



DEM USE ONLY	
Date Received	_____

RIPDES SMALL MS4 ANNUAL REPORT

GENERAL INFORMATION PAGE

RIPDES PERMIT #RIR040 _____

REPORTING PERIOD: **YEAR 7**
Jan 2010-Dec 2010

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	STA - State
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.
------------	--

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 will continue through September 2011. As a partner in the program, RIDEM has an original copy of the URI/DOT/DEM Agreement and has approved the Contract extensions.

In Year 7, 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.

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 A

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 8 (2011) 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 2011. 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.

IV.B.1.b.2	Provide a general summary of how the public education program was used to educate the community on how to become involved in the municipal or statewide storm water program. Describe partnerships with governmental and non-governmental agencies used to involve your community.
------------	--

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

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 not required.)

Attendance at the following trainings if applicable:

- Preview of the Draft MS4 General Permit – Public Education and Involvement Measures (03/12/2010)
Attending name of staff and title: Emilie Holland – Sr. Environmental Scientist
- Preview of the Draft MS4 General Permit – IDDE and Pollution Prevention and Good Housekeeping Measures (04/09/2010)
- Preview of the Draft MS4 General Permit – Construction and Post-Construction Measures (07/08/2010)
Attending name of staff and title: Emilie Holland – Sr. Environmental Scientist
Attending name of staff and title: Mike Dahlquist – Environmental Scientist
- RI Stormwater Design and Installation Manual – Final Draft Informational Session (05/26/2010, 06/02/2010)
Attending name of staff and title: Emilie Holland – Sr. Environmental Scientist
Attending name of staff and title: Erik Johnstone – Environmental Scientist
- Institutionalizing Stormwater Education in Rhode Island (06/03/2010)
- Demonstration of the new ASIST Program Management Software (08/10/2010)
Attending name of staff and title: Allison Hamel, Env. Scientist/Stormwater Coordinator; Emilie Holland
- Stormwater Education Training: Using the Enviroscape Model (11/03/2010)
- Rhode Island Regulatory Setbacks and Buffers (12/02/2010)

BMP ID 1E, F – RIDOT Personnel Storm Water Training

- Construction Site Runoff Control Environmental Results Program Stakeholder Meeting (2/11/10) E Holland
- Lunch and Learn: MassDOT’s New Impaired Waterbodies Program (10/14/2010) Emilie Holland; A Hamel
- Watershed Academy Webcast – Re-Visioning Landscapes with LID (8/11/2010) Allison Hamel
- Belleville Pond TMDL Public Meeting (7/29/2010) – Allison Hamel
- Pawcatuck Bacteria TMDL Public Meeting (8/19/2010) – Emilie Holland, Allison Hamel
- EPA Changes to Update, Improve Water Quality Standards Program Teleconference (8/26/2010) – A Hamel
- Fall 2010 Indicator Workshops – Impervious Cover (9/14/2010) Allison Hamel
- Fall 2010 Indicator Workshops – Beach Closures (10/12/2010) Erik Johnstone
- Fall 2010 Indicator Workshops – Fresh Water Flow (11/19/2010) Mike Dahlquist, Emilie Holland
- Fall 2010 Indicator Workshops – Invasive Species (12/12/2010) Emilie Holland, Erik Johnstone
- Principals of Writing Highway Construction (11/3/10) Allison Hamel, Mike Dahlquist
- Webinar – Storm Water Compliance Construction Site... What Everyone Should Know (11/17/10) A. Hamel
- Webinar – Designing LID to Work: Lessons Learned from North Carolina (12/9/2010) Allison Hamel
- 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)
- Maintenance Winter Training 2010-2011 – Facility Stormwater Pollution Prevention Plans Allison Hamel presented; Maintenance Superintendents attended

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. URI NEMO has continued to provide very high quality training with support from both DEM and DOT and the URI T2 Center.

YEAR 8 (2011) 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 2011. 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.

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

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 8 (2011) 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.
---------------	---

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 will continue through 2011.

