

RIPDES SMALL MS4 ANNUAL REPORT GENERAL INFORMATION PAGE

RIPDES PERMIT # RIR040036

REPORTING PERIOD: **YEAR 9**
Jan 2012-Dec 2012

OPERATOR OF MS4

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Legal status (circle one):			
PRI - Private	PUB - Public	BPP - Public/Private	STA - State
FED - Federal			
Other (please specify):			

OWNER OF MS4 (if different from OPERATOR)

Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ()
Contact Person:		Title:	
		Email:	

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: MICHAEL P LEWIS

Print Title: DIRECTOR

Signature _____ Date _____



MINIMUM CONTROL MEASURE #1:

PUBLIC EDUCATION AND OUTREACH (Part IV.B.1 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS:

Include information relevant to the implementation of each measurable goal, such as activities, topics addressed, audiences and pollutants targeted. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for choosing the education activity to address the pollutant of concern. (Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.1.b.1	Provide a General Summary of activities implemented to educate your community on how to reduce storm water pollution. For TMDL affected areas, with storm water associated pollutants of concern, indicate rationale for choosing the education activity. List materials used for public education and topics addressed. Summarize implementation status and discuss if the activity is appropriate and effective.
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BMP ID 1A, B – URI AGREEMENT

The Natural Resources Unit was responsible for partnering with the URI Cooperative Extension to provide training to State and municipal officials and create a coordinated public outreach message. The target audience consists of State and municipal officials, Watershed groups, residents, and RIDOT personnel. A draft proposal was submitted with RIDOT’s Storm Water Management Plan (2004). The RIDOT/DEM/URI Agreement was signed in February 2006, and continued through December, 2011. *RI Stormwater Solutions* was developed as part of this agreement.

As a partner in the program, RIDEM has an original copy of the URI/DOT/DEM Agreement and has approved all Contract extensions. As described in the Agreement, RIDOT’s funding of the program constitutes full compliance with Minimum Measure 1.

In Year 8 and 9, URI continued to provide printed materials, training workshops, and educational resources addressing pollution prevention topics for priority resources and specific audiences. Templates were created that communities may use directly or adapt to local needs. These have incorporated a consistent message while targeting specific audiences.

In 2012, URI ran/co-sponsored/publicized multiple workshops on stormwater education, updated and expanded the Rhode Island LID Inventory, updated the *RI Stormwater Solutions* website, and continued to respond to requests for use of the *RI Stormwater Solutions* education materials. A detailed summary of URI work is included in **ATTACHMENT 1A**

RI Stormwater Solutions received the 2012 Exemplary Human Environment Initiatives Award from the Federal Highway Administration. The EHEIs recognize and publicize transportation initiatives that make our transportation system work better for the people who use it. The goal of the EHEIs is to make things better for people when they use our Nation’s transportation system while remaining conscious of any natural environmental consequences. **ATTACHMENT 1B** <http://www.fhwa.dot.gov/environment/ehei/>

Additionally, *RI Stormwater Solutions* was acknowledged as a leading example of sustainable practices in transportation from the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) in the November 2012 Leaner and Greener – Sustainability at Work in Transportation publication. **ATTACHMENT 1C**

URI has continued to work on drafting the next Agreement between URI, RIDOT & RIDEM, which provides measurable goals and a timeline. It is anticipated that this Agreement will be signed by the three parties and begin by June, 2013, and continue for 5-years. This next agreement is anticipated to constitute full compliance with Minimum Measure 1 of the next RIPDES General Permit. **ATTACHMENT 1D**

RESPONSIBLE PARTIES - The University of Rhode Island is the primary entity responsible for the

implementation of RIDOT's Public Education and Outreach Program with significant support & coordination from the RIDOT Natural Resources Unit and RIDEM.

EFFECTIVENESS - It is felt that this Minimum Measure work has been extremely effective. Both municipal officials and RIDOT personnel have received effective, appropriate, and useful training through this initiative. URI NEMO has continued to provide very high quality training with support from both DEM and DOT and the URI T2 Center.

YEAR 10 (2013) EXPECTED ACTIONS

BMP: Sign New Contract Agreement with URI NEMO

RIDOT has continued contract discussions with URI NEMO and RIDEM. It is anticipated that a new contract will begin in June 2013. URI NEMO will manage the training of the 1989 Erosion and Sediment Control Handbook update; develop a Linear LID Stormwater Design Manual; continue to provide municipal and RIDOT staff stormwater training; provide TMDL-specific trainings; and provide children's public education of stormwater topics. RIDEM is an involved partner in this Agreement and has an active role in developing the next Agreement. A final draft scope of tasks has been developed, and is currently under review by RIDOT and RIDEM. **ATTACHMENT 1D**

IV.B.1.b.2

Provide a general summary of how the public education program was used to educate the community on how to become involved in the municipal or statewide storm water program. Describe partnerships with governmental and non-governmental agencies used to involve your community.

URI has provided an annual report and assessment to RIDOT & RIDEM, which provides the measurable goals set and agreed upon by RIDOT, RIDEM, and URI-CE in the contract agreement, and the success towards each. **ATTACHMENT 1A**

Additional Measurable Goals and Activities: Please indicate if the following training sessions were attended and list the name(s) and municipal position of all staff who attended the training.

Attendance at the following trainings if applicable:

A New Approach to Financing Stormwater Management: Stormwater Utility Districts. Workshop Part 3: Rhode Island Moves Forward (January 26, 2012)

Attending name of staff and title: Allison Hamel, Environmental Scientist

RI Residential Rain Garden Training (April 3, 2012)

Attending name of staff and title: Allison Hamel, Environmental Scientist

Attending name of staff and title: Sue Votta, Supervising Landscape Architect

Attending name of staff and title: Trevor Jones, Sr. Landscape Architect

Small Scale Bioretention Installation Training (April 11-12, 2012)

Attending name of staff and title: Emilie Holland, Principal Environmental Scientist

Attending name of staff and title: Mike Dahlquist, Sr. Environmental Scientist

Attending name of staff and title: Allison Hamel, Environmental Scientist

Attending name of staff and title: Sue Votta, Supervising Landscape Architect

Attending name of staff and title: Trevor Jones, Sr. Landscape Architect

Results of a Pilot Stormdrain Mapping Project in Johnston and Smithfield, RI ... and how your municipality can participate (November 20, 2012)

Attending name of staff and title: Allison Hamel, Environmental Scientist

Attending name of staff and title: James Gallant, Engineering Co-Op Student

Rhode Island Regulatory Setbacks and Buffers (November 29, 2012)

Other Trainings:

RIGIS Users Group Quarterly Meeting: RIDOT's Stormwater Mapping Efforts
2/7/12; A. Hamel Presented

Webinar: **Storm Water Solutions 2012 Virtual Expo**

3/21/12; A. Hamel attended

Morning Keynote: Storm Water Post Construction BMP: Evaluation, Effectiveness & Design

<http://www.estormwater.com/storm-water-solutions-2012-virtual-expos-morning-keynote-storm-water-post-construction-bmp-evaluatio>

Afternoon Keynote: "Understanding EPA's NPDES MS4 Permit Program"

<http://www.estormwater.com/storm-water-solutions-2012-virtual-expos-afternoon-keynote-understanding-epas-npdes-ms4-permit-progr>

Webinar: U.S. EPA Webinar on the 2012 Construction General Permit (CGP)

3/15/12; **A. Hamel attended**

http://cfpub.epa.gov/npdes/courseinfo.cfm?program_id=0&outreach_id=632&schedule_id=1159

Webinar: Construction's 10 Step Guide to Implementing an Environmental Compliance Program

4/24/12; **A. Hamel attended**

<http://www.estormwater.com/construction%E2%80%99s-10-step-guide-implementing-environmental-compliance-program>

2012 Rhode Island Soil Survey Planning Conference

6/28/12; E. Holland attended

Webinar: Low Impact Development and the Basics of Bioretention

9/18/12; A. Hamel attended

<http://www.estormwater.com/low-impact-development-and-basics-bioretention>

Webinar: AASHTO -- **Post Construction BMP Selection – Runoff Management to Meet Quantitative Pollution Limits**

Construction Winter Training 2012:

10 Steps to an Environmentally Compliant Construction Sites

February 14 & 16, 2012 ;; May 3 & 10, 2012

Allison Hamel, Environmental Scientist - RIDOT Natural Resources Unit – presented
ALL RIDOT Construction Personnel attended (Resident Engineers, Inspectors, Staff)

ANSI 300A Standards: Best Management Practices for Trees During Construction

February 14 & 16, 2012

Frank Mastrobuono, Urban & Community Forestry Program Coordinator, RIDEM – presented
ALL RIDOT Construction Personnel attended

Maintenance Summer Training 2012:

**Facility Stormwater Pollution Prevention Plans (SWPPPs)
Spill Prevention, Control, & Countermeasure Plans (SPCCs)
Universal Waste
Right-To-Know & Material Safety Data Sheets**

Allison Hamel, Environmental Scientist - RIDOT Natural Resources Unit – presented
ALL Maintenance Facility personnel attended

Glocester – 10/23/2012
Midstate – 11/09/2012
Belleville – 10/23/2012
Hope Valley – 11/15/2012
Portsmouth – 11/19/2012
Smithfield – 11/16/2012
East Providence – 10/22/2012
Headquarters – 11/15/2012

Professional Development

In 2012, RIDOT established an Office of Professional Development and Training comprised of three dedicated full-time professionals who will coordinate, develop, implement, and monitor RIDOT's staff development and training programs. The Office of Professional Development and Training is committed to help meet RIDOT's professional development needs and will continue to strive to offer learning opportunities and schedule training according to demand. All future RIDOT training will be coordinated through this new Office, offering better record keeping and development of required training.

ATTACHMENT 1E

RESPONSIBLE PARTIES -

Public Education/Outreach: The University of Rhode Island is the primary entity responsible for the implementation of RIDOT's Public Education and Outreach Program with significant support & coordination from the RIDOT Natural Resources Unit and RIDEM.

RIDOT Storm Water Management Training: The Natural Resources Unit is the primary RIDOT entity responsible for the implementation of storm water management training within the RIDOT Construction Winter Training program and the RIDOT Maintenance Summer Training program; support from RIDOT Design, Construction, and Maintenance are also provided as needed. Going forward, the Natural Resources Unit will coordinate with the new Office of Professional Development and Training for environmental and stormwater training of RIDOT staff.

EFFECTIVENESS - It is felt that this Minimum Measure work has been extremely effective. Both municipal officials and RIDOT personnel have received effective, appropriate, and useful training through this initiative.

YEAR 10 (2013) EXPECTED ACTIONS

BMP: Sign Contract Agreement with URI NEMO

RIDOT has continued contract discussions with URI NEMO and RIDEM. It is anticipated that a new contract will begin in June 2013. URI NEMO will manage the training of the 1989 Erosion and Sediment Control Handbook update; develop a Linear LID Stormwater Design Manual; continue to provide municipal and RIDOT staff stormwater training; provide TMDL-specific trainings; and provide children's public education of stormwater topics. RIDEM is an involved partner in this Agreement and has an active role in developing the next Agreement. A final draft scope of tasks has been developed, and is currently under review by RIDOT and RIDEM. **ATTACHMENT 1D**

Storm Water Education

The RIDOT Natural Resources Unit will continue to provide Storm Water education to RIDOT Construction, Maintenance, and Design personnel. RIDOT NRU will also continue to aid RIDEM and other state Agencies in stormwater education.

Professional Development

RIDOT has established an Office of Professional Development and Training comprised of three dedicated full-time professionals who will coordinate, develop, implement, and monitor RIDOT's staff development and training programs. The Office of Professional Development and Training is committed to help meet RIDOT's professional development needs and will continue to strive to offer learning opportunities and schedule training according to demand.

The Natural Resources Unit has been coordinating with the new Chief of the Office of Professional Development and Training to provide stormwater and environmental training to all of RIDOT staff through a "RIDOT 101" Training series which every new RIDOT employee will be required to attend. Additional job-specific stormwater & environmental training will be provided through the "RIDOT 201" training series. It is anticipated that these training series will be developed over the next two - four years.

BMP ID 1C – RIDOT Storm Water Program Website

RIDOT has continued to maintain the Stormwater Program web page on the RIDOT website at:
<http://www.dot.ri.gov/programs/stormwater/index.asp>

RIDOT does not regularly update this website because the URI NEMO program launched the "Know Where It Goes" website at: www.ristormwatersolutions.org as part of the URI/DEM/DOT Agreement. This website is updated regularly with training and resources.

Additionally, RI Stormwater Solutions has been added to the EPA Soak up the Rain campaign and website at:
<http://www.epa.gov/region1/soakuptherain/learnmore.html>

RESPONSIBLE PARTIES - The Natural Resources Unit is the primary RIDOT entity responsible for the updating of the RIDOT Storm Water Program web page.

The University of Rhode Island NEMO is the primary entity responsible for the updating of the "Know Where It Goes" web site.

EFFECTIVENESS - It is felt that this Minimum Measure is an effective tool to provide general information about storm water issues.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT NRU will continue to update the RIDOT web page as necessary, but will primarily rely on the "Know Where It Goes" website for Public Education and Outreach compliance. The new 2013 Agreement provides staff time for regular website maintenance.



