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## RIPDES SMALL MS4 ANNUAL REPORT GENERAL INFORMATION PAGE

RIPDES PERMIT # RIR040036

REPORTING PERIOD:       **YEAR 8**  
Jan 2011-Dec 2011

**OPERATOR OF MS4**

Name: RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
Mailing Address: 2 CAPITOL HILL			
City: PROVIDENCE	State: RI	Zip: 02903	Phone: (401)222-2023
Contact Person: Peter A. Healey, PE		Title: Supervising Civil Engineer	
Legal status (circle one): PRI - Private      PUB - Public      BPP - Public/Private <b>STA - State</b> FED - Federal			
Other (please specify):			

**OWNER OF MS4 (if different from OPERATOR)**

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

**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.

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, 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. Specific to Year 8, URI coordinated the state-wide training on the 2010 DEM/CRMC *Stormwater Design and Installation Standards Manual*.

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 A1**

**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 9 (2012) EXPECTED ACTIONS**

**BMP: New 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 2012. 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 A2**

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.
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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 A1**

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. (Please note that participation in these trainings was required for those MS4s who committed to participating in the URI NEMO Stormwater Public Education and Outreach Program.)

Attendance at the following trainings if applicable:

- [RI Stormwater Design and Installation Standards Manual: Workshop Part #1 - Manual Overview \(January 13, 2011\)](#)  
Attending name of staff and title: **ATTACHMENT B**
- [RI Stormwater Design and Installation Standards Manual: Workshop Part #2 - BMP Construction and Maintenance \(January 19, 2011\)](#)  
Attending name of staff and title: **ATTACHMENT B**
- [RI Stormwater Design and Installation Standards Manual: Workshop Part #3 - A detailed look at the required sizing calculations and critical elements of BMP design \(March 22, 2011\)](#)  
Attending name of staff and title: **ATTACHMENT B**
- [RI Stormwater Design and Installation Standards Manual: Workshop Part #4 - A detailed look at the required specifications and measures for BMP construction and maintenance \(March 24, 2011\)](#)  
Attending name of staff and title: **ATTACHMENT B**
- [A New Approach to Financing Stormwater Management: Stormwater Utility Districts. Workshop Part 1: Managing Stormwater in Tough Budget Times \(October 25, 2011\)](#)  
Attending name of staff and title: Allison Hamel, RIDOT Stormwater Program Coordinator
- [A New Approach to Financing Stormwater Management: Stormwater Utility Districts. Workshop Part 2: Success Stories From New England \(November 17, 2011\)](#)  
Attending name of staff and title: Allison Hamel, RIDOT Stormwater Program Coordinator

**LID for Linear Transportation Projects: Using the RI Stormwater Design and Installation Standards Manual to Design Green Streets (July 13, 2011)**  
Attending name of staff and title: **ATTACHMENT B**

**LID for Linear Transportation Projects: Using the RI Stormwater Design and Installation Standards Manual to Design Green Streets (August 25, 2011)**  
Attending name of staff and title: **ATTACHMENT B**

Other Trainings:

**Construction Winter Training 2010-2011:**  
**Construction Site Stormwater Pollution Prevention - How to Protect Valuable Natural & Cultural Resources on Active (& Passive!) Construction Sites**  
(1/6/11; 1/10/11; 1/17/11) – Allison Hamel presented; ALL Construction Personnel attended (Resident Engineers, Inspectors, Staff)

**RIDEM Stormwater Training: LID (February 11, 2011)** – Erik Johnstone, Emilie Holland

Webinar: **Sustainability/Climate Change and Context Sensitive Solutions (February 22, 2011)** – A. Hamel

**Municipal Canada Geese Abatement Workshop (March 4, 2011)** - Erik Johnstone, Environmental Scientist

Webinar: **Using Eco-Logical to Identify Priorities for Conservation & Mitigation** (March 16, 2011) – A. Hamel

Webinar: **Intersections between Eco-Logical and PEL: FHWA Programs to Improve Environmental Outcomes** (April 6, 2011) – A. Hamel

DEM - **Statewide Assessment and Schedule for TMDL Water Quality Restoration Studies** (April 15, 2011) – A. Hamel, Emilie Holland – Principal Environmental Scientist

AASHTO - **Construction Effluent Guidelines – Numerical Limits are Coming** (April 28, 2011) – A. Hamel

Webinar: **BMP Maintenance: Don't Get Caught with Your Fence Down!** June 21, 2011 – A. Hamel

**Northeast Chloride Toxicity Symposium on Snow and Ice Control** (June 15, 2011) - Joe Baker, Maintenance Deputy Administrator; Mike Dahlquist, Senior Environmental Scientist