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 8 (2011) EXPECTED ACTIONS

NEW BMP: MS4 Coordinator's Group Exchange

RIDOT has initiated a Coordinator's Group exchange in January 2011. It is anticipated that an exchange of timely topics will be discussed during monthly emails and during regular meetings. RIDOT has reached out to each Stormwater Coordinator (using the Annual Template email list) to engage interconnected MS4s.

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 2011. 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.

Additional Measurable Goals and Activities

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).

Adopt-a-Highway currently has 103 sponsors in the program and 206 miles are 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.

Sponsor-A-Highway has 31 Segments Sponsored (62 Miles Sponsored), out of a total of 111 total segments in the program. Through this program, over 3,800 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	6 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	4 sponsored
Route 78– total segments 4	1 sponsored	Route 95 – total segments 45	18 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 8 (2011) 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 2010, RIDOT paid \$584,850 for prison crews and picked up 66,687 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 8 (2011) 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 this TIP are 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. A balance of 69 Enhancement Program projects remain in the Transportation Improvement Program (TIP).

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.

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 does not have any control over what projects are submitted for Enhancement Program funding, and therefore cannot be held accountable for the lack of stormwater-related projects.

YEAR 8 (2011) EXPECTED ACTIONS - RIDOT will not continue to evaluate this BMP, but will develop a more suitable goal for this Program for the next RIPDES General Permit. The RIDOT Enhancement Program is evaluating the possibility of developing a "Low Impact Development Demonstration Project" that could fund the incorporation of more LID practices in the traditional submissions of Enhancement projects.

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

Date of Public Notice: 4/1/2011 – 5/1/2011	How public was notified: Providence Journal (April 1, 2011) <u>ATTACHMENT B</u>
Was public meeting held? YES <input type="radio"/> NO <input checked="" type="radio"/>	
Date:	Where:
Summary of public comments received:	None received
Planned responses or changes to the program:	None required



**MINIMUM CONTROL MEASURE #3:
ILLICIT DISCHARGE DETECTION AND ELIMINATION (Part IV.B.3 General Permit)**

SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS

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

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

IV.B.3.b.1:	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.) 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, have been inventorying outfalls through plan research and field data collection using GPS. To date, RIDOT has 3811 outfalls and associated photos in the GIS 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 8 (2011) EXPECTED ACTIONS - RIDOT will develop a policy to have newly constructed outfall geographical locations provided by design consultants to maintain the database as up-to-date as possible.

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 2010 calendar year.
------------	---

N/A – RIDOT is using 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.

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

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. Maintenance is in the process of purchasing an Asset Management software system that will provide the basis of the systematic mapping approach.

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 8 (2011) EXPECTED ACTIONS

RIDOT Maintenance anticipates implementing an Asset Management System in 2011/2012 (please see Minimum Measure 6).

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

RIDOT will 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.

IV.B.3.b.4	Indicate if the IDDE ordinance was not developed, adopted and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement. Date of Adoption: If the Ordinance was amended in 2010, please indicate why changes were necessary.
------------	---

N/A – RIDOT does not have regulatory authority to develop and implement ordinances.

IV.B.3.b.5.ii, iii, iv, & v	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.
-----------------------------	---

BMP ID 3D – Develop & Implement IDDE Plan

RIDOT developed an IDDE program during 2006 that addresses the SOP requirements under Permit ID# IV.B.3.b.5. The RIDOT IDDE Program was developed using New England Interstate Water Pollution Control Commission's Illicit Discharge Detection and Elimination Manual – A Handbook for Municipalities (January 2003), the Center for Watershed Protection Illicit Discharge Detection and Elimination – A Guidance Manual for

Program Development and Technical Assessments (October 2004), and RIDEM IDDE workshop materials (December 2004). The IDDE manual was modified to reflect RIDOT authority and procedures.