MINIMUM CONTROL MEASURE #2:

PUBLIC INVOLVEMENT/PARTICIPATION (Part IV.B.2 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS:

Include information relevant to the implementation of each measurable goal, such as types of activities and audiences/groups engaged. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern.

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.2.b.2.ii

Describe audiences targeted for the public involvement minimum measure, include a description of the groups engaged, and activities implemented and if a particular pollutant(s) was targeted. If addressing TMDL requirements indicate how the audience(s) and/or activity address the pollutant(s) of concern. Name of person(s) and/or parties responsible for implementation of activities identified. Assess the effectiveness of BMP and measurable goal.

BMP ID 2B – Public Involvement

The Natural Resources Unit developed a partnership with the URI Cooperative Extension to provide a public outreach & involvement program. The target audiences of this BMP include the public, State and municipal officials, environmental groups and educational organizations focusing on various pollutant sources. The URI agreement was signed in February 2006. URI has provided an annual report and assessment to RIDOT, which provides the measurable goals set and agreed upon by RIDOT, RIDEM, and URI-CE in the contract agreement, and the success towards each. Please See BMP ID 1A, B under Section IV.B.1.b.1.

As a partner in the program, RIDEM has an original copy of the URI/DOT/DEM Agreement and has approved all Contract extensions. As described in the Agreement, RIDOT's funding of the program constitutes full compliance with Minimum Measure 1, and full compliance with Minimum Measure 2, with exception of the Public Notice of the Annual Report requirements.

RESPONSIBLE PARTIES - The University of Rhode Island is the primary entity responsible for the implementation of RIDOT's Public Education and Outreach Program with significant support & coordination from the RIDOT Natural Resources Unit and RIDEM

EFFECTIVENESS - It is felt that this Minimum Measure work has been extremely effective. Municipal officials, RIDOT personnel, and the general public have been given the opportunity to provide their input and insight on RIPDES requirements. URI NEMO has continued to provide very high quality training with support from both DEM and DOT and the URI T2 Center.

YEAR 10 (2013) EXPECTED ACTIONS

BMP: Sign Contract Agreement with URI NEMO – RIDOT has initiated contract discussions with URI NEMO and RIDEM. It is anticipated that a new contract (or a renewed contract) will begin in June 2013. Currently, it is anticipated that URI NEMO will manage the update of the 1989 Erosion and Sediment Control Handbook; develop a Linear LID Stormwater Design Manual; continue to provide municipal and RIDOT staff stormwater training; provide TMDL-specific trainings; and provide children's public education of stormwater topics. RIDEM is an involved partner in this Agreement and has an active role in developing the next Agreement. A draft scope of tasks has been developed, and is currently under review by RIDOT and RIDEM. **ATTACHMENT 1D**

Additional Measurable Goals and Activities

The RIDOT Stormwater Program Coordinator has participated in several State-wide Stormwater Management initiatives:**Watershed Counts <http://watershedcounts.org/>**

Watershed Counts is a broad coalition of agencies and organizations that have committed to work together to examine and report regularly on the condition of the land and water resources of the Narragansett Bay Watershed Region. The coalition's first report (2011) featured information on five key indicators (climate change, impervious cover, beach closures, fresh water flow and invasive species). In 2012, indicators were added for marine water quality, freshwater quality, open space and resource economics. These indicators will be used to describe the condition of the watershed region and then to communicate this information to the public and decision makers in order to inform and guide future management and development of the watershed. The indicators consider the region's interwoven economic and environmental assets. More information may be found at: <http://www.watershedcounts.org/> . "Watershed Counts" reports the 'report card' to the Legislators on Earth Day each year.

A. Hamel – Agency Partner

Roger William Park Ponds Restoration Steering Committee <http://nbep.org/rwppondsrestoration.html>

Roger Williams Park is Providence's most important greenspace, with more than a million visitors each year. The centerpiece of the park is a network of urban ponds--100 acres of fresh water valued for fishing, boating, and the scenic beauty they provide. The ponds, however, are polluted by urban runoff from nearby roads, shoreline erosion, waterfowl and other sources. NBEP is working with the City of Providence and a steering committee of stakeholders and technical experts, to begin restoring the ponds through innovative stormwater management and the development of a restoration master plan to guide the two-year project.

This commitment addresses TMDL requirements listed in the Total Maximum Daily Loads for Phosphorus To Address 9 Eutrophic Ponds in Rhode Island. RIDOT tried to incorporate two of the suggested BMPs in to ongoing contracts, but scheduling and other commitments did not allow for the BMPs to be installed.

A. Hamel – Steering Committee Member

Erosion and Sediment Control Handbook – Technical Review Committee

The TRC is a group of professionals from State agencies, private industry, and consultants that are reviewing and updating the 1989 Rhode Island Soil Erosion and Sediment Control Handbook (original version completed by the Rhode Island Department of Environmental Management, USDA Soil Conservation Service, and Rhode Island State Conservation Committee (SCC)). The goals of this effort are to end up with an updated, revised version of the 1989 Rhode Island Soil Erosion and Sediment Control Handbook that:

- Meets the needs of RI's practitioners
- Contains the most up-to-date technical information on BMPs
- Contains up-to-date information on the regulatory and implementation processes relating to erosion control
- Is consistent with the 2010 Rhode Island Stormwater Design and Installation Standards Manual
- Is easy to use and understand
- Is internally consistent in terms of level of detail, utility of illustrations, and applicability to RI

A. Hamel – TRC Member ; RIDOT – Reviewing Agency

Providence "After The Storm" - October 25, 2012; December 4, 2012

A workshop about developing a regional solution to the regional problem of stormwater management. This effort brought together top municipal elected officials and managers, Public Works Directors and Planning Directors in the communities at the head of Narragansett Bay. Building on the workshops that the Department of Environmental Management has sponsored, further discussion on the model of a stormwater utility district as a potential strategy to address the currently under-funded efforts to manage stormwater.

A. Hamel attended

Woonasquatucket River Environmental Charette – June 14, 2012

A group of environmental experts were invited to participate in a meeting to discuss possible erosion fixes to a segment of the Woonasquatucket River in Providence. Erosion Control specialists provided information on new structural control practices. This commitment addresses TMDL requirements listed in the Woonasquatucket River Fecal Coliform Bacteria and Dissolved Metals Total Maximum Daily Loads

A. Hamel – attended

Excellence in Bay Management

The Goals 1) Address regularly expressed concerns about lack of satisfactory progress on major issues that are addressed by mandate or mission by a range of agencies, NGOs, etc. 2) Facilitate a neutral, wide-ranging conversation – within the predetermined parameters – that examines the interaction, communication and consistency between and among various agencies and organizations. 3) Make the best use of the talents and resources available both in the planning and execution of agreed upon action steps.

The Outcomes: 1) Identify overlaps or gaps in addressing selected issue(s). 2) Decrease the frustration exhibited and/or expressed by dedicated professionals. 3) Increase morale and public recognition of value added. 4) Identify ways to provide people with a greater sense of accomplishment.

Municipal Mapping Assistance Program (MMAP)

RIDOT assisted RIDEM in developing the MMAP program in 2012. This program advanced the GPS/GIS mapping capabilities of the Town of Johnston in support of RIPDES compliance efforts. RIDOT provided training, technical assistance, maintenance of catch basins, and intern field work for the project. It is anticipated that RIDOT will provide similar assistance for the 2013 MMAP project in North Providence. ATTACHMENT 2A

Save the Bay Bi-State Water Quality Coordination Initiative for the Pawcatuck River Estuary and Little Narragansett Bay – June 20, 2012

A. Hamel attended/presented

Public Meetings:

RIDEM Public Notice Meeting re: Water Quality in the Ten Mile River Watershed - July 12, 2012

A. Hamel attended

RIDEM Public Notice Meeting re: Blackstone TMDL Public Meeting – November 7, 2012

A. Hamel attended

RESPONSIBLE PARTIES - The RIDOT Natural Resources Unit is the primary responsible party

EFFECTIVENESS - It is felt that this Minimum Measure work has been effective. RIDOT attends, presents, and offers technical expertise to many local and state-wide initiatives.

YEAR 10 (2013) EXPECTED ACTIONS

Continue statewide coordination

BMP ID 2A – Adopt-a-Highway Program

The Maintenance Division has continued supporting both the Adopt-a-Highway and the Sponsor-a-Highway programs.

The Adopt-A-Highway Program (AAH) is geared for non-profit, volunteer groups such as environmental groups, students, boy/girl scouts and civic minded businesses. RIDOT Maintenance provides advanced warning signs, safety vests, litter picks and trash bags. RIDOT Maintenance Division also fabricates and installs signs for this program (small signs are free to not-for-profit organizations; larger signs are a charge). The Sponsor is responsible to do a minimum of 4 cleanups per year. The segments in the AAH Program are on secondary roads (no high speed routes or interstates).

In 2012, Adopt A Highway had 105 sponsors in the program with 210 miles cleaned as a result.

The Sponsor-A-Highway Program (SAH) is geared toward businesses and there are currently two companies that the Department does business with, Adopt-A-Highway Maintenance Corporation (AAHMC) and Adopt-A-Highway Litter Removal Service of America, Inc. (AAHLRSA). AAHMC and AAHLRSA are both based out of California and they are active in many states. They both charge a monthly fee to each Sponsor for the sign panel (*Catch the Wave- Ride with Pride*) and they are obligated to clean each segment 19 times per year. There is a set schedule for each company to follow and the cleanups take place on Mondays throughout the year. All companies send electronic cleanup reports.

In 2012, Sponsor A Highway had 21 segments sponsored (42 miles sponsored). Through this program, over 2,375 bags of trash were picked up by two companies.

The following is a breakdown of the Sponsor-a-Highway Segments:

Route 4 – total segments 10 – 5 sponsored	Route 146– total segments 16 – 0 sponsored
Route 6 – total segments 4 – 0 sponsored	Route 195 – total segments 4 – 2 sponsored
Route 10 – total segments 4 – 0 sponsored	Route 295– total segments 24 – 3 sponsored
Route 78– total segments 4 – 3 sponsored	Route 95 – total segments 45 – 6 sponsored
Airport Connector – 2 sponsored	

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Natural Resources Unit is provided as needed.

EFFECTIVENESS - RIDOT considers this BMP very effective in both public involvement and the reduction of floatables/trash along RIDOT roadways.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue this BMP

BMP ID 2C – Prison Crew Cleanups

The Maintenance Division has continued funding prison crew cleanups along RIDOT roadways. **In 2012, RIDOT paid \$845,750 for prison crews and picked up 55,580 bags of litter.**

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Natural Resources Unit is provided as needed.

EFFECTIVENESS - RIDOT considers this BMP very effective in both public involvement and the reduction of floatables/trash along RIDOT roadways.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this BMP

BMP ID 2E – Enhancement Program

The recently adopted transportation bill - Moving Ahead for Progress in the 21st Century (MAP-21) - created the Transportation Alternatives Program (TA), which combines the Transportation Enhancement Program with two other popular, non-traditional transportation programs; Safe Routes to School and the Recreational Trails Program.

TA provides funding for activities that include:

- On road/off road pedestrian and bicycle facilities;
- Infrastructure projects to improve/enhance non-driver mobility;
- Community improvement programs;
- Environmental mitigation;
- Recreational trails projects; and
- Safe Routes to School

The legacy projects in the former Transportation Enhancement Program are being implemented with funding left over from previous transportation funding efforts and MAP-21. These projects were selected and recommended by RIDOT's Transportation Enhancement Advisory Committee (TEAC), which conducted a thorough solicitation, outreach, and proposal evaluation process.

All enhancement projects listed in the TIP are initiated through the development of a project agreement with the sponsor and/or the commencing of the design process. The funds to be allocated for each project as well as the year of anticipated implementation is available at <http://www.planning.state.ri.us/transportation/>. The implementation schedule is based on the information available to RIDOT and is subject to change. To expedite program implementation, RIDOT is given flexibility in advancing projects within the annual Enhancement budget when other projects are delayed.

In 2012, 4 projects were advanced to construction; 12 projects are currently in design with 4 of those in the final stages of design. The Enhancement Program has required the inclusion of the RIDOT Small-Site Stormwater Pollution Prevention Plan for active construction sites as part of their process.

RESPONSIBLE PARTIES - RIDOT Intermodal Planning Division is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Natural Resources Unit is provided as needed.

EFFECTIVENESS - RIDOT does not consider this BMP measure effective. RIDOT has limited control over what projects are submitted for Enhancement Program funding, and therefore cannot be held accountable for the lack of stormwater-related projects.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue to evaluate more suitable goals for this Program for the next RIPDES General Permit. The RIDOT Enhancement Program continues to evaluate the possibility of developing a "Low Impact Development Demonstration Project" that could fund the incorporation of more LID practices in the traditional submissions of Enhancement projects. The Enhancement Program and the NRU will also evaluate the possibility of prioritizing LID inclusion to areas of significant environmental concern (the State's Impaired/TMDL waters and Special Resource Protection Waters (SRPWs)).