**AASHTO National Planning and Environmental Practitioners Meeting** – SCOP/SCOE Annual Meeting – Boston, MA (June 20-23, 2011) – Emilie Holland, Peter Healey

Webinar: **AASHTO Efficient and Innovative Strategies for Achieving Better Environmental Performance (June 28, 2011)** – A. Hamel

**The Changing Waters Edge, Sea Level Rise & Mapping** - Save the Bay (June 23, 2011)

**Maintenance Summer Training:**

**2011 – Facility Stormwater Pollution Prevention Plans & Spill Prevention, Control, & Countermeasure Plan (SWPPPs & SPCCs) Training**

Allison Hamel presented; ALL Maintenance Facility personnel attended

- Gloucester – Monday, June 13, 7 AM
- Midstate – Monday, June 13, 2 PM
- Belleville – Tuesday, June 14, 2 PM
- Hope Valley – Thursday, June 16, 2 PM
- Portsmouth – Monday, June 20, 2 PM
- Smithfield – Wednesday, June 29, 7 AM
- East Providence – Wednesday, June 29, 2 PM
- Headquarters – Wednesday, July 6, 9 AM

Webinar - **Stormwater Compliance for Road and Utility Construction** (September 13, 2011) - A. Hamel

**COMPLETE STREETS FOR RHODE ISLAND** - A Workshop for Municipal Planners, Public Works and Public Safety Officials Public and Private Urban/Transportation Planners, Traffic Engineers and Transportation Advocates (September 16th, 2011) – Lambri Zerva, Diane Badorak, Bob Smith, Steve Church, Courtney Danella, Allison Hamel

**Construction Site Stormwater Compliance Workshop for DEM** (September 15, 2011) – A. Hamel – Presenter

**Construction Site Stormwater Compliance Assistance Tools and Training NEIECA/DEM** (November 15, 2011) – A. Hamel – Presenter

Webinar: **Total Maximum Daily Load (TMDL) for Construction Sites** (November 15, 2011) – E. Johnstone, M. Dahlquist

**Linking science, behavior and communication for climate adaptation in Rhode Island** (November 18, 2011) – E. Holland

**Roundtable Discussion on Winter Operations** (November 29, 2011) – Joe Baker, Deputy Administrator of Maintenance - Moderator

**Communities Protecting Drinking Water Sources: Current Challenges, New Strategies for RI Municipal Officials** (December 1, 2011) - A. Hamel

Webinar: **Greening Local Codes and Ordinances - Updating Codes to Cultivate Green Infrastructure and Foster Sustainable Stormwater Management** (December 13, 2011) – Allison Hamel

**Construction Winter Training 2011-2012**

**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

**Construction Site Stormwater Pollution Prevention – Small-Site SWPPP Inspections & Procedures** (Scheduled for March 19-23, 2012); Allison Hamel to present; ALL Construction Personnel to attend (Resident Engineers, Inspectors, Staff)

**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 Winter Training program; support from RIDOT Design, Construction, and Maintenance are also provided as needed.

**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 9 (2012) EXPECTED ACTIONS**

BMP: New 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 2012. 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 A2**

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.

**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](http://www.ristormwatersolutions.org) as part of the URI/DEM/DOT Agreement. This website is updated regularly with training and resources.

RIDOT has updated the RIDOT Storm Water website with additional information requested by other MS4s. RIDOT has posted the RIDOT Construction Site Storm Water Pollution Prevention Plan Templates (both large and small site SWPPPs), IDDE Inspection Forms, Catch Basin Inspection and Maintenance Database, etc. New information may be seen under the “Resources” link.

**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 9 (2012) 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.



**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.
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**BMP ID 2B – Public Involvement**

The Natural Resources Unit has developed a partnership with the URI Cooperative Extension to provide a public outreach 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. Workshops began in February 2007 and continued through 2011. See BMP ID 1A, B under Section IV.B.1.b.1.

**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 9 (2012) EXPECTED ACTIONS**

NEW BMP: MS4 Coordinator’s Group Exchange

The RIDOT Natural Resources Unit initiated a Coordinator’s Group exchange in January 2011. A monthly email exchange was developed to connect MS4 Coordinators with each other to share RIPDES compliance information, issues, and ideas. RIDOT also organized regional meetings to specifically discuss TMDL-related issues. **ATTACHMENT C**

- June 22, 2011 – Northern RI TMDL Regional Meeting
- August 3, 2011 – Middle & Southern RI TMDL Regional Meeting
- August 23, 2011 – East Bay RI TMDL Regional Meeting

RIDOT intends to continue the group exchange in 2012.