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

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

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

YEAR 8 (2011) EXPECTED ACTIONS - RIDOT wishes to work with RIDEM and develop a compliant IDDE plan that can be fully implemented in RIDOT and also provided to other MS4s as a template – similar to the Construction Site SWPPPs and Maintenance Facility SWPPPs.

IV.B.3.b.5.vi	Provide summary of implementation of catch basin and manhole inspections for illicit connections and non-storm water discharges. If the required measurable goal of inspecting all catch basins and manholes for this purpose was not accomplished, please indicate reasons why, the proposed schedule of completion and identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement. The operator must keep records of all inspections and corrective actions required and completed.
---------------	---

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

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

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

RIDOT Maintenance anticipates implementing an Asset Management System Program in 2011. 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 develop standard procedures for IDDE investigation 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 8 (2011) 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.

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. 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.

RIDOT has not focused on the January-April dry-weather surveys for the following reasons:

- RIDOT employs summer interns to map and survey the outfalls. Interns are typically not available during the January-April time period.
- RIDOT elected to map the entire state-wide system. This was done by summer interns over the past 7 years. During the initial outfall identification, the July-October dry weather survey was completed.
- Very few outfalls exhibited dry weather discharge (<2%) during the July-October surveys. Of the outfalls that exhibited DWD, only two had values >1000 MPN.
- Both outfalls have been continuously monitored. MOSH 019 (1200 MPN) was re-visited in three subsequent years: no dry weather flow was exhibited again. WARR 015 (>24000 MPN) was re-visited in 2008 & 2009 with similar MPN results. The drainage system was investigated in Sept 2010 and it has been determined that the high MPN numbers are coming from tidal inundation of the outfall pipe, not from the drainage system.
- Sampling between January & April is logistically difficult. As previously explained, there are very few 'dry weather days' in the January-April months because of the required 72-hour wait after a 0.10-inch precipitation event (there are typically about 5 'dry weather (business) days' per month); snow and ice cover the outfalls much of January and February; snow and ice-covered shoulders make for hazardous conditions; snow-melt in March is a significant source of flowing water; and RIDOT must also prepare the Annual Report in this January – March timeframe.
- As of April 1, RIDOT has been unable to perform any Dry Weather Monitoring due to storms and snow cover.

Continuing Investigations

During October of Year 5, the NRU re-tested dry weather discharges that were previously found to have high (MPN >100) fecal coliform counts. An MPN > 100 count was used to determine the 'priority list' for outfalls for possible investigation. In all, seven (7) outfalls were re-examined for dry weather discharge. Three, including the highest elevated level outfall (MPN ~1200), did not exhibit dry weather flow. Out of the remaining four, three (3) exhibited MPN levels below 100. The last outfall had a fecal coliform count of 230 MPN.

In Year 6, the NRU retested the same seven outfalls on June 2, 2009. Lab results are as follows:

- WOON-368: MPN Result Fecal Coliform: 23
- MOSH0-019: No Dry Weather Discharge
- PAWT-468: MPN Result Fecal Coliform: 23
- PAWT-713: MPN Result Fecal Coliform: 240
- NARR-318: outfall submerged
- WARR-015:: No Sample Taken

The NRU retested the same outfalls on August 24, 2009. Lab results are as follows:

- WARR-015: MPN Result Fecal Coliform: >24,000
- WOON-368: MPN Result Fecal Coliform: 240

In Year 7, the NRU investigated the 'priority' outfalls. Results are as follows:

WARR 015 : RIDOT Natural Resources Unit conducted a full IDDE field investigation of the WARR 015 outfall in 2010. NRU Environmental Scientists investigated the drainage system to this outfall, and determined that the high MPN result was due to tidal inundation of the system outfall and connected pipe and a population of mussels living in the outfall. Catch basins, manholes, and roadway flow patterns were investigated, and not found to be contributing dry weather flow. The dry weather flow from the outfall was determined to be tidal water flowing out of the system at low tide.