SECTION II. Public Notice Information (Parts IV.G.2.h and IV.G.2.i) *Note: attach copy of public notice

Date of Public Notice: April 17, 2013 - May 17, 2013	How public was notified: <ul style="list-style-type: none"> • Providence Journal Legal Notice <u>ATTACHMENT 2B</u>
Was public meeting held? YES <input checked="" type="radio"/> NO	
Date:	Where:
Summary of public comments received: NONE	
Planned responses or changes to the program: NONE	



MINIMUM CONTROL MEASURE #3:

ILLICIT DISCHARGE DETECTION AND ELIMINATION (Part IV.B.3 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS

Include information relevant to the implementation of each measurable goal, such as activities implemented (when reporting tracked and eliminated illicit discharges, please explain the rationale for targeting the illicit discharge) to comply with on-going requirements, and illicit discharge public education activities, audiences and pollutants targeted. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern.

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.3.b.1:	<p>Indicate if the outfall map was not completed, reasons why, proposed schedule for completion of requirement and person(s)/ Department responsible for completion. (The Department recommends electronic submission of updated EXCEL Tables if this information has been amended.)</p> <p>Date of Completion: 2010</p>
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BMP ID 3A, 3B – Outfall Mapping, GIS Database

This measurable goal was completed in 2010. RIDOT required additional time to map its entire state-wide system. The Natural Resources Unit Summer Interns, supported by the MIS Office, inventoried outfalls through plan research and field data collection using GPS. To date, RIDOT has 3811 outfalls and associated photos in the GIS database. RIDOT NRU continues to use Summer Interns to verify and update the outfall database.

RESPONSIBLE PARTIES - The Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this BMP; support from RIDOT Design, Construction, Maintenance, and MIS/GIS are also provided as needed.

EFFECTIVENESS - RIDOT has mapped its entire outfall system – not just within the regulated areas. This has taken longer than the Permit allowance; however RIDOT felt that it was an acceptable alternative to achieve state-wide outfall coverage.

YEAR 10 (2013) EXPECTED ACTIONS - (Continued from Year 8) RIDOT is developing a policy to have newly constructed outfall geographical locations provided by design consultants to maintain the database as up-to-date as possible. The Natural Resources Unit updates as needed, or as new information is available.

IV.B.3.b.2	<p>Indicate if your municipality chose to implement the tagging of outfalls activity under the IDDE minimum measure, activities and actions undertaken under the 2012 calendar year.</p>
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N/A – RIDOT used GPS/GIS to develop outfall map

IV.B.3.b.3	<p>Provide a summary of the implementation of recording of system additional elements (catch basins, manholes, and/or pipes). Indicate if the activity was implemented as a result of the tracing of illicit discharges, new MS4 construction projects, and inspection of catch basins required under the IDDE and Pollution Prevention and Good Housekeeping Minimum Measures, and/or as a result of TMDL related requirements and/or investigations. Assess effectiveness of the program minimizing water quality impacts.</p>
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BMP ID 3C – Recording of Additional Elements

Catch Basins along major interstate highways, limited-access roads, and primary routes have been mapped as part of an MIS project. Additional work to complete mapping on ramps and secondary roads is planned as funding and staff time allows (anticipated to be completed over the next 2 years). At this time, this is a geographical inventory of catch basins with limited information.

As illicit discharges are investigated, additional elements are recorded as necessary to aid in the tracing, sourcing, and removal of the illicit connection. The Natural Resources Unit developed an IDDE plan which details the procedure for locating additional elements (catch basins, man holes, etc.), recording pertinent information about them, and amending mapping to depict these features. The IDDE Plan was submitted to RIDEM with the 2006 Annual Report. To date, IDDE investigations have not required extensive mapping; field investigations using existing plan sets have been sufficient to conclude the investigations.

Additionally, all construction projects have plans electronically submitted to RIDOT, so RIDOT has accurate drainage information available to aid in investigations.

In 2011, the Natural Resource Unit's summer interns initiated drainage catchment analysis in the Woonasquatucket Watershed. The interns completed the catch basin inventory in the watershed. Outfalls had previously been identified and inspected in the watershed; through field work, interns verified the outfalls and began to map the drainage pipe connectivity to the outfalls.

In 2012, the Natural Resource Unit's summer interns worked with RIDEM interns to develop the *Municipal Mapping Assistance Program (MMAP)*. In 2012, the MMAP interns mapped the catchment of the Woonasquatucket TMDL priority outfalls S1 and S2 with the towns of Johnston and Smithfield. The next step of this project is to determine ownership of the system components, and to continue the mapping of the drainage systems. ATTACHMENT 2A

In 2011, the RIDOT Maintenance purchased the VueWorks Asset Management software system that will provide the basis of a systematic approach to the mapping of additional elements (among other things – please see Minimum Measure 6 for further information). This system is currently being implemented in the Maintenance Division, and is expected to be fully implemented by the end of 2012. This system will enable RIDOT to accurately report Maintenance activity.

In 2012, the RIDOT Maintenance continued to configure the VueWorks Asset Management System. Drainage system structures continue to be a priority focus. The configuration, training, and implementation will continue in 2013. Please see Minimum Measure 6 for more information.

In 2011, the Design Section initiated contract development for Drainage System Inspection and Cleaning Program. A contract will be developed specifically for preventative drainage system inspections and maintenance. It is anticipated that this program will be managed through the Design Section, run through the Construction Division, and data available to the Maintenance Division. This program will provide mapping and inspections of "additional elements."

In 2012, the Design Section applied for RICAP funding for the Drainage System Inspection, Cleaning, and Repair program. If funding is received, the first project will go out to bid in the Spring of 2013 focusing on Interstate 295 in the Woonasquatucket River Watershed. Additionally, a second I-295 contract has been amended to include the clean/inspect/repair of the drainage system.

As part of the 'inspection' of catch basins, GPS coordinates and connecting pipes and outfall information will be documented.

In 2011, the Design Section initiated developing new Construction Standard Specifications for including drainage system mapping and inspections as part of common 'clean and flush' operations. It is anticipated that this will be finalized in 2012, and will provide additional mapping information on RIDOT's drainage systems.

The Design contract for I-295 will be used as a template for future construction projects, where appropriate.

RESPONSIBLE PARTIES - The Natural Resources Unit, the MIS/GIS Office, Design, Construction, and the Maintenance Division are the primary RIDOT entities responsible for the implementation of this BMP.

EFFECTIVENESS - Mapping system elements as part of IDDE investigations, new construction projects, or catch basin inspection/maintenance has not been effective for RIDOT due to the size and complexity of the RIDOT drainage system.

Mapping small portions of the drainage system (i.e. during an IDDE investigation where typically less than 10 manholes/catchbasins and connecting pipes would require mapping) is a very inefficient and time-consuming process for an insignificant data set. RIDOT has had less than 5 IDDE investigations per year, and the state-wide drainage system is estimated at over 25,000 catch basins. Developing and maintaining such a small dataset is not practical for RIDOT. A broader, systematic approach to mapping the state-wide system in a discrete time-period is required.

RIDOT will continue mapping of additional elements during TMDL investigations, however, as this dataset is considered to be of significant environmental importance. This has been completed in the Greenwich Bay TMDL area as part of RIDOT's Stormdrain Retrofit Demonstration Project, and in both the Easton's Beach and Scarborough Beach areas as part of the Priority Beach projects.

It is anticipated that once the preventative maintenance program for drainage system cleaning, inspection, and repair is active, it will be an effective tool for drainage system cleaning, inspection, & mapping. Please see Minimum Measure 6 for more information.

YEAR 10 (2013) EXPECTED ACTIONS

RIDOT Maintenance is currently implementing an Asset Management System (please see Minimum Measure 6). It is anticipated that this system will be fully implemented by the end of **2013**.

RIDOT will continue to develop a policy to have newly constructed outfall/catch basin/stormwater structure geographical locations provided by design consultants to maintain the database as up-to-date as possible.

RIDOT will continue to develop and implement a Preventative Drainage System Maintenance Program through Design/Construction contracts.

RIDOT NRU summer interns will continue catchment mapping and analysis in the Woonasquatucket Watershed.

IV.B.3.b.4	<p>Indicate if the IDDE ordinance was not developed, adopted, and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement.</p> <p>Date of Adoption: If the Ordinance was amended in 2012, please indicate why changes were necessary.</p>
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N/A – RIDOT does not have regulatory authority to develop and implement ordinances.

IV.B.3.b.5.ii, iii, iv, & v	<p>Provide a summary of the implementation of procedures for receipt and consideration of complaints, tracing the source of an illicit discharge, removing the source of the illicit discharge and program evaluation and assessment as a result of removing sources of illicit discharges. Identify person(s) / Department and/or parties responsible for the implementation of this requirement.</p>
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BMP ID 3D – Develop & Implement IDDE Plan

RIDOT developed an IDDE program during 2006 that addresses the SOP requirements under Permit ID# IV.B.3.b.5. The RIDOT IDDE Program was developed using New England Interstate Water Pollution Control Commission's Illicit Discharge Detection and Elimination Manual – A Handbook for Municipalities (January 2003), the Center for Watershed Protection Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments (October 2004), and RIDEM IDDE workshop materials (December 2004). The IDDE manual was modified to reflect RIDOT authority and procedures.

RIDOT received an informal response from RIDEM regarding the IDDE Plan in 2010. RIDOT's Plan will require further development to be in compliance with RIDEM. RIDOT wishes to work with RIDEM to develop an acceptable plan, and will submit a new plan when completed.

RESPONSIBLE PARTIES - The Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this plan; support from RIDOT Design, Construction, and Maintenance are also provided as needed.

EFFECTIVENESS - RIDOT considers the IDDE plan an effective guidance document; however RIDOT has had few IDDE investigation requirements.

YEAR 10 (2013) EXPECTED ACTIONS - (continued from Year 8) RIDOT wishes to work with RIDEM and develop a compliant IDDE plan that can be fully implemented in RIDOT and also provided to other MS4s as a template – similar to the Construction Site SWPPPs and Maintenance Facility SWPPPs.

IV.B.3.b.5.vi

Provide summary of implementation of catch basin and manhole inspections for illicit connections and non-storm water discharges. If the required measurable goal of inspecting all catch basins and manholes for this purpose was not accomplished, please indicate reasons why, the proposed schedule of completion and identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement. The operator must keep records of all inspections and corrective actions required and completed.

In 2011, the Natural Resource Unit's summer interns initiated drainage catchment analysis in the Woonasquatucket Watershed. The interns completed the catch basin inventory in the watershed. Outfalls had previously been identified and inspected in the watershed; through field work, interns verified the outfalls and began to map the drainage pipe connectivity to the outfalls.

In 2012, the Natural Resource Unit's summer interns worked with RIDEM interns to develop the *Municipal Mapping Assistance Program (MMAP)*. In 2012, the MMAP interns mapped the catchment of the Woonasquatucket TMDL priority outfalls S1 and S2 with the towns of Johnston and Smithfield. The next step of this project is to determine ownership of the system components, and to continue the mapping of the drainage systems.

As reported previously, RIDOT cannot inspect all catchbasins and manholes as an independent project due to the size and complexity of the RIDOT drainage system (estimated at over 25,000 catch basins; the majority of them located within the urban area or on divided highways), and for personnel safety (inspecting catch basins on any roadway in the urban area/divided highway would require significant & costly Maintenance traffic protection detail). RIDOT inspects catch basins as part of regular Maintenance activities, and during Design and Construction projects involving drainage components.

RIDOT has established a prioritized approach to inspecting catch basins and manholes. Standard operating procedures have been established to inspect catch basins if dry weather discharge (DWD) is visible at the outfall, during all IDDE investigative work, and during regular Maintenance drainage activities (cleaning of catch basins via Stetco & Vactor trucks).

Each Maintenance Facility bases catch basin cleaning on institutional knowledge of system. The RIDOT Maintenance Division regularly cleans catch basins throughout the state during the Spring/Summer/Fall months. Cleaning is primarily based on institutional knowledge of 'trouble spots' in the areas, response to complaints, and response to flooding issues.

RIDOT Maintenance purchased (in 2011) and is still implementing an Asset Management System Program (VueWorks). This system is GIS-based, and will replace the "Daily Activity Log" excel files that are currently used to document routine Maintenance work. Once RIDOT can document the catch basins that are cleaned each year, RIDOT can develop a systematic program for annual catch basin cleaning. Please see Minimum Measure 6 for more information.

The RIDOT Construction Division is also responsible for maintenance and cleaning of drainage system components involved in active construction projects. As part of any project that requires drainage work, contractors are typically required to 'flush and clean' the drainage system. RIDOT also develops projects that investigate/maintain/flush & clean whole drainage systems.

In 2012/2013, RIDOT developed standard procedures for drainage system investigations to be included in these projects. The standard language for future construction projects is currently under review, and anticipated to be included immediately in two construction contracts for Route 295. Based upon the results of these contracts, the contract language may undergo further revision, with the intent of inclusion in to more contracts in 2013.

RESPONSIBLE PARTIES - The Natural Resources Unit, RIDOT Maintenance, and RIDOT Construction are all responsible for the implementation of this plan.

EFFECTIVENESS - RIDOT does not consider this an achievable requirement. The RIDOT catch basin/manhole/pipe system is significantly larger than any other MS4, and inspecting every catch basin

every year is not feasible with the resources that RIDOT currently has.