BMP: New 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 2012. 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 A2**

## Additional Measurable Goals and Activities

### **The RIDOT Stormwater Program Coordinator has participated in several State-wide initiatives:**

**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" reported the first 'report card' to the Legislators on April 27, 2011. A. Hamel – Committee Partner / Presenter  
**ATTACHMENT B** – training.pdf

**Bi-State Water Quality Coordination Initiative for the Pawcatuck River Estuary and Little Narragansett Bay** (May 4, 2011)– Allison Hamel (Presenter) **ATTACHMENT B**

**Stormwater Coordination Meeting - DEM/Narragansett Bay Research Reserve** (May 20, 2011) – Allison Hamel

**The RIDEM Coordinated Stormwater Permitting and Construction Site Stormwater Compliance Program**  
RIDOT has been a partner in developing the RI Model SWPPP Template and the Construction Site Stormwater Pollution Prevention Environmental Results Program.  
ERP/Model SWPPP Training **ATTACHMENT B**

- **Construction Site Stormwater Compliance Workshop** for DEM (September 15, 2011) Allison Hamel – Presenter
- **Construction Site Storm Water Compliance Workshop for Construction Industry** (October 19, 2011 (Cancelled)) – Allison Hamel – Coordinator, Presenter
- **Construction Site Stormwater Compliance Assistance Tools & Training** NEIECA/DEM (November 15, 2011) – Allison Hamel – Presenter

### **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 2011, Adopt-a-Highway had 106 sponsors in the program with 212 miles cleaned as a result.**

The Sponsor-A-Highway Program (SAH) is geared toward businesses and there are currently three companies that the Department does business with, Adopt-A-Highway Maintenance Corporation (AAHMC) and Adopt-A-Highway Litter Removal Service of America, Inc. (AAHLRSA) and Cleanscape, Inc. AAHMC and AAHLRSA are both based out of California and they are active in many states. Cleanscape, Inc. is a company that is based in South Providence and recycles everything collected that can be at their recycling plant in South Providence. Also, they have a mission to hire as many people from the inner-city as is possible. They all 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 2011, Sponsor-A-Highway had 25 Segments Sponsored (50 Miles Sponsored), out of a total of 111 total segments in the program. Through this program, over 2,500 bags of trash were picked up by the three 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	10 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 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this BMP

### **BMP ID 2C – Prison Crew Cleanups**

**The Maintenance Division has continued funding prison crew cleanups along RIDOT roadways. In 2011, RIDOT paid \$631,000 for prison crews and picked up 70,837 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 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this BMP

### **BMP ID 2E – Enhancement Program**

A portion of funds from the Surface Transportation Program (STP) are committed each year to projects that address the environmental impacts on local communities from transportation and highway construction. SAFETEA-LU requires that 10 percent of STP funds be set-aside and used exclusively for enhancement activities and projects that will increase mobility, protect the human and natural environment, and preserve and increase the livability of communities.

The projects included in the Enhancement Program for 2011 were continued from the previous TIP. They were all 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 2011, 7 projects were advanced to construction; 12 projects are currently in 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





## MINIMUM CONTROL MEASURE #3: ILLCIT 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.)**

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.)

IV.B.3.b.1: **Date of Completion: 2010**

#### **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 9 (2012) 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: Indicate if your municipality chose to implement the tagging of outfalls activity under the IDDE minimum measure, activities and actions undertaken under the 2011 calendar year.

**N/A – RIDOT used GPS/GIS to develop outfall map**

IV.B.3.b.3: 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.

#### **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 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 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 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.**

**RESPONSIBLE PARTIES** - The Natural Resources Unit, the MIS/GIS Office, 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.

#### **YEAR 9 (2012) 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 2012.

RIDOT will continue to develop a TMDL Compliance Strategy, which will include a plan to develop TMDL system drainage mapping.

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 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 <b>not</b> 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><b>Date of Adoption: N/A</b></p> <p>If the Ordinance was amended in 2011, please indicate why changes were necessary.</p>
<p><b>N/A – RIDOT does not have regulatory authority to develop and implement ordinances.</b></p>	
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>
<p><b>BMP ID 3D – Develop &amp; Implement IDDE Plan</b></p> <p>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.</p> <p>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.</p> <p><b>RESPONSIBLE PARTIES</b> - 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.</p> <p><b>EFFECTIVENESS</b> - RIDOT considers the IDDE plan an effective guidance document; however RIDOT has had few IDDE investigation requirements.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - (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.</p>	
IV.B.3.b.5.vi	<p>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.</p>
<p><b>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.</b></p> <p>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 &amp; costly Maintenance traffic protection detail). RIDOT inspects catch basins as part of regular Maintenance activities, and during Design and Construction projects involving drainage components.</p> <p>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 &amp; Vactor trucks).</p> <p>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.</p>	

RIDOT Maintenance purchased (in 2011) and is implementing (2012) an Asset Management System Program. This system will be 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.