WOON-368: RIDOT Natural Resources Unit conducted a full IDDE field investigation of the WOON-368 outfall in 2010. NRU Environmental Scientists investigated the drainage system to this outfall, and determined that WOON 386 PIPES 1 & 2 are waterways, there is a stream running through. No DWD from CB was found.

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 8 (2011) 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 2011.

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 also works closely with 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 OC&I. In 2008, OC&I and RIDOT began investigating dry weather discharges along Rt 44 on the North Providence/Johnston line. The RIDOT NRU & Maintenance Division completed the investigation in 2010. No illicit connections were found, and OC&I has closed the case file. ([ATTACHMENT C](#))

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 RIDEM OC&I an extremely effective effort.

YEAR 8 (2011) 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

ILLICIT DISCHARGE DETECTION AND ELIMINATION cont'd

	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.
<p>RIDOT and the town of Tiverton found an illicit discharge during the Sakonnet River Bridge Construction Project (corner of Tucker & Evans Rd). A failing residential house septic system was discharging to the town drainage system during rain events. RIDEM was informed, and required the home-owners to install a new septic system.</p> <p>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.</p> <p>EFFECTIVENESS - RIDOT considers the coordination with RIDEM an effective effort.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS- RIDOT will continue working with RIDEM as needed.</p>	
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.
<p>This permit requirement is covered under the URI NEMO Agreement and RIDOT Winter Training (Please see Minimum Measure 1).</p>	
<p>Additional Measurable Goals and Activities</p> <p>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.</p> <p>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.</p> <p>EFFECTIVENESS - RIDOT considers this effort effective.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort. RIDOT will review existing PAP Policy to determine the necessity of updating.</p>	

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

# of Illicit Discharges Identified in 2010: 1 (Sakonnet Bridge)	# of Illicit Discharges Tracked in 2010: 1
# of Illicit Discharges Eliminated in 2010: 1	# of Complaints Received: 0
# of Complaints Investigated: 0	# of Violations Issued: n/a
# of Violations Resolved: n/a	# of Unresolved Violations Referred to RIDEM: 0

ILLICIT DISCHARGE DETECTION AND ELIMINATION cont'd

Total # of Illicit Discharges Identified to Date: 1 (Sakonnet Bridge)	Total # of Illicit Discharges remaining unresolved at the end of 2010: 0
Summary of Enforcement Actions: Rt 44 Outfall – N Providence/Johnston – no illicit connections – file closed by DOT & DEM WARR 015 – no action/enforcement needed WOON-368 – no action/enforcement needed Sakonnet Bridge Homeowner – RIDEM enforced new septic system installation	
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 2011/2012 Total # of Outfalls Identified and Mapped to Date: 3811	

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:
No new interconnections were added to the database in 2010					



**MINIMUM CONTROL MEASURE #4:
CONSTRUCTION SITE STORM WATER RUNOFF CONTROL (Part IV.B.4 General Permit)**

SECTION I. OVERALL EVALUATION:

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

Include information relevant to the implementation of each measurable goal, such as activities implemented to support the review, issuance and tracking of permits, inspections and receipt of complaints. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern.

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

IV.B.4.b.1	Indicate if the Sediment and Erosion Control and Control of Other Wastes at Construction Sites ordinance was not developed, adopted and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement.
------------	--

Date of Adoption: N/A – RIDOT does not have regulatory authority to develop and adopt Ordinances.

If the Ordinance was amended in 2010 please indicate why changes were necessary.

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). All RIDOT standard specifications may be found at: <http://www.dot.state.ri.us/engineering/standards/index.asp>

Applicable (but not limited to) Standard Specifications:

NEWLY REVISED IN 2010

SECTION 104

SCOPE OF WORK

104.15 ENVIRONMENTAL PROTECTION.

Reasons for the change to Section 104.15: the following revision is necessary to make this section more accurately reflect Federal and State laws, regulations and policies. It is also necessary to more accurately reflect how the terms and conditions and enforcement of project specific regulatory permits and approvals, obtained by RIDOT during design, are required under law to be complied with during construction. Conditions set forth within regulatory permits and approvals require that the permittee (RIDOT) comply with permits and approvals. Revisions to this section more accurately support this required compliance provision. The revisions also more accurately reflect the provisions set forth in Section 107.