YEAR 10 (2013) EXPECTED ACTIONS

RIDOT Maintenance will continue to inspect and clean catch basins as part of regular Maintenance activities. Maintenance inherently does this on a prioritized approach; however the Natural Resources Unit will work with the Maintenance Division to develop a Standard Operating Procedure to ensure that catch basins within TMDL areas and around environmentally sensitive areas (wetlands, rivers/streams/ponds, etc.) receive priority cleaning & maintenance.

RIDOT Natural Resources Unit will continue to work with RIDOT Maintenance to document inspection work.

RIDOT Natural Resources Unit will continue to work with cities/towns and local citizen groups to continue coordination efforts.

RIDOT wishes to work with RIDEM to establish an acceptable variance to General Permit requirements regarding annual catch basin inspections. RIDOT anticipates developing an acceptable plan for each of the Maintenance districts with coordination from RIDEM. This work will be concurrent with the implementation of VueWorks in the Maintenance Division.

RIDOT will implement the Maintenance Division Asset Management System (VueWorks). It is anticipated that this program will be fully implemented by the end of 2013. Please see Minimum Measure 6.

RIDOT will include video inspection, gps location, and documentation to applicable Construction contracts to increase the inspection rate of catch basins. This data will be compatible with VueWorks, and will be documented in next year's RIPDES Annual Report.

IV.B.3.b.5.vii

If dry weather surveys including field screening for non-storm water flows and field tests of selected parameters and bacteria were not completed, indicate reasons why, proposed schedule for the completion of this measurable goal and person(s) / Department and/or parties for the completion of this requirement. Evaluate effectiveness of the implementation of this requirement. **The results of the dry weather survey investigations must be submitted to RIDEM electronically, if not already submitted or if revised since 2009, in the RIDEM-provided EXCEL Tables and should include visual observations for all outfalls during both the high and low water table timeframes, as well as sample results for those outfalls with flow. The EXCEL Tables must include a report of all outfalls and indicate the presence or absence of dry weather discharges.**

Date of Completion: ONGOING ATTACHMENT 3A

BMP ID 3E, F – Outfall Surveys / Sampling

Outfalls have been examined for dry weather discharges during the initial Outfall Mapping (Permit ID# IV.B.3.b.1; BMP ID 3A – Outfall Mapping) that occurred during dry weather conditions during between July and October each year. Outfalls that were determined to have dry weather discharge, or were unknown, will be re-visited, and another dry weather survey conducted. If dry weather discharge is present, the flow will be sampled for pH, conductivity, temperature, and bacteria as described in the RIDOT IDDE Plan.

In 2012, RIDOT NRU Summer Interns continued to revisit outfalls with suspected or unknown Dry Weather Discharges. Of the 50+ outfalls revisited, only three were found to be flowing, ten were unreachable, and the remaining had no dry weather discharge (DWD). 15 outfalls remain as 'unknown', and will be revisited in the Summer of 2013.

In 2012, RIDOT identified priority inspection/sampling outfalls and created a schedule for the Jan/Apr and Jul/Oct sampling efforts.

All RIDEM TMDL reports (including drafts) were examined to identify RIDOT outfalls contributing to TMDL listings. The outfalls were identified using the TMDL reports in conjunction with RIDOT ArcGIS data to approximate outfall locations. After priority outfalls were established, a database was created to ensure follow-up sampling and monitoring. Additionally, a sampling schedule for the summer 2013 was created, ensuring all TMDL outfalls are sampled by September 1, 2013 (weather dependent). In addition to the TMDL priority outfalls, all outfalls exhibiting dry weather discharge will be examined/sampled again. Based on sample results, outfalls will be 1) routine monitored and scheduled for IDDE inspection or 2) taken off the monitoring list for 'normal' test & field results.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Maintenance, GIS, Design, & Construction is provided as needed.

EFFECTIVENESS - RIDOT considers the IDDE Plan an effective guidance document, however RIDOT has found few Dry Weather Flows that require investigation.

The Jan-Apr survey/sampling has not been an achievable measure. Due to snow cover & snow melt in January & February, and frequent rain in March & April, there are very few 'dry weather days' in the sampling period. RIDOT will continue to monitor weather and attempt Jan-Apr sampling when possible.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue examining outfalls for Dry Weather Flow and sampling/investigating as appropriate.
RIDOT summer interns will revisit all outfalls with Dry Weather Flow, and also all Priority TMDL outfalls.

IV.B.3.b.7

Provide a description of efforts and actions taken as a result of for coordinating with other physically interconnected MS4s, including State and federal owned or operated MS4s, when illicit discharges were detected or reported. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.

RIDOT NRU works closely with every MS4 Coordinator and also with the RIDEM Office of Compliance and Inspection (OC&I) to investigate dry weather discharges and possible illicit connections. RIDOT provides plans and field support when requested by either the MS4 or OC&I.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Maintenance, GIS, Design, & Construction is provided as needed.

EFFECTIVENESS - RIDOT considers the coordination with MS4s and RIDEM OC&I an extremely effective effort.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue working with RIDEM OC&I and all other MS4s as needed.

IV.B.3.b.8

Provide a description of efforts and actions taken for the referral to RIDEM of non-storm water discharges not authorized in accordance to Part I.B.3 of this permit or another appropriate RIPDES permit, which the operator has deemed appropriate to continue discharging to the MS4, for consideration of an appropriate permit. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.

No referrals in 2012.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Maintenance, GIS, Design, & Construction is provided as needed.

EFFECTIVENESS - RIDOT considers the coordination with other MS4s and RIDEM an effective effort.

YEAR 10 (2013) EXPECTED ACTIONS- RIDOT will continue working with the MS4s and RIDEM as needed.

IV.B.3.b.9

Provide a description of efforts and actions taken to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste, as well as allowable non-storm water discharges identified as significant contributors of pollutants. Include a description on how this activity was coordinated with the public education minimum measure and the pollution prevention/good housekeeping minimum measure programs. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.

This permit requirement is covered under the URI NEMO Agreement and RIDOT Winter (Construction) & Summer (Maintenance) Training (Please see Minimum Measure 1).

Additional Measurable Goals and Activities

BMP ID 3D – Existing/Future Connections

The Design Office oversees the drainage discharges to the RIDOT system accounted for through Physical Alteration Permit Application (PAPA) system drainage. PAPAs are required whenever a party with State-adjacent land wants curbcut access and/or drainage to the State system. The permit does not allow for additional net flow or volume to the RIDOT system. Tie-ins to the system are required to treat storm water. PAPAs from 2002-2006 were reviewed and each connection into the RIDOT system was inspected, GPSed, and documented. A revised policy for PAPA policy/regulation was established in Year 3 (2006) to include geo-referencing of drainage interconnections. The PAPA records may be reviewed when an illicit discharge is located to aid in identification of existing contributors. Please see **SECTION III.B** for data.

RESPONSIBLE PARTIES - RIDOT Highway Design is the primary RIDOT entity responsible for the implementation of this program; support from RIDOT Natural Resources Unit and GIS is provided as needed.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort. RIDOT anticipates updating the existing PAP Policy & Manual in 2012/2013 to include further guidance (for both RIDOT personnel and the public/consultants submitting the applications) on stormwater quality and volume treatment requirements.

SECTION II.A Other Reporting Requirements - Illicit Discharge Investigation and System Mapping (Part IV.G.2.m)

# of Illicit Discharges Identified in 2012: 4	# of Illicit Discharges Tracked in 2012: 4
# of Illicit Discharges Eliminated in 2012: 4	# of Complaints Received: 2
# of Complaints Investigated: 4	# of Violations Issued: 0
# of Violations Resolved: 0	# of Unresolved Violations Referred to RIDEM: 0
Total # of Illicit Discharges Identified to Date (since 2003):	Total # of Illicit Discharges remaining unresolved at the end of 2012:

Summary of Enforcement Actions:

Johnston – Rt 6 & Memorial Ave – June 20, 2012 (resolved)

RIDOT received a call from the Town of Johnston and RIDEM indicating that sewage was flowing from a RIDOT electrical handhole. The RIDOT Construction Operations Section, the RIDOT Maintenance Division, and the RIDOT Natural Resources Unit sent staff to investigate the site. RIDOT does not own or maintain any sanitary sewer lines anywhere in the State. Sewer lines are the responsibility of either the Sewer Authority in the Municipality, or they are privately owned (generally speaking, small force mains are privately owned and tied into the municipal system). RIDOT assisted RIDEM in the investigation that found the sewage was coming from a commercial business upstream of the RIDOT electrical boxes. This issue was resolved by the private property owner responsible for the problem. RIDEM has indicated that the issue has been resolved.

Smithfield – Stillwater Viaduct – July 9, 2012 (resolved)

RIDOT staff and SWPPP inspector on the Stillwater Viaduct Bridge #278 (Route 116 over the Woonasquatucket River) project in Smithfield discovered a blue liquid leaking onto our construction site. The liquid appeared to be paint or paint waste from the Frank E. Clynes, INC. property adjacent to RIDOT right-of-way. Clynes is a seal-coating, line striping, crack sealing, color coating and paving company located at 75 George Washington Highway in Smithfield. The liquid was running from a parking and storage area on the property into the State right-of-way, through a drainage ditch, which then flows towards the Woonasquatucket River and associated wetlands,

perimeter and riverbank wetlands. In accordance with the RIPDES SWPPP and General Permit we found and documented a non-stormwater related discharge running onto our right of way and active construction site. The discharge was not an allowable discharge in accordance with the SWPPP or GP, was not within our control or authority, and as it may be impacting our right-of-way and adjacent wetlands. The discharge was referred to RIDEM who worked with the property owner to correct the problem.

Providence - Allen's Ave Oil Contamination – February 16, 2012 (resolved)

RIDEM contacted RIDOT NRU regarding oil contamination in a RIDOT catch basin along Allen's Avenue in Providence and also reported flowing oil to the Providence River from the connected DOT outfall.

RIDOT immediately responded to site and provided USCG with road plans and assistance in tracing the drainage system.

After field investigation, it was determined that there was significant oil product in a manhole located between the Thurbers Ave on-ramp and Terminal Rd, directly in front of the Motiva Gas Terminal. Petroleum pipes run under Allen's Ave from the storage tanks on the west side of the road to the fueling terminal on the east side of the road. Motiva was contacted by both DEM and Coast Guard – all systems were reported operational, and at that time, there was no product being pumped through the lines.

Coast Guard placed absorbent booms at the outfall, and ordered a vacor truck to pump out the manhole; RIDOT Maintenance provided traffic control with an attenuator truck from East Providence.

Coast Guard and the NRU followed the drainage system to determine where the product was originating. The immediately adjacent catch basins/manholes all had product in them; some catch basins to the south towards Terminal Rd also had product. No source was identified in the drainage system, even though it appeared that fresh product was flowing in to the original manhole.

Coast Guard took control of the site and no further action was requested of RIDOT, other than possible assistance with traffic control. The outfall has been boomed off by Coast Guard and their emergency response contractor vacuumed oil from the drainage system. Although the RIDOT drainage system is providing the flow conduit to the bay, the drain line runs through a petroleum tank farm so the source was determined by the Coast Guard to be the Motiva property.

USCG August 2012: Everything was passed off to Motiva and National Grid with DEM oversight. No RIDOT responsibilities.

Pawtucket – Bridge 550 – January 06, 2012 (resolved)

During excavation, the contractor identified a previously unknown 6" steel pipe cast into the bridge footing near Peasant Street on or about 12/8/11. The pipe was at least 15 feet below pre-existing (and final) grade at the footing, and the footing is not being demolished. Contractor sampled flow from pipe, and received analytical reports dated 12/13/11. The lab results identified contamination similar to what had previously been identified in surrounding groundwater. This office was notified of the situation on Friday 1/6/12 and notified DEM on 1/9/12. Contractor set up a containment system on or before 1/13 and disposed of collected effluent at a facility in Taunton, MA. Further inspection (TV) of the pipe indicated that it was not connected to any drainage lines and that the invert of the broken/cut inlet end was below the groundwater table. The pipe was plugged ~1/31/12 and DEM OWM was notified.

ILLICIT DISCHARGE DETECTION AND ELIMINATION cont'd

Extent to which the MS4 system has been mapped:

Outfalls: 99% completion for easy-access, standard DOT roadways;
 99% divided highway/limited access DOT roadways

Catchbasins: 90%-95% completion for divided highway/limited access DOT roadways (via Right-of-Way images)
 Ramps to be completed 2012/2013

The RIDOT Maintenance Division has purchased an Asset Management System (VueWorks). RIDOT is still configuring the system, but anticipates full implementation by the end of 2013. This System will allow RIDOT to more accurately document and report drainage asset (catch basins, manholes, pipes, outfalls, etc.) inspections and maintenance work.

Additionally, RIDOT Design and Construction anticipate adding a 'Video inspect, Coordinate Location and Documentation" to Construction contract for further documentation of drainage systems. This policy is expected to be implemented in 2013/2014. Please see Minimum Measure 3C.