**Construction Projects:**

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. RIDOT will continue to develop standard procedures for drainage system investigations to be included in these projects.

**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 9 (2012) 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 (such as the Kickemuit River Council) 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.

**RIDOT will implement the Maintenance Division Asset Management System (VueWorks). It is anticipated that this program will be fully implemented by the end of 2012. Please see Minimum Measure 6.**

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:**

**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 2011, RIDOT NRU Summer Interns continued to revisit outfalls with suspected or unknown Dry Weather Discharges. Sixteen (16) outfalls with DWD flow were revisited; 4 did not exhibit flow; 12 were sampled.**

**Three require additional monitoring and sampling (anticipated Summer 2012) (ATTACHMENT F).**

**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.

**YEAR 9 (2012) EXPECTED ACTIONS** - RIDOT will continue examining outfalls for Dry Weather Flow and sampling/investigating as appropriate.

RIDOT summer interns will continue to investigate the 'unknown' outfalls to accurately determine DWD over the summer of 2012.

The NRU anticipates completing follow-up investigations for DWD outfalls by March 31, 2012.

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 9 (2012) 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.

The Town of Jamestown reported an illicit discharge to RIDOT on December 29, 2011. **ATTACHMENT E**

Justin Jobin from the Town of Jamestown Public Works provided the attached photo and pdf as documentation of illegal dumping to a catch basin on Dec 27, 2011 by a Peking Garden employee. The catch basin is located on private property behind the restaurant (in the Chopmist Charlie's parking lot). The catch basin flows to several other private catch basins, and then connects to the RIDOT drainage system on Narragansett Ave, which then flows ~750 feet down Narragansett Ave, crosses under Conanicus Ave, and then discharges through an outfall directly into the Bay.

DOT reported this incident to RIDEM on January 3, 2012.

The Town of Jamestown did all of the field investigation and drainage system inspections, and provided RIDOT the results. No traces of the contaminant were found in the RIDOT drainage system or the Bay.

Both the Town of Jamestown and RIDOT notified the business operator and land owner of the illegal incident. They have been informed to stop the practice of dumping into the storm drains immediately.

**At this time, RIDOT is awaiting action from RIDEM Office of Compliance & Inspection regarding this matter. RIDOT assistance will be provided if necessary.**

**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 9 (2012) 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.
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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 9 (2012) 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 2011: <b>1 (Peking Garden, JAMESTOWN)</b>	# of Illicit Discharges Tracked in 2011: <b>1</b>
# of Illicit Discharges Eliminated in 2011: <b>1</b>	# of Complaints Received: <b>1</b>
# of Complaints Investigated: <b>1</b>	# of Violations Issued: <b>n/a</b>
# of Violations Resolved: <b>n/a</b>	# of Unresolved Violations Referred to RIDEM: <b>1</b>
Total # of Illicit Discharges Identified to Date (since 2003): <b>3</b>	Total # of Illicit Discharges remaining unresolved at the end of 2011: <b>0</b>

Summary of Enforcement Actions:  
 RIDOT Notice of Violation letter sent to land owner and business owner.  
 RIDOT awaiting notice of action from RIDEM Officer of Compliance and Inspection.

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

Total # of Outfalls Identified and Mapped to Date: 3811

The RIDOT Maintenance Division has purchased an Asset Management System (VueWorks), and anticipates full implementation by the end of 2012. This System will allow RIDOT to more accurately document and report drainage asset (catch basins, manholes, pipes, outfalls, etc.) inspections and maintenance work.

**SECTION II.B Interconnections (Part 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:

2011: It was determined that the coordinates of new drainage connections had not been properly reported in RIDOT's PAPA Database. RIDOT NRU Summer Interns reviewed PAPA records from 2006 – 2011 to obtain the coordinates of permitted interconnections to the State drainage system. **APPENDIX G – PAPA records.**

RIDOT has released a "To All Project Engineers" policy memo regarding the inclusion of interconnection information; the PAPA database has also been modified to ensure inclusion of appropriate information.

RIDOT will review the PAPA policies and procedures in 2012/2013 as part of the next RIPDES General Permit measurable goals.