104.15 Environmental Protection. The Contractor shall comply with any and all Federal, State and Local laws, rules, regulations, permits, approvals and Contract Provisions controlling pollution and protection of the environment, such that the Contractor does not pollute Freshwater and or Coastal Wetlands, (including but not limited to surface water

features such as rivers, streams, lakes, ponds, reservoirs, tidal waters, etc.) and all other regulated natural resource areas, (including but not limited to, waters of the state and or federal jurisdiction, wellhead protections areas, groundwater recharge/discharge areas, critical habitats, natural heritage areas, forestland, cultural/historic resources etc.) with sediment, fuels, oils, bitumens, chemicals, solid and or liquid waste or other harmful or hazardous or foreign materials, and the atmosphere with particulate and gaseous matter.

The Contractor shall read, become familiar with and aggressively and expeditiously adhere to environmental permits and approvals, contract provisions, Standard Specifications controlling pollution and protection of the environment. The contractor shall ensure that all employees, and all employees of each sub-contractor, avoid pollution of the environment. The contractor shall be responsible to ensure that all employees, and all employees of each sub-contractor, aggressively and expeditiously comply with any and all Federal, State and Local laws, rules, regulations, permits, approvals and Contract Provisions controlling pollution and protection of the environment.

When work areas or pits in or adjacent to any drainage system components, flowing body of water, surface water, tidal water or State or Federally regulated waters, such work areas shall be separated from the main water body by a dike or barrier to keep sediment and or pollutants from exiting the work area.

Water from aggregate washing or other operations containing sediment and or other pollutants shall be treated by filtration, settling basins or other means sufficient to reduce the sediment /pollutant content to levels which do not exceed that of the receiving waters/areas, and or levels allowed by specific permit, law and/or regulation.

Other requirements relating to temporary and permanent erosion and pollution controls are set forth in SECTION 206 through 212 and 214 respectively, of these specifications, and shall be in full effect.

The Contractor, at his own expense, shall be responsible for any fines and penalties resulting from non-compliance and or enforcement actions administered by Federal, State or Local Regulatory Authorities or by the Engineer for non-compliance with any and all Federal, State and Local laws, rules, regulations, permits, approvals and Contract Provisions controlling pollution and protection of the environment. Requirements, as set forth in Section 107, respectively, of these specifications, shall be in full effect.

Delay claims and compensation due to non-compliance of this specification, Federal, State or Local laws, Regulations and or Contract Provisions, shall not be allowed. All time and/or delays resulting from corrective work, as a result of non-compliance, shall be considered a non-excusable/non-compensable delay.

Failure to comply with this subsection and or contract provisions permits and approvals, If in the opinion of the Engineer, will result in a failure to comply charge, as set forth within Contract Special Provision Codes and will be deducted from monies due the contractor. The Engineer will determine if multiple violations of the contract permits and approvals exist and that the charge be deducted per violation. This charge shall be separate from any penalties, fines or corrective actions resulting from regulatory agency enforcement actions. This charge will be deducted along with any penalties, fines or corrective actions resulting from regulatory agency enforcement actions.

a. Plant and Pest Control Requirements. The United States Department of Agriculture has advised that soil and soil-moving equipment operating in regulated areas of certain counties will be subject to plant and pest quarantine regulations. In general, these regulations provide for cleaning soil from equipment before it is moved from regulated areas. Complete information may be secured from appropriate divisions of the Rhode Island Department of Environmental Management and the United States Department of Agriculture.

Contractors shall comply with these regulations where applicable to the State of Rhode Island.