Total # of Outfalls Identified and Mapped to date: 3811

SECTION II.B Interconnections (Parts IV.G.2.k and IV.G.2.l)

Interconnection:	Date Found:	Location:	Name of Connectee:	Originating Source:	Planned and Coordinated Efforts and Activities with Connectee:
<p>2012: APPENDIX G – PAPA records.</p> <p>RIDOT will review the PAPA policies and procedures as part of the next RIPDES General Permit measurable goals.</p>					



MINIMUM CONTROL MEASURE #4:

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL (Part IV.B.4 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS:

Include information relevant to the implementation of each measurable goal, such as activities implemented to support the review, issuance and tracking of permits, inspections and receipt of complaints. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern. (Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.4.b.1	Indicate if the Sediment and Erosion Control and Control of Other Wastes at Construction Sites ordinance was not developed, adopted, and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement. Date of Adoption: N/A RIDOT does not have authority to develop/adopt Ordinances. If the Ordinance was amended in 2012, please indicate why changes were necessary. Please also indicate if amendments have been made based on the 2010 <i>RI Stormwater Design and Installation Standards Manual</i> , and provide references to the amended portions of the local codes/ordinances.
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RIDOT does not have authority to develop &/or adopt ordinances. RIDOT relies on the RIDOT Standard Specifications for Road and Bridge Design and Other Specifications, Contract Specific and Job Specific Specifications, and the RIPDES General Permit for Storm Water Discharge Associated with Construction Activity for compliance with this measure.

The RIPDES General Permit for Storm Water Discharge Associated with Construction Activity requires sediment and erosion control and other waste control at construction sites. As the RIPDES Part IV.B.4.b.1 permit requirement is met by the Construction General Permit, RIDOT has focused on creating standardized construction site Stormwater Pollution Prevention Plan templates, which have been in use at RIDOT since 2008 and was distributed to all MS4s via a training session in August 2009. RIDOT created both a Large Site SWPPP for projects with over an acre of soil disturbance (required by the General Permit), and a Small Site SWPPP for projects with less than an acre of soil disturbance (not required by the General Permit, but enacted by RIDOT to further control erosion and sedimentation at our Construction sites).

In 2012, RIDOT approved a URI project to implement a revised model of the RIDEM "Environmental Results Program" on RIDOT Construction Sites. Due to delayed funding issues, and the lack of a URI representative, this project has been postponed. RIDOT is currently looking for a project partner to start the project.

In 2012, the RIDOT Natural Resources Unit worked extensively on the Rhode Island Erosion and Sediment Control Handbook Technical Review Committee. This committee is currently updating the 1989 Handbook, anticipated to be completed in 2013.

RESPONSIBLE PARTIES - RIDOT Design, Construction, and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers the SWPPP templates successful, however full implementation still remains inconsistent with the small-site SWPPP; RIDOT considers the update the 1989 E&S Handbook to be a valuable effort.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue both efforts. Construction personnel have received training on SWPPP Inspections as part of Winter Construction Training in February 2013. RIDOT is searching for a partner to implement the revised model of the RIDEM ERP.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL cont'd

IV.B.4.b.6	Describe actions taken as a result of receipt and consideration of information submitted by the public.
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RIDOT has a Customer Service Office as part of the Director's Office. The purpose of the Customer Service Office is to keep information lines open between the citizens of Rhode Island and RIDOT. We hope to inform, assist, and coordinate our efforts with the general public, cities/towns, businesses, chambers of commerce, public and private organizations, and elected officials during all phases of transportation projects, from concept through completion, to lessen both construction inconveniences and economic impacts. We will strive to produce an effective public information program incorporating such tools as public meetings, project brochures and informational handouts concerning our roads and bridges. Our web site will continue to post up-to-date information on the progress of our projects. The Customer Service Office will also respond to any questions or concerns the public may have regarding the Department of Transportation. The Customer Service Office may be contacted via phone, email, or the RIDOT website: <http://www.dot.state.ri.us/custserv/index.html>.

In 2012, the RIDOT NRU was not informed of any storm water complaints received.

RESPONSIBLE PARTIES - RIDOT Office of Customer Service, Design, Construction, and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort. The VueWorks Asset Management Program that was purchased by the Maintenance Division has a "Customer Service" module that will be fully implemented across the Department in 2013. This module will allow better tracking, coordination, and reporting of measurable goals for the receipt and consideration of stormwater-related complaints.

IV.B.4.b.8	Describe activities and actions taken as a result of referring to the State non-compliant construction site operators. The operator may rely on the Department for assistance in enforcing the provisions of the RIPDES General Permit for Storm Water Discharges Associated with Construction Activity to the MS4 if the operator of the construction site fails to comply with the local and State requirements of the permit and the non-compliance results or has the potential to result in significant adverse environmental impacts.
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RIDOT requires the awarded Construction company to sign as "Operator" in the RIDOT SWPPPs. Any sub-contractor involved in earthwork is also required to sign a signature page acknowledging SWPPP requirements.

RIDOT has also implemented new Job-Specific Page language that allows RIDOT to impose a tiered fine for non-compliance with the Maintenance and Cleaning of Erosion and Pollution Controls. Fines have been imposed on several construction projects.

RESPONSIBLE PARTIES - RIDOT Design, Construction, and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.

Additional Measurable Goals and Activities

BMP ID 4A – E, H – J – Review/Revise RIDOT policies

RIDOT has stated in the Annual Reports that many of the additional BMPs (RIDOT SWMPP 4A – E; H-J) have been informally adopted. Although the Standard Specifications had not been formally revised, the BMPs have been implemented in a manner such that legal responsibility is placed on the Contractors to follow environmental permits, conditions, and requirements. RIDOT has implemented many of the BMPs via the Job Specific (J-S) pages or the Contract Specific (C-S) pages of the Contract Documents. RIDOT has also drafted a revised Environmental Protection specification (Section 104.15 of the RIDOT Standard Specifications) to further clarify what is required of State contractors bidding on RIDOT construction projects. This specification is still under Super Spec Committee review before formal implementation.

Both Construction Site SWPPPs (large-site and small-site) are being utilized for RIDOT Construction projects.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL cont'd

Job Specific and Contract Specific pages include specific requirements regarding additional, or more specific, specifications regarding environmental protection. The Natural Resources Unit ensures that the JS and/or CS pages include the environmental protection language in all appropriate contracts

RIDOT has reviewed the BMPs originally provided in the SWMPP Measure 4 – Construction Site Runoff Control, and feels that the spirit of the BMPs are satisfied with the Standard Specification section 104.15 revision, the inclusion of environmental protection language in to J-S and C-S pages, and the development and use of the Construction Site SWPPP templates.

BMP ID 4G – Erosion and Sedimentation Control Training

Please see Minimum Measure 1.

BMP ID 4K, 4L – Waste Control Training

The standard specifications require proper control and disposal of construction site waste. The Resident Engineer is responsible for ensuring these specifications are met onsite; training is provided as part of the Construction Winter Training Series. Please see Minimum Measure 1.

BMP ID 4M, 4N, 4O – Pre-construction Meetings

The NRU currently meets with contractors prior to construction commencement to review environmental constraints and permit conditions.

RESPONSIBLE PARTIES - RIDOT Design, Construction, and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.

SECTION II. A - Plan and SWPPP Reviews during Year 9 (2012), Part IV.B.4.b.2: Issuance of permits and/or implementation of policies and procedures for all construction projects resulting in land disturbance of greater than 1 acre.

Part IV.B.4.b.4: Review 100% of plans and SWPPPs for construction projects resulting in land disturbance of 1-5 acres must be conducted by adequately trained personnel and incorporate consideration of potential water quality impacts.

of Construction Reviews completed: **100%**

Summary of Reviews and Findings, include an evaluation of the effectiveness of the program. Identify person(s) /Department and/or parties responsible for the implementation of this requirement.

The NRU reviews all plans and SWPPPs as part of the design review and permitting process. RIDOT is required to submit plans to DEM, CRMC, ACOE, etc for permits.

RESPONSIBLE PARTIES - The RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort. As part of the next RIPDES General Permit measurable goals, RIDOT will evaluate how to better track SWPPP reviews and inspections.

SECTION II.B - Erosion and Sediment Control Inspections during Year 9 (2012), Parts IV.G.2.n and IV.B.4.b.7:
 Inspection of 100% of all construction projects within the regulated area that discharge or have the potential to discharge to the MS4 (the program must include two inspections of all construction sites, first inspection to be conducted during construction for compliance of the Erosion and Sediment controls at the site, the second to be conducted after the final stabilization of the site).

# of Site Inspections:	# of Complaints Received:
# of Violations Issued:	# of Unresolved Violations Referred to RIDEM: n/a
<p>Summary of Enforcement Actions, include an evaluation of the effectiveness of the program. Identify person(s) /Department and/or parties responsible for the implementation of this requirement.</p> <p>RIDOT Construction projects that disturb an area greater than one acre are required to have Storm Water Pollution Prevention Plans (SWPPPs) under the RIPDES Construction General Permit. SWPPPs require erosion and sedimentation control inspections on a weekly basis, and after a storm event. RIDOT hires consultant inspectors to perform SWPPP inspections on RIDOT construction projects. Each active construction project with a SWPPP has weekly &/or storm event E&S monitoring. In 2012, there were 17 active construction projects with large-site SWPPPs (69 total active projects). <u>ATTACHMENT 4A</u></p> <p>RIDOT Construction projects that disturb an area less than one acre are required to have a Small Site Storm Water Pollution Prevention Plans (sm-SWPPPs). Small Site SWPPPs require erosion and sedimentation control inspections on a weekly basis, and after a storm event. RIDOT Resident Engineers (or designate) perform the inspections on RIDOT construction projects.</p> <p>Final Inspections are conducted on every RIDOT construction project, and are attended by appropriate personnel from the Finals, Maintenance, Design, Construction, and Environmental sections. If any drainage work, BMP, or proper stabilization is not correctly installed/established, the contractor is notified and must remedy the issue before Final Acceptance is granted. Final payment is based on this Final Acceptance. In 2012, there were 39 Final Inspections. <u>ATTACHMENT 4B</u></p>	



MINIMUM CONTROL MEASURE #5:

POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REVELOPMENT (Part IV.B.5 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS:

Include information relevant to the implementation of each measurable goal, such as activities implemented to support the review, issuance and tracking of permits, inspections and receipt of complaints, etc. Please indicate if any projects have incorporated the use of Low Impact Development techniques. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern. (Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.5.b.5	Describe activities and actions taken to coordinate with existing State programs requiring post-construction storm water management.
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The NRU coordinates a monthly Meeting with RIDEM to review projects. The NRU also coordinates an Interagency meeting (CRMC, Army Corps, RIDEM, F&W, etc.) as necessary.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.

IV.B.5.b.6	Describe actions taken for the referral to RIDEM of new discharges of storm water associated with industrial activity as defined in RIPDES Rule 31(b)(15) (the operator must implement procedures to identify new activities that require permitting, notify RIDEM, and refer facilities with new storm water discharges associated with industrial activity to ensure that facilities will obtain the proper permits).
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Not applicable to RIDOT

IV.B.5.b.9	<p>Indicate if the Post-Construction Runoff from New Development and Redevelopment Ordinance was not developed, adopted, and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement.</p> <p>Date of Adoption: If the Ordinance was amended in 2012, please indicate why changes were necessary. Please also indicate if amendments have been made based on the 2010 <i>RI Stormwater Design and Installation Standards Manual</i>, and provide references to the amended portions of the local codes/ordinances.</p>
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Not applicable to RIDOT

IV.B.5.b.12	Describe activities and actions taken to identify existing storm water structural BMPs discharging to the MS4 with a goal of ensuring long term O&M of the BMPs.
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BMP ID 5C – Identification of existing structural BMPs & BMP ID 5B – Maintenance and Cleaning of structural BMPs

In 2012, the RIDOT BMP database has been updated to include newly installed structural BMPs and additional information regarding inspections and maintenance. This updated database will be used to populate the Maintenance Division asset management program, VueWorks (please see Minimum Measure 6 for more information). This information has also been collated for each Maintenance Garage into binders. The

RIDOT Maintenance, with assistance from the Natural Resources Unit, is responsible for the regular inspection and cleaning of these units.

Additionally, RIDOT requires that newly installed storm water treatment units are cleaned before construction final acceptance and payment. The new RI Stormwater Design and Installation Standards Manual requires Operations and Maintenance Manuals to be developed as part of project permitting requirements. The O&M manuals are forwarded to RIDOT Maintenance for review, and the information will be entered in to the VueWorks system once implemented.

RESPONSIBLE PARTIES - RIDOT Maintenance and MIS/GIS are the primary RIDOT entities responsible for the implementation of this program, with assistance from the Natural Resources Unit as necessary.

EFFECTIVENESS - RIDOT considers the implementation of the VueWorks System in Maintenance will be an effective method to ensure long term operation and maintenance of the storm water treatment units.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.

Additional Measurable Goals and Activities

IV.B.5.b.2; BMP ID 5A: Meeting Water Quality Standards

Current RIDOT policy requires that all new construction meet the State water quality standards for pollutant removal from storm water and redevelopment projects must incorporate BMPs to improve storm water quality to the maximum extent practicable. Management of post-construction runoff is incorporated into project designs. All RIDOT projects are required to follow all federal, state, and local regulations, including the use of the 2010 RIDEM/CRMC Rhode Island Stormwater Design and Installation Standards Manual for the design of construction projects.

RESPONSIBLE PARTIES - RIDOT Design and Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.