**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	<p>Indicate if the Sediment and Erosion Control and Control of Other Wastes at Construction Sites ordinance was <b>not</b> 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><b>Date of Adoption: N/A – RIDOT does not have regulatory authority to develop and adopt Ordinances.</b></p> <p>If the Ordinance was amended in 2011 please indicate why changes were necessary.</p>
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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 2011, the RIDOT Natural Resources Unit worked extensively with the RIDEM RIPDES Program to develop the RIDEM Rhode Island Model SWPPP for the Construction Compliance Environmental Results Program (ERP). RIDOT also provided training to RIDEM staff, the construction industry, and other MS4s through two training session at DEM (please see Minimum Measure 1) as part of the ERP program. <http://www.dem.state.ri.us/programs/benviron/water/permits/swcoord/index.htm>**

**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 9 (2012) EXPECTED ACTIONS - RIDOT** will continue this effort. Construction personnel will receive training on the Small-Site SWPPP as part of Winter Construction Training in March 2012.

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 2011, 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 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this effort.

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 9 (2012) 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 currently under Super Spec Committee review before formal implementation.

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

**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 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this effort.

**SECTION II. A - Plan and SWPPP Reviews during Year 8 (2011) 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.

**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:

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 9 (2012) 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 8 (2011) (Part IV.G.2.n) Part 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: 0

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.

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 2011, there were 14 active construction projects with SWPPPs (60 total active projects). **ATTACHMENT H**

RIDOT Construction projects that disturb an area less than one acre are required to have a Small Site Storm Water Pollution Prevention Plans (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.

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. There were 58 Final Inspections in 2011 **ATTACHMENT I**



**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.

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 8 (2011) 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).

Not applicable to RIDOT

IV.B.5.b.9 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.

**Date of Adoption:**

If the Ordinance was amended in 2011 please indicate why changes were necessary.

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.

**BMP ID 5C – Identification of existing structural BMPs  
BMP ID 5B – Maintenance and Cleaning of structural BMPs**

All RIDOT BMPs have been identified (2006), inspected (2009), and cleaned (as necessary) (2010). RIDOT storm water treatment units installed on currently active Construction sites are cleaned as part of the final acceptance requirements.

Once the BMP Monitoring contract is finalized (anticipated spring 2011), the consultant will provide RIDOT a concise document of STU location, inspection schedule, and maintenance requirements that RIDOT will use to train the Maintenance staff. RIDOT Maintenance, with assistance from the Natural Resources Unit, will be 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. Documentation of these efforts will be tracked and presented in the Annual Reports. The RIDOT construction site Storm water Pollution Prevention Plan (SWPPP) Template requires the inclusion of the post-construction storm water treatment unit's location, inspection schedule, and maintenance requirements.

This document is provided to RIDOT Maintenance upon completion of the construction contract.

RIDOT is actively pursuing an asset management software system to be installed in Maintenance. A proposal is currently before the Rhode Island Division of Information Technology awaiting approval. The storm water treatment units will be part of this system, and long-term care and operation will be tracked accordingly. RIDOT anticipates purchasing this system by the end of 2011, with full implementation in 2012.

**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 Maintenance Management System (MMS) in Maintenance will be an effective method to ensure long term operation and maintenance of the storm water treatment units.

**YEAR 8 (2011) EXPECTED ACTIONS** - RIDOT will move forward 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 new projects are required to utilize the new RIDEM/CRMC [Rhode Island Stormwater Design and Installation Standards Manual](#).

**In 2011, RIDOT Design Engineer's received specific training to apply the new Stormwater Manual to linear projects (in addition to the 4-part training introductory series). Please see Minimum Measure 1 for attendance records).**

**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 9 (2012) 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 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this effort.

**SECTION II.A. - Plan and SWPPP Reviews during Year 8 (2011) 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:
<p>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.</p> <p>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.</p> <p><b>RESPONSIBLE PARTIES</b> - RIDOT Natural Resources Unit &amp; Design are the primary RIDOT entities responsible for the implementation of this program.</p> <p><b>EFFECTIVENESS</b> - RIDOT considers this effort effective.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - RIDOT will continue this effort.</p>

**SECTION II.B. - Post Construction Inspections during Year 8 (2011): 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: 58 (total (not all include drainage work))	# of Complaints Received: 0
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
<p>Summary of Enforcement Actions:</p> <p><b>IV.B.5.b.10; BMP ID 5D, 5E</b> - All 2011 Final Inspections were attended by Design, Construction, and Maintenance personnel. Environmental personnel attended when appropriate. <b><u>ATTACHMENT I</u></b></p> <p><b>RESPONSIBLE PARTIES</b> - RIDOT Final Inspections Division, Construction, Maintenance, Design and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.</p> <p><b>EFFECTIVENESS</b> - RIDOT considers this effort effective.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - RIDOT will continue this effort.</p>	