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of Federal and State laws, local laws, ordinances, and regulations and orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Project, or which affect the conduct of the Project. The Contractor shall observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the State and its representatives against any claim or liability arising from the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor, the subcontractors, suppliers of materials or services, or others engaged by the Contractor, or the employees of any of them. If any discrepancy or inconsistency is discovered between the Contract and any law, ordinance, regulation, order or decree, the Contractor shall immediately report the same to the Engineer in writing. The Contractor shall execute and file such documents, statements and affidavits required under applicable Federal or State law or regulation affecting its Proposal, Contract or the prosecution of the work. The Contractor shall permit the examination of any records made subject to such examination by Federal or State law or by regulations promulgated thereunder by any State or Federal agency charged with the enforcement of such law.

107.03 PERMITS, LICENSES AND TAXES. The Contractor shall procure all permits (except those specifically provided in the Contract Documents) and licenses, pay all charges, fees, and taxes, and give all notices necessary and

incidental to the due and lawful prosecution of the work. These costs shall be included in the unit prices bid for the various items of the Contract work.

**PART 200 - EARTHWORK AND EROSION CONTROL
SECTION 212**

MAINTENANCE AND CLEANING OF EROSION AND POLLUTION CONTROLS

212.03 CONSTRUCTION METHODS. *Erosion and pollution controls shall be maintained by the Contractor to the satisfaction of the Engineer. Erosion and pollution controls must be able to prevent, under normal weather conditions, both the movement of soil materials and the intrusion of sediment-laden discharges into environmentally sensitive areas. Construction shall not commence or continue until all specified erosion and pollution controls are in place, properly installed and accepted by the Engineer. Erosion and pollution controls shall be routinely inspected by the Engineer. The Engineer shall notify the Contractor immediately if problems develop. The Contractor shall commence cleaning and maintenance measures no later than the next consecutive calendar day after receiving a directive from the Engineer to perform such measures. The Contractor shall aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Engineer. In the event of a weekend storm, the Contractor must have the Contractor must have resources available to restore, and, if necessary, to replace any damaged controls.*

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 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.

IV.B.4.b.6	Describe actions taken as a result of receipt and consideration of information submitted by the public.
------------	---

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 you 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 Year 8, 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 8 (2011) 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.
------------	---

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.

EXAMPLE JS Page

CODE 212.2000 MAINTENANCE AND CLEANING OF EROSION AND POLLUTION CONTROLS

DESCRIPTION. Subsection 212.03.2; Other Requirements, a. Perimeter Controls, Check Dams and Storm Drain Protection, of the Standard Specifications requires that damaged controls shall be repaired or replaced after each storm or as directed by the Engineer. This shall include the Contractor designating a point of contact for erosion and pollution control issues and maintaining an onsite stockpile of perimeter controls, check dams, and storm drain protection for the duration of the Contract. The stockpile shall contain 200 linear feet of Baled Hay Erosion Check Standard 9.1.0, 6 Sedimentation Control for Catch Basins, and 2 Sedimentation Control for Curb Inlet Structures. Once the amount of an item in the stockpile drops to 50% of the stockpiled amount, the item shall be replenished to the required stockpile amount. The stockpile shall also be stored out of the weather and off of the ground.

Subsection 212.03.3; Failure to Maintain Erosion and Pollution Controls, of the Standard Specifications requires that a daily charge be deducted from monies due the Contractor in the event the Engineer decides that erosion and pollution controls are not in place or have not been adequately maintained. This shall include the failure to comply with the Storm Water Pollution Prevention Plan (SWPPP) provisions. Also, the Contractor shall sign the SWPPP as the Operator at the time the Contract is signed acknowledging that he understands the terms and conditions of the SWPPP and agrees to follow the Best Management Practices described in it. The contractor shall be held responsible for any and all cost associated with fines and clean up activities, over and above the penalty assessed herein resulting from contractor failure in this regard.

For the first violation the charge for this Contract will be \$1000.00.

For the second violation the charge for this Contract will be \$5000.00.

For the third and following violations the charge for this Contract will be \$10,000.00 per day.

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 8 (2011) 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 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.

SECTION II. A - Plan and SWPPP Reviews during Year 7 (2010) 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: 50+ reviews

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 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.