IV.B.5.b.4 – Review of plans

Current RIDOT policy requires that all new construction meet the State water quality standards for pollutant removal from storm water and redevelopment projects must incorporate BMPs to improve storm water quality to the maximum extent practicable. Management of post-construction runoff is incorporated into project designs. RIDOT's Natural Resource Unit reviews all construction design plans to determine if Permits from regulatory agencies (RIDEM, CRMC, ACOE, Coast Guard, etc) are required.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this effort effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort. RIDOT will work towards better documentation as part of an ongoing Environmental Management System audit.

SECTION II.A. - Plan and SWPPP Reviews during Year 9 (2012), Part IV.B.5.b.4: Review 100% of post-construction BMPs for the control of storm water runoff from new development and redevelopment projects that result in discharges to the MS4 which incorporates consideration of potential water quality impacts (the program requires reviewing 100% of plans for development projects greater than 1 acre, not reviewed by other State programs).

of Post-Construction Reviews completed:
Summary of Reviews and Finding, include an evaluation of the effectiveness of the program. Identify person(s) /Department and/or parties responsible for the implementation of this requirement.
All construction plans and SWPPPs are reviewed by RIDOT Design and NRU before contract award. Post-construction storm water BMPs are reviewed at that time. Please see Minimum Measure 4, Section III.
RESPONSIBLE PARTIES - RIDOT Natural Resources Unit & Design are the primary RIDOT entities responsible for the implementation of this program.
EFFECTIVENESS - RIDOT considers this effort effective.
YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort. RIDOT will work towards better documentation as part of an ongoing Environmental Management System audit.

SECTION II.B. - Post Construction Inspections during Year 9 (2012), Parts IV.G.2.o and IV.B.5.b.10 - Proper Installation of Structural BMPs: Inspection of BMPs, to ensure these are constructed in accordance with the approved plans (the program must include inspection of 100% of all development greater than one acre within the regulated areas that result in discharges to the MS4 regardless of whom performs the review).

# of Site Inspections: 39	# of Complaints Received: n/a
# of Violations Issued: n/a	# of Unresolved Violations Referred to RIDEM: n/a
Summary of Enforcement Actions:	
IV.B.5.b.10; BMP ID 5D, 5E - Every RIDOT Construction project receives a Final Inspection before final payment. All 2012 Final Inspections were attended by Design, Construction, and Maintenance personnel. Environmental personnel attended when appropriate. <u>ATTACHMENT 4B</u>	
RESPONSIBLE PARTIES - RIDOT Final Inspections Division, Construction, Maintenance, Design and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.	
EFFECTIVENESS - RIDOT considers this effort effective.	
YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue this effort.	

SECTION II.C. - Post Construction Inspections during Year 9 (2012), Parts IV.G.2.p and IV.B.5.b.11 - Proper Operation and Maintenance of Structural BMPs: Describe activities and actions taken to track required Operations and Maintenance (O&M) actions for site inspections and enforcement of the O&M of structural BMPs. Tracking of required O&M actions for site inspections and enforcement of the O&M of structural BMPs.

# of Site Inspections: 0	# of Complaints Received: 0
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
<p>Summary of Activities and Enforcement Actions. Evaluate the effectiveness of the Program in minimizing water quality impacts. Identify person(s) /Department and/or parties responsible for the implementation of this requirement.</p> <p>RIDOT Maintenance will include the BMP database in to their Asset Management System (VueWorks) (please see Minimum Measure 6). Once this system is implemented, post-construction stormwater BMP installation, inspection, and maintenance will be tracked.</p> <p>RESPONSIBLE PARTIES - RIDOT Maintenance and MIS/GIS are the primary RIDOT entities responsible for the implementation of this program, with assistance from the Natural Resources Unit as necessary.</p> <p>EFFECTIVENESS - RIDOT considers this effort will be effective once implemented in to the Maintenance Asset Management System.</p> <p>YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will continue the effort of configuring VueWorks for post-construction BMP inspections and maintenance.</p>	



MINIMUM CONTROL MEASURE #6:

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS (Part IV.B.6 General Permit)

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS:

Include information relevant to the implementation of each measurable goal, such as activities and practices used to address on-going requirements, and personnel responsible. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern. (Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals.)

IV.B.6.b.1.i	Describe activities and actions taken to identify structural BMPs owned or operated by the small MS4 operator (the program must include identification and listing of the specific location and a description of all structural BMPs in the SWMPP and update the information in the Annual Report). Evaluate appropriateness and effectiveness of this requirement.
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The NRU and the Design Section have identified all RIDOT BMPs through plan inspection and contract document searches. An Access Database was developed by the NRU to document the BMP inventory, inspection, and maintenance. **This database has been updated in 2012 with additional maintenance and inspection schedule information.** This data will be used in the Asset Management System. (**ATTACHMENT 6A**)

In 2011, RIDOT Maintenance purchased an Asset Management System – VueWorks. This system is currently being configured for implementation in the RIDOT Highway and Bridge Maintenance Division. RIDOT understands the importance of accurate records and reporting with respect to storm water management, and RIDOT has chosen to prioritize the implementation of the drainage network assets. Configuration is still underway, with full implementation in the Maintenance Division anticipated in Fall 2013.

RESPONSIBLE PARTIES – The RIDOT Natural Resources Unit was the entity to compile the inventory and inspection data. The RIDOT Maintenance Division & GIS Division are the primary RIDOT entities responsible for the implementation of the VueWorks program.

EFFECTIVENESS - RIDOT considered the implementation of VueWorks will be effective to document existing BMPs, implement an inspection program, and document maintenance activities.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT will develop a policy/procedure to have consultants provide geographical coordinates for future installations. RIDOT Maintenance anticipates the implementation of VueWorks in Maintenance will be complete in 2013. RIDOT also anticipates implementing VueWorks in other Divisions through 2013/2014.

IV.B.6.b.1.ii	Describe activities and actions taken for inspections, cleaning and repair of detention/retention basins, storm sewers and catch basins with appropriate scheduling given intensity and type of use in the catchment area. Evaluate appropriateness and effectiveness of this requirement.
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BMP IDs 6F, 6G, 6H, 6I, 6J, 6M, 6N, 6O, 6P, 6Q, 6R

All RIDOT BMPs have been inspected (2009) and cleaned (as necessary) (2010). RIDOT STUs installed on currently active Construction sites are cleaned as part of the final acceptance requirements. **In 2012, RIDOT NRU interns reviewed the database to ensure QA/QC. The updated database will be used as the base data for the newly configured Asset Management Program.**

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of the 2009 BMP Monitoring contract.

RIDOT Maintenance is the primary RIDOT entity responsible for the inspection and maintenance of the

units. This will be part of the VueWorks Asset Management System.

EFFECTIVENESS - RIDOT considered the BMP Monitoring Contract an effective one-time-baseline inspection/cleaning effort. RIDOT anticipates the VueWorks system will be an effective tool to schedule and document BMP inspections and maintenance work.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance anticipates full implementation of VueWorks in 2013, after configuration and training is complete; structural BMPs will be part of this system.

RIDOT Maintenance Division will conduct future inspections, maintain the stormwater structures, and document work in the VueWorks system.

IV.B.6.b.1.iii

Describe activities and actions taken to support the requirement of yearly inspection and cleaning of all catch basins (a lesser frequency of inspection based on at least two consecutive years of operational data indicating the system does not require annual cleaning might be acceptable). Evaluate appropriateness and effectiveness of this requirement.

Total # of CBs within regulated area (including SRPW and TMDL areas): **unknown**

Total # of CBs inspected in 2012: **1244 (Maintenance)**

Total # of CBs cleaned in 2012: **1244 (Maintenance) + 862 (Construction)**

BMP ID 6K, 6L – Annual Catch Basin Cleaning

RIDOT cannot inspect &/or clean every catch basin annually due to the extent of the RIDOT system and the resources available.

Each Maintenance Facility bases catch basin cleaning on institutional knowledge of system. The RIDOT Maintenance Division regularly cleans catch basins throughout the state during the Spring/Summer/Fall months. Cleaning is primarily based on institutional knowledge of ‘trouble spots’ in the areas, response to complaints, and response to flooding issues.

RIDOT is able to provide more reliable documentation of what has been inspected/cleaned by the Maintenance Division. A copy of the Catch Basin Database is included; however it is not a complete documentation of RIDOT Maintenance inspections or activities. **In 2012, RIDOT estimates that 1244 catch basins were cleaned as part of Maintenance projects. ATTACHMENT 6B**

The RIDOT Construction Division is also responsible for maintenance and cleaning of drainage system components involved in active construction projects. As part of any project that requires drainage work, contractors are typically required to ‘flush and clean’ the drainage system. RIDOT estimates these catch basins by examining the “Distribution of Quantities” in projects that have been Finalized in 2011 (the “DOQ” provides a listing of payment items; and ‘clean and flushing of the system is typically one of the last procedures of an active construction project). **In 2012, RIDOT estimates that 96,189 linear feet of drainage lines, 88 manholes, and 774 catch basins were cleaned as part of Construction projects. ATTACHMENT 6C**

In 2011, the Maintenance Division purchased an Asset Management System (VueWorks). VueWorks is currently being configured for implementation in the RIDOT Highway and Bridge Maintenance Division. RIDOT understands the importance of accurate records and reporting with respect to storm water management, and RIDOT has chosen to prioritize the implementation of the drainage network assets. The current RIDOT catch basin database will be used as base data and concept; it is now anticipated that the drainage assets will be fully implemented by the end of 2013. RIDOT also anticipates implementing this program in the Design and Construction Divisions to more accurately document the catch basins inspected and cleaned as part of their routine work.

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.

RIDOT Construction is the secondary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT does not consider this measure achievable. However, with the implementation of VueWorks, it is anticipated that RIDOT will be able to provide accurate documentation of inspections and maintenance and develop a programmatic preventative maintenance schedule for the drainage network. This is anticipated to take several years.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue to inspect and clean catch

basins as part of regular Maintenance activities; Maintenance will continue the implementation of VueWorks – starting with the drainage network assets.

RIDOT NRU has developed new Standard Specifications that will be included in future Design/Construction contracts to include “video inspections, GPS locating, and documenting” as part of typical “Clean and Flush” work. It is anticipated that this will be fully implemented in 2013.

Additionally, RIDOT has two current construction projects at the 90% design phase that will clean, flush, repair, and video inspection & document the drainage system on I-295. RIDOT Environmental, Design, Construction, and Maintenance are all working together on these projects.

IV.B.6.b.1.iv

Describe activities and actions taken to minimize erosion of road shoulders and roadside ditches by requiring stabilization of those areas. Evaluate appropriateness and effectiveness of this requirement.

BMP ID 6S – Stabilization of road side shoulders

RIDOT funded Dr. Rebecca Brown of the University of Rhode Island to develop a slope stabilizing, salt tolerant grass mix. The study with URI on the Salt Tolerant Grass Mixes is entitled *Evaluation of Native Grasses for Highway Slope Stabilization and Salt Tolerance*. The purpose of the study was to help develop a grass seed mix that can be used along the highway, especially at the road edge, where grass is being killed by the winter salt. It would be advantageous to have a grass seed mix that will grow in this 20 foot zone, so erosion of the road edge would not occur. Another part of this study is to help develop a seed mix that consists of native grasses that are deep rooted for use on steep slopes to help prevent erosion. This would be used in rural areas and would possibly not be mowed. This project was funded with research monies from FHWA.

RESPONSIBLE PARTIES - URI has completed the research study.

EFFECTIVENESS – RIDOT anticipates the research will aid in future stabilizations efforts.

YEAR 10 (2013) EXPECTED ACTIONS - The RIDOT Landscape Unit has reviewed the studies, and will implement key findings as appropriate.

RIDOT will continue to fund environmental studies through the National Highway Cooperative Research Program with URI.

IV.B.6.b.1.v

Describe activities and actions taken to identify and report known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation, for the Department to determine on a case-by-case basis if the scouring or sedimentation is a significant and continuous source of sediments. Evaluate appropriateness and effectiveness of this requirement.

Discharges causing scouring are identified during the initial outfall location identification and GPS field work (**Permit ID# IV.B.3.b.1; BMP ID 3A – Outfall Mapping**).

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit was the primary RIDOT entity responsible for the initial identification of outfalls with scouring &/or sedimentation.

RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.

RIDOT Construction is the secondary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT does not consider this measure achievable. However, with the implementation of VueWorks, it is anticipated that RIDOT will be able to provide accurate documentation of inspections and maintenance and develop a programmatic preventative maintenance schedule for the drainage network. This is anticipated to take several years.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue to inspect and clean catch basins as part of regular Maintenance activities; Maintenance will continue the implementation of VueWorks – starting with the drainage network assets.

RIDOT NRU has developed new Standard Specifications that will be included in future Design/Construction contracts to include “video inspections, GPS locating, and documenting” as

part of typical "Clean and Flush" work. It is anticipated that this will be fully implemented in 2013.