**SECTION II.C. - Post Construction Inspections during Year 8 (2011): Parts IV.G.2.p and IV.B.5.b.11 Proper Operation and Maintenance of Structural BMPs (Part)** 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:	# of Complaints Received:
# of Violations Issued:	# of Unresolved Violations Referred to RIDEM:
<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 has relied on the "BMP Monitoring" Contract of the Stormdrain Retrofit program to establish a baseline inspection survey of the stormwater treatment units (STUs). One hundred and twenty one STUs were inspected; seventy-two locations required and received cleaning/maintenance.</p> <p>The BMP Monitoring contract was finalized in the Spring of 2011. The consultant provided RIDOT a database with inspection information and photos. <b><u>ATTACHMENT J</u></b> (photos will be provided upon request). A follow-up inspection &amp; monitoring contract was anticipated to be awarded in 2011; this did not occur. As a result, units were</p>	

not inspected in 2011. However, this information will be submitted to RIDOT Maintenance for inclusion 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.

Additionally, the new DEM/CRMC Stormwater Design and Installation Manual requires the development of an Operations and Maintenance manual as part of the design process. RIDOT requires that new projects be designed in accordance with all applicable state and federal regulations.

**RESPONSIBLE PARTIES** - RIDOT Natural Resources Unit & Maintenance are the primary RIDOT entities responsible for the implementation of this program.

**EFFECTIVENESS** - RIDOT considers this effort will be effective once implemented in to the Maintenance Asset Management System.

**YEAR 9 (2012) EXPECTED ACTIONS** - RIDOT will continue this effort.



**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. (**ATTACHMENT I**) This database has been updated in 2011 with the BMP Monitoring contract inspections and photos. This data will be used in the Asset Management System.

**In 2011, RIDOT Maintenance purchased an Asset Management System – VueWorks.** This system will be implemented over the next year in Maintenance, and . This System was purchased in 2011, and 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 for 2012.

**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 this effort will be effective to document existing BMPs, implement an inspection program, and document maintenance activities.

**YEAR 9 (2012) EXPECTED ACTIONS -** RIDOT will have summer interns review the database and ensure it is up to date. 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 2012. RIDOT also anticipates implementing VueWorks in other Divisions through 2013.

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.

**RESPONSIBLE PARTIES -** RIDOT Natural Resources Unit is the primary RIDOT entity responsible for the implementation of the 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 9 (2012) EXPECTED ACTIONS -** RIDOT will have summer interns review the database and ensure

it is up to date.

RIDOT Maintenance anticipates implementing a VueWorks in 2012; structural BMPs will be part of this system.

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

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 2011: **~516 Maintenance**

Total # of CBs cleaned in 2011: **~516 Maintenance; ~1,310 Construction**

RIDOT does not have its entire catch basin system mapped. The Asset Management System (VueWorks) currently being implemented in the Maintenance Division is anticipated to aid RIDOT in developing a complete mapped drainage network.

### **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. **ATTACHMENT K**

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 2011, RIDOT estimates that 71,441 linear feet of drainage lines, 105 manholes, and 926 catch basins were cleaned as part of Construction projects. ATTACHMENT L**

**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 anticipated that the drainage assets will be fully implemented by the end of 2012. 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 9 (2012) 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 is developing new Standard Specifications that will be included in future Design/Construction contracts to include "Inspections" & "GPS Locating" as part of typical "Clean and Flush" work. It is anticipated that this will be fully implemented in 2013.