SECTION II.B - Erosion and Sediment Control Inspections during Year 7 (2010) (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:

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.

Each active construction project with a SWPPP has weekly &/or storm event E&S monitoring. RIDOT Construction projects that disturb an area greater than one acre are required to have Storm Water Pollution Prevention Plans (SWPPPs). SWPPPs require erosion and sedimentation control inspections on a weekly basis, and after a storm event. RIDOT hires inspectors to perform SWPPP inspections on RIDOT construction projects. There are currently 11 active construction projects with large site SWPPPs ATTACHMENT D.

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. There are currently 2 active construction projects with small site SWPPPs.

Final Inspections are conducted on every RIDOT construction project, and are attended by appropriate personnel from the 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 34 Final Inspections in 2010 (NOT including FLOOD projects) ATTACHMENT E
RIDOT works cooperatively with RIDEM & CRMC on E&S compliance issues.



**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 2010 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](#).

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 8 (2011) 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 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.

POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT
cont'd

SECTION II.A. - Plan and SWPPP Reviews during Year 7 (2010) Part IV.B.5.b.4: Review 100% of post-construction BMPs for the control of storm water runoff from new development and redevelopment projects that result in discharges to the MS4 which incorporates consideration of potential water quality impacts (the program requires reviewing 100% of plans for development projects greater than 1 acre, not reviewed by other State programs).

of Post-Construction Reviews completed:
Summary of Reviews and Finding, include an evaluation of the effectiveness of the program. Identify person(s) /Department and/or parties responsible for the implementation of this requirement.
All construction plans and SWPPPs are reviewed by RIDOT Design and NRU before contract award. Post-construction storm water BMPs are reviewed at that time. Please see Minimum Measure 4, Section III.
RESPONSIBLE PARTIES - RIDOT Natural Resources Unit & Design are the primary RIDOT entities responsible for the implementation of this program.
EFFECTIVENESS - RIDOT considers this effort effective.
YEAR 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.

SECTION II.B. - Post Construction Inspections during Year 7 (2010): 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: 79	# of Complaints Received: 0
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
Summary of Enforcement Actions:	
IV.B.5.b.10; BMP ID 5D, 5E - All 2010 Final Inspections were attended by Design, Construction, and Maintenance personnel. Environmental personnel attended when appropriate. ATTACHMENT E	
RESPONSIBLE PARTIES - RIDOT Final Inspections Division, Construction, Maintenance, Design and the Natural Resources Unit are the primary RIDOT entities responsible for the implementation of this program.	
EFFECTIVENESS - RIDOT considers this effort effective.	
YEAR 8 (2011) EXPECTED ACTIONS - RIDOT will continue this effort.	

SECTION II.C. - Post Construction Inspections during Year 7 (2010): 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:
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.	
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. A monitoring contract is anticipated to be awarded in 2011.	
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.	
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 stormwater treatment units are cleaned before construction final acceptance and payment. The RIDOT construction site Stormwater Pollution Prevention Plan (SWPPP) Template requires the inclusion of the post-construction stormwater 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 in the Maintenance Division. Once this system is implemented, post-construction stormwater BMP installation, inspection, and maintenance will be tracked.

RESPONSIBLE PARTIES - RIDOT Natural Resources Unit & Maintenance are 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.



**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 <u>identify structural BMPs</u> 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.
--------------	--

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.

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

EFFECTIVENESS - RIDOT considered this effort effective to document existing BMPs.

YEAR 8 (2011) 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 implementing a *Maintenance Management System* in 2011/2012; structural BMPs will be part of this system.

IV.B.6.b.1.ii	Describe activities and actions taken for <u>inspections, cleaning and repair</u> 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.
---------------	---

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.

EFFECTIVENESS - RIDOT considered the BMP Monitoring Contract an effective one-time-baseline inspection/cleaning effort.

YEAR 8 (2011) EXPECTED ACTIONS - RIDOT will have summer interns review the database and ensure it is up to date.