IV.B.6.b.1.vi	<p>Indicate if all streets and roads within the urbanized area were swept annually and if not indicate reason(s). Evaluate appropriateness and effectiveness of this requirement.</p> <p>Total roadway miles within regulated area (including SRPW and TMDL areas): unknown</p> <p>Total roadway miles that were swept in 2012: unknown</p>
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BMP ID 6T, 6U – Annual Road Sweeping

The RIDOT Maintenance Division has attempted to sweep 100% of the state highways each year, however this is often not achieved due to the limited availability of overtime, personnel, and equipment. It is estimated that 80-90% of divided highway sweeping is completed each year. The individual facilities estimate that 90-100% of the secondary roadways are completed each year.

Beginning in 2007 the RIDOT Highway & Bridge Maintenance Division implemented an alternate program for sweeping the high-speed/limited access facilities in and around the **Providence metropolitan area**. Known as the "Big Sweep", all seven of the Division's District Maintenance Facilities perform a coordinated sweeping operation, with each District operating outside of its usual boundaries. This concerted effort allows for a great deal of highway miles to be swept over a brief period of three to four weeks.

Per year the Division is typically authorized for 3-4 nights of overtime operations in order to schedule this program, which occurs one night per week in April/May. In addition, portions of these segments may be re-swept 2-4 times over the remainder of the year as debris and sediments accumulate.

Currently, RIDOT cannot provide accurate documentation of roadway sweeping operations. However, **in 2011, the Maintenance Division purchased an Asset Management System (VueWorks)**. VueWorks is currently being configured for implementation in the RIDOT Highway and Bridge Maintenance Division. RIDOT understands the importance of accurate records and reporting with respect to storm water management, and RIDOT has chosen to prioritize the implementation of the drainage network assets. The sweeping operations are also anticipated to be fully implemented in 2013.

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT does not consider this measure achievable. Currently, RIDOT has insufficient resources to conduct roadway sweeping more than once per year other than as a response to complaint or need. However, with the implementation of VueWorks, it is anticipated that RIDOT will be able to provide accurate documentation of sweeping operations and develop a programmatic maintenance schedule for the sweeping operation. This programmatic approach is anticipated to be in effect for the 2013 sweeping season.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue to sweep roads as part of regular Maintenance activities; Maintenance will continue the implementation of VueWorks – starting with the drainage network assets.

IV.B.6.b.1.vii	<p>Describe activities and actions taken for controls to reduce floatables and other pollutants from the MS4. Evaluate appropriateness and effectiveness of this requirement.</p>
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RIDOT uses prison work crews to pick up litter along highways. **In 2012, RIDOT paid \$845,750 for prison crews and picked up 55,580 bags of litter.** Please see Minimum Measure 2C.

Additionally, RIDOT is utilizing state-of-the-art snow equipment to reduce sand pollutants.

<http://www.ecori.org/front-page-journal/2013/2/8/liquid-salt-reducing-sand-on-ri-roads.html>

ATTACHMENT 6D

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this measure effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue this program.	
IV.B.6.b.1.viii	<p>Describe the method for disposal of waste removed from MS4s and waste from other municipal operations, including accumulated sediments, floatables and other debris and methods for record-keeping and tracking of this information.</p> <p>RIDOT Maintenance facilities have Stormwater Pollution Prevention Plans and/or Spill Prevention Plans (as appropriate) which require the proper storage and removal of waste. (Submitted to RIDEM RIPDES w/ 2006 Annual Report; Updated 2011/2012). Catch basin and street sweeping wastes are disposed of at the Johnston Rhode Island Resource Recovery landfill following applicable state regulations and guidance In 2011, the SWPPPs and SPCCs were evaluated and updated. <u>ATTACHMENT 6E</u></p> <p>In 2012, a full SWPPP & SPCC Audit was conducted at each Maintenance Facility to determine purchasing needs for compliance issues. RIDOT Maintenance is currently working on full implementation of the updated plans. <u>ATTACHMENT 6F</u></p> <p>RIDOT Construction projects must adhere to the RIDOT Standard Specifications (“Blue Book”), which requires the proper and legal disposal of waste from all RIDOT Construction sites. In order for a Contractor to get paid for the item, proper documentation and record-keeping is required.</p> <p>RESPONSIBLE PARTIES - RIDOT Maintenance and Construction are the primary RIDOT entities responsible for the implementation of this program.</p> <p>EFFECTIVENESS - RIDOT considers this measure effective.</p> <p>YEAR 10 (2012) EXPECTED ACTIONS - RIDOT Maintenance & Construction will continue this program. RIDOT Maintenance is currently implementing the compliance items for each facility SWPPP & SPCC</p>
IV.B.6.b.4 and IV.B.6.b.5	<p>Describe and indicate activities and corrective actions for the evaluation of compliance. This evaluation must include visual quarterly monitoring; routine visual inspections of designated equipment, processes, and material handling areas for evidence of, or the potential for, pollutants entering the drainage system or point source discharges to a waters of the State; and inspection of the entire facility at least once a year for evidence of pollution, evaluation of BMPs that have been implemented, and inspection of equipment. A Compliance Evaluation report summarizing the scope of the inspection, personnel making the inspection, major observations related to the implementation of the Storm Water Pollution Prevention Plan, and any actions taken to amend the Plan must be kept for record-keeping purposes.</p> <p>RIDOT Maintenance facilities have Stormwater Pollution Prevention Plans and/or Spill Prevention Plans (as appropriate). The Facility SWPPP requires actions (inspections, monitoring, reporting) fulfilling obligations under IV.B.6.b.4 and IV.B.6.b.5.</p> <p>In 2011, the SWPPPs and SPCCs were evaluated and updated. <u>ATTACHMENT 6E</u></p> <p>In 2012, a full SWPPP & SPCC Audit was conducted at each Maintenance Facility to determine purchasing needs for compliance issues. RIDOT Maintenance is currently working on full implementation of the updated plans. <u>ATTACHMENT 6F</u></p> <p>RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.</p> <p>EFFECTIVENESS - RIDOT considers this measure effective.</p> <p>YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance is currently implementing the SWPPPs & SPCCs. RIDOT Maintenance is also implementing an asset management program, VueWorks, and it is anticipated that facility inspections will be documented in VueWorks in the future as part of the FACILITIES module.</p>
IV.B.6.b.6	<p>Describe all employee training programs used to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance for the past calendar year, including staff municipal participation in the URI NEMO storm water public education and outreach program and all in-house training conducted by municipality or other parties. Evaluate appropriateness and effectiveness of this requirement.</p>

BMP ID 6C, 6D, 6E – Employee training Please see Minimum Measure 1.

IV.B.6.b.7

Describe actions taken to ensure that new flow management projects undertaken by the operator are assessed for potential water quality impacts and existing projects are assessed for incorporation of additional water quality protection devices or practices. Evaluate appropriateness and effectiveness of this requirement.

Not applicable to RIDOT

Additional Measurable Goals and Activities

BMP ID 6A, 6B – Winter Operations - ONGOING

Salt Storage: Currently, 14 out of 20 RIDOT Salt Storage facilities have permanent cover. Where facilities do not have salt barns, a contractor has been hired to cover & uncover salt piles. The contract was originally awarded late in the FY2010 winter season and was if full effect for the FY2011 winter. New salt storage barns are now being designed & constructed to have completely enclosed loading and unloading operations. These new barns are being constructed as funding allows. It is anticipated that all RIDOT salt storage will be under permanent cover in 2015 (dependent upon funding).

In 2011, RIDOT Maintenance Division has invested significant capital expense in the Winter Operations program. A salt-brining machine was purchased and installed at the Mid-State Facility in 2011. This machine allows Maintenance to pre-treat the roadways with a brine solution before a snow event. Maintenance also purchased 61 closed-loop spreader control systems to upgrade or refurbish existing Maintenance vehicles with better machinery to control salt/sand spreading rates. RIDOT Maintenance also initiated a 20% *Green Equipment Incentive* for RIDOT vendors. Vendors must have an operating and functional AVL/GPRS closed loop spreader to receive the 20% increased pay rate. These investments will significantly reduce the amount of salt and sand on RIDOT roadways.

RIDOT Maintenance has also decided to keep the updated RFP for the 'end of season salt/sand transport' which includes large material haulers to expedite the final state-wide consolidation of salt/sand piles to covered locations. Previously, this final winter operation task took several months of transporting the temporary salt piles to permanent structures. With this updated RFP, it is now completed within several weeks.

2012 SALT BARN STATUS:

Anthony Road, Portsmouth – new facility scheduled to be constructed 2013-2014, salt storage facility will follow that construction, likely in 2015-2016. Projects were delayed due to use of our parcel as a stockpile area for Sakonnet River Bridge project

Apex/I-95 Pawtucket – new paved stockpile area was constructed in 2010 near Exit 30 (I-95 South). We are currently in negotiations with the City of Pawtucket to construct a new salt storage (shared use) at their existing DPW facility off of Armistice Blvd.; construction likely in 2014

Belleville, NK – completed 2009

Dillon's Corner, Narragansett: awarded in 2012, construction to be completed in 2013

Geo. Washington Hwy, Lincoln: awarded in 2012, construction to be completed in 2013

Route 116, Smithfield –completed in 2010

Route 6 & 295, Johnston: completed 2010

Warren Ave, E. Prov – scheduled for construction in 2014-2015 depending upon funding and use of stockpile area as a staging area for accelerated bridge replacement project

West Main Road, Middletown – site was discontinued in 2010; new stockpile area is located at Route 138 off-ramp in Newport. Long term plan is to construct a shared-use facility at the Newport DPW site off of Adm. Kalbfus.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

Construction not likely before 2015.

Of note is that the new environmental regulations which took effect in 2010 have increased our overall construction costs by about 25% thus reducing our ability to construct 2 new facilities per year, we now can only afford to build 2 facilities over 3 years based on current funding appropriations. The new environmental regulations require the entire storage and loading process to occur under the same roof, within the structure, which forced us to expand the square footage of the facilities in order to continue to maintain adequate salt quantities to maintain safe and operable highways.

RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.

EFFECTIVENESS - RIDOT considers this measure effective.

YEAR 10 (2013) EXPECTED ACTIONS - RIDOT Maintenance will continue this program. RIDOT Maintenance will continue to upgrade equipment & salt barns as funding allows.

SECTION II.A - Structural BMPs (Part IV.B.6.b.1.i)

BMP ID:	Location:	Name of BMP Owner/Operator:	Description of BMP:
ATTACHMENT 6A			

SECTION II.B - Discharges Causing Scouring or Excessive Sedimentation (Part IV.B.6.b.1.v)

Outfall ID:	Location:	Description of Problem:	Description of Remediation Taken, include dates:	Receiving Water Body Name/Description:
ATTACHMENT 6G				

SECTION II.C - Note any planned municipal construction projects/opportunities to incorporate water quality BMPs, low impact development, or activities to promote infiltration and recharge (Part IV.G.2.j).

RIDOT Design/Construction projects are required to use the 2010 Rhode Storm Water Design and Installation Standards Manual, as applicable, which requires water quality BMPs & LID. RIDOT Design/Construction projects are also subject to DEM RIPDES, Water Quality, & Wetland regulations, CRMC, ACOE, USCG, etc. permit requirements.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

SECTION II.D - Please include a summary of results of any other information that has been collected and analyzed. This includes any type of data (Part IV.G.2.e).

none



TOTAL MAXIMUM DAILY LOAD (TMDL) or other Water Quality Determination REQUIREMENTS

SECTION I. If you have been notified that discharges from your MS4 require non-structural or structural storm water controls based on an approved TMDL or other water quality determination, please provide an assessment of the progress towards meeting the requirements for the control of storm water identified in the approved TMDL (Part IV.G.2.d). Please indicate rationale for the activities chosen to address the pollutant of concern.

RIDOT was awaiting RIDEM's issuance of the next RIPDES General Permit (expected in 2008 when the last permit expired) to amend its SWMPP to include RIDEM TMDL implementation plan efforts. In 2012, RIDOT has focused on creating Request for Proposals (RFPs) seeking consultant services for developing a 5-year state-wide TMDL implementation plan for RIDOT. **ATTACHMENT 7A**

In 2012, RIDOT was a project partner with RIDEM in the Municipal Mapping Assistance Program (MMAP). Through this program, RIDEM and RIDOT interns worked together with the towns of Smithfield and Johnston to delineate the catchment area and the drainage system components of the priority outfalls identified in the Woonasquatucket River TMDL Report. In 2013, RIDOT will continue to partner with the RIDEM MMAP program with the focus in North Providence. ATTACHMENT 2A

In 2012, RIDOT was also a member of the Roger Williams Park Ponds Restoration Steering Committee. This team, led by Providence's Roger Williams Park and the Narragansett Bay Estuary Program, focuses on restoring Roger Williams Park ponds through stormwater management bmps. Roger Williams Park ponds were identified in the Total Maximum Daily Loads for Phosphorus To Address 9 Eutrophic Ponds TMDL report. RIDOT received several conceptual design practices that may be incorporated in to future RIDOT projects in the area.