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.
<p><b>BMP ID 6S – Stabilization of road side shoulders</b></p> <p>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 <i>Evaluation of Native Grasses for Highway Slope Stabilization and Salt Tolerance</i>. 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.</p> <p><b>RESPONSIBLE PARTIES</b> - URI has completed the research study.</p> <p><b>EFFECTIVENESS</b> – RIDOT anticipates the research will aid in future stabilizations efforts.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - The RIDOT Landscape Unit is currently reviewing the studies, and will implement key findings as appropriate.</p>	
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.
<p>Discharges causing scouring are identified during the initial outfall location identification and GPS field work (<b>Permit ID# IV.B.3.b.1; BMP ID 3A – Outfall Mapping</b>).</p> <p><b>RESPONSIBLE PARTIES</b> - RIDOT Natural Resources Unit was the primary RIDOT entity responsible for the initial identification of outfalls with scouring &amp;/or sedimentation.</p> <p>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.</p> <p><b>EFFECTIVENESS</b> - 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.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - 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.</p> <p>RIDOT NRU is developing new Standard Specifications that will be included in future Design/Construction contracts to include “Inspections” &amp; “GPS Locating” as part of typical “Clean and Flush” work. It is anticipated that this will be fully implemented in 2013.</p>	
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): <b>unknown</b></p> <p>Total roadway miles that were swept in 2011: <b>unknown</b></p>
<p><b>BMP ID 6T, 6U – Annual Road Sweeping</b></p> <p>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.</p> <p>Beginning in 2007 the RIDOT Highway &amp; Bridge Maintenance Division implemented an alternate program for sweeping the high-speed/limited access facilities in and around the <b>Providence metropolitan area</b>. Known as the “Big Sweep”, all seven of the Division’s District Maintenance Facilities perform a coordinated sweeping</p>	

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 by the end of 2012.

**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 9 (2012) 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

Describe activities and actions taken for controls to reduce floatables and other pollutants from the MS4. Evaluate appropriateness and effectiveness of this requirement.

RIDOT uses prison work crews to pick up litter along highways. **In 2011, RIDOT paid \$631,000 for prison crews and picked up 70,837 bags of litter.** Please see Minimum Measure 2C.

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

**EFFECTIVENESS** - RIDOT considers this measure effective.

**YEAR 9 (2012) EXPECTED ACTIONS** - RIDOT Maintenance will continue this program.

IV.B.6.b.1.viii

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.

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). Catch basin and street sweeping wastes are disposed of at the Johnston Rhode Island Resource Recovery landfill following applicable state regulations and guidance **ATTACHMENT M**

**In 2011, the SWPPPs and SPCCs were evaluated and updated.** RIDOT Maintenance is currently working on full implementation of the updated plans (anticipated by July 2012). **ATTACHMENT N** (signed hardcopies will be provided upon request).

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.

**RESPONSIBLE PARTIES** - RIDOT Maintenance and Construction are the primary RIDOT entities responsible for the implementation of this program.

**EFFECTIVENESS** - RIDOT considers this measure effective.

**YEAR 9 (2012) EXPECTED ACTIONS** - RIDOT Maintenance & Construction will continue this program. RIDOT Maintenance is currently implementing the SWPPPs & SPCCs (anticipated completion by July 2012).

<p>IV.B.6.b.4 and IV.B.6.b.5</p>	<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><b>In 2011, the SWPPPs and SPCCs were evaluated and updated.</b> RIDOT Maintenance is currently working on full implementation of the updated plans (anticipated by July 2012). <b><u>ATTACHMENT M</u></b></p> <p><b>RESPONSIBLE PARTIES</b> - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.</p> <p><b>EFFECTIVENESS</b> - RIDOT considers this measure effective.</p> <p><b>YEAR 9 (2012) EXPECTED ACTIONS</b> - RIDOT Maintenance is currently implementing the SWPPPs &amp; SPCCs (anticipated completion by July 2012).</p>	
<p>IV.B.6.b.6</p>	<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>
<p><b>BMP ID 6C, 6D, 6E – Employee training</b></p> <p>Please see Minimum Measure 1.</p>	
<p>IV.B.6.b.7</p>	<p>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.</p>
<p>Not applicable to RIDOT</p>	
<p>Additional Measurable Goals and Activities</p> <p><b>BMP ID 6A, 6B – Winter Operations - ONGOING</b></p> <p>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 &amp; 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 &amp; 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). Please see <b>Attachment O</b> for all RIDOT salt storage area information.</p> <p><b>In 2011, RIDOT Maintenance Division has invested significant capital expense in the Winter Operations program.</b> 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% <i>Green Equipment Incentive</i> 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. <b>ATTACHMENT O</b></p> <p>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.</p>	

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

**EFFECTIVENESS** - RIDOT considers this measure effective.

**YEAR 9 (2012) EXPECTED ACTIONS** - RIDOT Maintenance will continue this program. RIDOT Maintenance will continue to upgrade equipment & salt barns as funding allows.