In 2012, RIDOT developed a comprehensive database for RIDOT TMDL compliance. This database includes information regarding the TMDL document, the listed waterbodies, RIDOT associated outfalls, and other pertinent information that will aid RIDOT in developing a comprehensive action plan. In 2013, RIDOT will visit each TMDL-listed priority outfall to evaluate dry weather discharge, catchment area (if applicable), and contribution to impaired waterbody. This effort is anticipated to be ongoing through 2014. **ATTACHMENT 7B**

Current Status:

Stormdrain Retrofit

The Stormdrain Retrofit Demonstration Project started in 1993 with Federal Funding from ISTEA (1991). In 1996, URI conducted a study to determine Priority Outfalls within the Moshassuck, Pawtuxet, and Woonasquatucket River watersheds. RIDEM, RIDOT, and numerous other agencies and stakeholders agreed that 20 of these outfalls were to be the priority focus of RIDOT retrofit efforts. In 1998, Crossman Engineering, Inc (CEI) was contracted to re-assess the priority outfall report, and provide recommendations of the final outfall retrofits. CEI provided the Phase III Report in 2003 that recommends the prioritization of the outfalls. Of the 20 priority outfalls highlighted in the Phase III Report, RIDOT has one remaining outfall to be retrofitted. Ten priority outfalls have been constructed; five priority outfalls have been designed but then incorporated in to larger construction projects; four priority outfalls have 'no build' as the design recommendation from CEI; the remaining outfall (P106) has a conceptual design completed, and is on hold. In addition to these 20 priority outfalls, 10 other project areas have been retrofitted.

In 2012, the RIDOT Stormdrain Retrofit Program Project Manager worked to obtain funding to advance work to resolve beach closure issues at Scarborough State Beach. Funding approvals have been issued for

completing preliminary designs in order to determine a final design scenario. Final design work is dependent upon the State (not RIDOT) obtaining construction and maintenance funding.

TMDL Watersheds

In addition to the Stormdrain Retrofit Program, RIDOT incorporates drainage improvements in construction projects within TMDL areas where feasible.

Apponaug Cove, Gorton Pond, Greenwich Bay: The Apponaug Circulator Improvements project design is currently under review at RIDEM; advertising is anticipated in 2013. This project is incorporating significant improvements to the current river and wetland system, including daylighting Apponaug River.

Greenwich Bay: Consultant has received both RIDOT and RIDEM TMDL comments on the Initial Project Assessment Report. This work was not advanced in 2012 due to resource constraints.

Sakonnet River: The Sakonnet River Bridge Replacement project drainage work is designed to achieve improved TSS removal rates through the addition of deep sump catch basins, extended detention basins, and the use of bio-retention facilities. Local roads were added to the drainage system improvements to achieve a greater water quality benefit over a larger area. This project is still under construction.

Bailey Brook: The Two Mile Corner Reconstruction project will mitigate untreated stormwater through a created gravel wetland. This project is in construction.



SPECIAL RESOURCE PROTECTION WATERS (SRPWs)

SECTION I. In accordance with Rule 31(a)(5)(i)G of the *Regulations for the Rhode Island Pollutant Discharge Elimination System (RIPDES Regs)*, on or after March 10, 2008, any discharge from a small municipal separate storm sewer system to any Special Resource Protection Waters (SRPWs) or impaired water bodies within its jurisdiction must obtain permits if a waiver has not been granted in accordance to Rule 31(g)(5)(iii). A list of SRPWs can be found in Appendix D of the *RIDEM Water Quality Regulations* at this link:

<http://www.dem.ri.gov/pubs/regs/regs/water/h20q09a.pdf>

The 2008 303(d) Impaired Waters list can be found in Appendix G of the *2008 Integrated Water Quality Monitoring and Assessment Report* at this link: <http://www.dem.ri.gov/programs/benviron/water/quality/pdf/iwqmon08.pdf>

If you have discharges from your MS4 (regardless of its location) to any of the listed SRPWs or impaired waters (including impaired waters when a TMDL has not been approved), please provide an assessment of the progress towards expanding the MS4 Phase II Storm Water Program to include the discharges to the aforementioned waters and adapting the Six Minimum Control Measures to include the control of storm water in these areas. Please indicate a rationale for the activities chosen to protect these waters. Please note that all of the measurable goals and BMPs required by the 2003 MS4 General Permit may not be applicable to these discharges.

RIDOT has chosen to implement our Storm Water Management Program state-wide, not just within the Urban Boundary and divided highways. As such, all 6 minimum measures are being implemented state-wide.



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



Office of Water Resources

INSTRUCTIONS FOR THE RI POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES)

SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS AND INDUSTRIAL ACTIVITY AT ELIGIBLE FACILITIES OPERATED BY REGULATED SMALL MS4s

ANNUAL REPORT FORM

WHO MUST SUBMIT AN ANNUAL REPORT:

Owners/Operators of regulated small municipal separate storm sewer systems (MS4s) and industrial activities authorized to discharge storm water under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Storm Water General Permit for Small Municipal Separate Storm Sewer Systems and Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s (hereafter referred to as "the General Permit"), must submit an Annual Report, outlined in Part IV.G of the permit. The Report must be submitted each year after permit issuance by March 10th to track progress of compliance. If you have questions regarding this Annual Report Form contact Margarita Chatterton of the Rhode Island Department of Environmental Management (RIDEM), Office of Water Resources, Permitting Section at (401) 222-4700 ext. 7605.

The Annual Report must be submitted to:

RIDEM

Office of Water Resources

RIPDES Program

Permitting Section

235 Promenade Street

Providence, RI 02908

ATTN: Jennifer Stout

INSTRUCTIONS FOR COMPLETION:

GENERAL INFORMATION PAGE:

"RIPDES Permit #"

Include your permit ID # to ensure proper tracking.

"Operator of MS4"

Give the legal name of the person, firm, public (municipal) organization, or any other entity that is responsible for day-to-day operations of the MS4 described in this application (RIPDES Rules 3 & 12). Enter the complete address and telephone number of the operator. Circle the appropriate choice to indicate the legal status of the operator of the MS4.

"Owner of MS4"

If the owner is the same as the operator do not complete this section. Give the legal name of the person, firm, public (municipal) organization, or any other entity that owns the MS4 described in this application (RIPDES Rules 3 & 12). Do not use a colloquial name. Enter the complete address and telephone number of the owner.

"Certification"

State and federal statutes provide for severe penalties for submitting false information on this application form.

State and federal regulations require this application to be signed as follows (RIPDES Rule 12);

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information or permit application requirements; and where authority to sign documentation has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor;

For a Municipality, State, Federal or other public site: by either a principal executive officer or ranking elected official.

SECTION I- OVERALL EVALUATION OF BMPS AND MEASURABLE GOALS:

One or more pages, front and back, are provided to report on the status of measurable goals which have been developed to aid in the implementation of strategies, procedures, and programs used to achieve each of the six minimum control measures in Part IV.B of the General Permit. This section provides narrative space for a descriptive explanation and evaluation of the actions taken to satisfy each of the minimum control measures for the 2012 calendar year. Please type or print. If additional space is needed, modify as necessary. Please submit attachments to the appropriate minimum control measure following the format provided.

A Permit ID # has been provided, which refers to the part of the permit where you can find a listing or description of the required measurable goal.

Please provide a general summary of actions taken (implementation of BMPs, development of procedures, events, etc.) to meet the measurable goals of the minimum measure. **Be sure to identify parties responsible for achieving each measurable goal** and reference any reliance on another entity for achieving any measurable goal.

Describe whether each measurable goal was completed within the time proposed in the General Permit or your Storm Water Management Program Plan (SWMP). Why or why not? Provide a progress report and discussion of activities that will be carried out during the next reporting cycle to satisfy the requirements of the minimum measures. If applicable, assess the appropriateness of the actions taken to meet the requirements of the minimum measure. In determining appropriateness, you may want to consider at a minimum the local population targeted, pollution sources addressed, receiving water concerns, integration with local management procedures, and available resources and violations or environmental impacts eliminated or minimized.

Also, discuss the effectiveness of the implementation of BMPs to meet the requirements of the minimum measure and the overall effectiveness of the minimum measure. Describe your progress towards achieving the overall goal of reducing the discharge of pollutants. Please include assessment parameters/indicators used to measure the success of the minimum measure. Also include a discussion of any proposed changes to BMPs or measurable goals.

After evaluation, it may be necessary to make changes or modifications to your Implementation Schedule if the time frame, appropriateness or effectiveness cannot be assured. If so, please include descriptions of changes or modifications, and detailed justification in the appropriate sections.

SECTION II- ADDITIONAL ANNUAL REPORT REQUIREMENTS

Section II refers to additional reporting requirements that the General Permit requires to be submitted to the Department as part of the Annual Report. Section II

requirements apply to Minimum Control Measures 2 through 6.

Minimum Control Measure #2: Section II:

Specify the date of and how the annual report was public noticed. If a public meeting was needed, provide the date and place. Include a summary of public comments received in the public comment period of the draft annual report and planned responses or changes to the program (new or revised BMP's and measurable goals, partnerships, etc.). Be sure to attach a copy of your public notice (Parts IV.G.2.h and IV.G.2.i) to the Annual Report.

Minimum Control Measure #3: Section II.A:

Provide the number of illicit discharges identified in 2012, number of illicit discharges tracked in 2012, number of illicit discharges eliminated in 2012, complaints received, complaints investigated, violations issued and resolved with a summary of enforcement actions, number of unresolved violations that have been referred to RIDEM, the total number of illicit discharges identified to date, and the total number of illicit discharges remaining unresolved at the end of 2012. Include a short narrative describing the extent to which your system has been mapped (Part IV.G.2.m), and the total number of outfalls identified to date.

Minimum Control Measure #3: Section II.B:

List identified MS4 interconnections, including location, date found, operator of the physically interconnected MS4, and originating source of newly identified physical interconnections with other small MS4s. Also note any planned or coordinated activities with the physically interconnected MS4 (Part IV.G.2.k and IV.G.2.l).

Minimum Control Measures #4 & 5: Section II.A:

Identify the number of construction and post-construction plan and SWPPP reviews completed during Year 9 (2012) and any additional information. This includes, but is not limited to a summary of the reviews, responsible parties, and types of projects reviewed.

Minimum Control Measure #4: Section II.B:

Construction inspection information for erosion and sediment control should be submitted annually as stated in Part IV.G.2.n. Provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #5: Section II.B:

Post-construction inspection information for proper installation of post-construction structural BMPs should be submitted annually as stated in Part IV.G.2.o. This should provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #5: Section II.C:

Inspection information for proper operation and maintenance of post-construction structural BMPs should be submitted annually as stated in Part IV.G.2.p. This should provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #6: Section II.A:

As prescribed in Part IV.B.6.b.1.i of the General Permit, the MS4 operator must identify and list the specific location and description of all structural BMPs in the SWMPP at the time of application and update the information in the annual report.

Minimum Control Measure #6: Section II.B:

Part IV.B.6.b.1.v of the General Permit states to identify and report annually, as part of the annual report, known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation. Include Outfall ID #, location, description of the problem, any remediation taken, and the ultimate receiving water body.

Minimum Control Measure #6: Section II.C:

As noted in Part IV.G.2.j of the General Permit, specify any planned municipal construction projects or opportunities to include water quality BMPs, low impact development, or seek to promote infiltration and recharge.

SPECIAL RESOURCE PROTECTION WATERS (SRPWs)

Minimum Control Measure #6: Section II.D:

Please include a summary of results of any other information that has been collected and analyzed. This includes any type of data, including, but not limited to, dry weather survey data (Part IV.G.2.e).

TOTAL MAXIMUM DAILY LOAD (TMDL) or other Water Quality Determination REQUIREMENTS

Section I:

Complete this section only if your MS4 is subject to an approved TMDL. TMDL requirements may require the implementation of the six minimum control measures to address the pollutants of concern, and/or additional structural storm water controls or measures that are necessary to meet the provisions of the approved TMDL. Be sure to identify the approved TMDL and assess the progress towards meeting the requirements for the control of storm water (Part IV.G.2.d).

Provide a progress report on the present status and discussion of activities that have been accomplished or will be carried out during the next reporting cycle to satisfy the requirements of the TMDL. If applicable, assess the appropriateness of the BMPs selected under each of the six minimum control measures to meet the requirements of the TMDL. In determining appropriateness, you may want to consider violations or environmental impacts eliminated or minimized.

Please include assessment parameters/indicators that will be used to measure the success of the selected BMPs. Also include a discussion of any proposed changes to BMPs or measurable goals.

Section I:

Complete this section only if your MS4, located outside Urbanized Areas or Densely Populated Areas, discharges to:

a SRPW as listed in Appendix D of the *RIDEM Water Quality Regulations* at this link:

<http://www.dem.ri.gov/pubs/regs/regs/water/h20q09a.pdf>
or

an impaired water body including water bodies with no approved TMDL as listed in Appendix G of the *2008 Integrated Water Quality Monitoring and Assessment Report* at this link:

<http://www.dem.ri.gov/programs/benviron/water/quality/pdf/iwqmon08.pdf>.

In accordance with Rule 31(a)(5)(i)G in the *Regulations for the Rhode Island Pollutant Discharge Elimination System* (RIPDES Regulations), MS4s were required to incorporate any discharges to these water bodies into their MS4 Program on or after March 10, 2008 unless a waiver has been granted in accordance with Rule 31(g)(5)(iii).

Provide a progress report on the present status and discussion of activities that have been accomplished or will be carried out during the next reporting cycle to incorporate these areas into the MS4's Phase II Storm Water Program.