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

BMP ID:	Location:	Name of BMP Owner/Operator:	Description of BMP:
	Attachment J		

**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:
	Submitted with outfall data to Paul Jordan			

**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.

**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.**

In addition to the RIPDES six minimum measures, RIDOT relies heavily on the Stormdrain Retrofit Program for TMDL compliance, and has continuously worked with consultants regarding drainage work within TMDL areas. RIDEM is aware of the ongoing work for both Greenwich Bay and Scarborough Beach, the construction of a BMP for priority outfall W6 in Johnston, and the inclusion of priority outfalls W2/W23 and S1 in to larger construction projects. The EPA has approved numerous TMDL reports for Rhode Island waters, and it has been the intention of RIDOT to address each additional report in another revision to the SWMPP. RIDOT has been awaiting RIDEM's issuance of the next RIPDES General Permit (expected in 2008 when the last permit expired) to amend its SWMPP.

RIDOT is in the process of evaluating the feasibility of hiring consultants to address TMDL compliance issues. RIDOT wishes to work with the RIDEM TMDL program to develop an acceptable strategic plan.

### 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 (see table, below). In addition to these 20 priority outfalls, 10 other project areas have been retrofitted (see table, below). Within the past 3 years, the RIDOT Stormdrain Retrofit Program Project Manager has worked closely with RIDOH and RIDEM to resolve beach closure issues at Scarborough State Beach, has developed an inspection, maintenance, and monitoring contract for RIDOT's stormwater BMPs, and has worked with CEI to advance the preliminary design work in Greenwich Bay.

#### 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 advancing to 75%, and 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 and is working to advance project to the final design phase.

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.

Bailey Brook: The Two Mile Corner Reconstruction project will mitigate untreated stormwater through a created gravel wetland. Please see attached Newport Daily News article.

Scarborough Beach: Scarborough Beach has been designated as a Top Priority Beach by the Governor's Office, and RIDOT, RIDEM, and RIDOH have been named as stakeholders responsible for minimizing beach closures. RIDOT, through the Stormdrain Retrofit Project is funding modeling and tidal studies to assess the potential mitigation measures.

Compliance Strategy: RIDOT recognizes the RIPDES General Permit TMDL requirements, and the requirements in each TMDL report, but as a state-wide entity, RIDOT is a stakeholder in almost every TMDL study.

It is requested that RIDEM take in to consideration the constraints that RIDOT faces when dealing with TMDL compliance. The Center for Environmental Excellence by AASHTO, Stormwater Management Community of Practice, STATE-OF-THE-PRACTICE REPORT: TMDLs, March 2010 Report summarizes some of the complex issues that DOTs face:

DOTs have to comply with TMDL requirements, because their facilities and the roads on which they work are, by definition, point sources for various constituents for which TMDLs have been named. Unfortunately, DOTs are often also required to meet TMDL requirements for pollutants that are included in their discharge but for which the DOTs are not directly responsible, such as pathogens.

DOTs typically occupy a small portion of the watershed and have a proportionately small portion of the pollutant load to a receiving water, but they may carry a disproportionate share of the technical, monitoring and investigative burdens. It is difficult to separate load from off-site flows, and the DOT may be responsible for pollutant load in upstream runoff. DOTs have no authority to require upstream landholders to reduce pollutant loads that run-on to the state ROW. Water quality credit trading for TMDL compliance may be an important tool for DOT TMDL compliance. DOTs have limited ROW to construct treatment controls for TMDL compliance. The DOT may have relatively low concentrations of the constituent of concern in their discharge, making removal costs relatively high. A credit-trading program may ultimately be the most cost-effective method for a DOT to comply with TMDL requirements.

RIDOT would like to be able to consider a watershed-wide approach when physical site constraints do not allow for mitigation at the site of construction.

At a minimum, RIDOT will continue to implement the 6 minimum measures in each TMDL area. RIDOT will incorporate TMDL requirements to the maximum extent practical in all construction projects within TMDL drainage areas. The RIDOT Stormdrain Retrofit Project will continue to work on stand-alone TMDL retrofit projects. Additionally, RIDOT will reach out to MS4s to coordinate efforts targeting TMDL requirements.

RIDEM has stated that the next RIPDES General Permit is anticipated to be issued in 2011, and an amended SWMPP will be required. RIDOT anticipates addressing each of the newly EPA-approved TMDLs within the amended SWMPP.

RIDOT requests a collaborative effort with the RIDEM TMDL Program to establish an acceptable Program to address the General Permit requirements.



## SPECIAL RESOURCE PROTECTION WATERS (SRPWs)

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**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 10<sup>th</sup> 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 2011 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 (SWMPP). 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 2011, number of illicit discharges tracked in 2011, number of illicit discharges eliminated in 2011, 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 2011. 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 8 (2011) 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 SWMP 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.

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.

**SPECIAL RESOURCE PROTECTION WATERS (SRPWs)**

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.