RIDOT Maintenance anticipates implementing a *Maintenance Management System* in 2011/2012; 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 <u>yearly inspection and cleaning of all catch basins</u> (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.
<p>BMP ID 6K, 6L – Annual Catch Basin Cleaning</p> <p>RIDOT cannot inspect &/or clean every catch basin annually due to the extent of the RIDOT system and the resources available.</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> <p>RIDOT is unable to provide 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. <u>ATTACHMENT F</u></p> <p>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. To date, these catch basins and systems have not been included in the estimates of annual DOT catch basin cleaning. RIDOT has established a procedure to estimate the number of catch basins, manholes, and drainage lines cleaned as part of Construction projects. <u>ATTACHMENT G</u></p> <p>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.</p> <p>EFFECTIVENESS - RIDOT does not consider this measure achievable.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance will continue to inspect and clean catch basins as part of regular Maintenance activities</p>	
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>BMP ID 6S – Stabilization of road side shoulders</p> <p>RIDOT is working with 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 is to help develop a grass seed mix that we can use 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 is funded with research monies from FHWA. <u>ATTACHMENT H1 & H2</u></p> <p>RESPONSIBLE PARTIES - URI is conducting the research study.</p> <p>EFFECTIVENESS – RIDOT anticipates the research will aid in future stabilizations efforts.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - none</p>	

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

IV.B.6.b.1.v	Describe activities and actions taken to <u>identify and report known discharges</u> 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 (Permit ID# IV.B.3.b.1; BMP ID 3A – Outfall Mapping).</p> <p>RESPONSIBLE PARTIES - RIDOT Natural Resources Unit was the primary RIDOT entity responsible for the initial identification of outfalls with scouring &/or sedimentation. RIDOT Maintenance is the primary RIDOT entity responsible for the maintenance and repair of outfalls.</p> <p>EFFECTIVENESS – RIDOT does not consider this measure achievable.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance anticipates implementing a <i>Maintenance Management System</i> in 2011/2012; outfalls will be part of this system. RIDOT Maintenance Division will conduct future inspections, maintain outfalls as necessary, and document work in the MMS.</p>	
IV.B.6.b.1.vi	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>BMP ID 6T, 6U – Annual Road Sweeping The Maintenance Division is responsible for the sweeping of State maintained roadways on an annual basis. RIDOT is unable to provide reliable documentation of what has been inspected/cleaned by the Maintenance Division. Roadways are systematically swept based upon complaints and general need. Currently, RIDOT has insufficient resources to conduct roadway sweeping more than once per year other than as a response to complaint or need.</p> <p>RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.</p> <p>EFFECTIVENESS - RIDOT does not consider this measure achievable.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance will continue to sweep roads as part of regular Maintenance activities. RIDOT Maintenance anticipates implementing a <i>Maintenance Management System</i> in 2011/2012; street sweeping will be part of this system.</p>	
IV.B.6.b.1.vii	Describe activities and actions taken for controls to <u>reduce floatables</u> and other pollutants from the MS4. Evaluate appropriateness and effectiveness of this requirement.
<p>RIDOT uses prison work crews to pick up litter along highways. In 2010, work crews removed 66,687 bags of garbage from RIDOT roadways. Please see Minimum Measure 2C.</p> <p>RESPONSIBLE PARTIES - RIDOT Maintenance is the primary RIDOT entity responsible for the implementation of this program.</p> <p>EFFECTIVENESS - RIDOT considers this measure effective.</p> <p>YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance will continue this program.</p>	
IV.B.6.b.1.viii	Describe the method for <u>disposal of waste removed</u> from MS4s and waste from other municipal operations, including accumulated sediments, floatables and other debris and methods for record-keeping and tracking of this information.
<p>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.</p>	

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

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 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance & Construction will continue this program. RIDOT Maintenance is currently having the SWPPPs updated by a consultant.

IV.B.6.b.4 and IV.B.6.b.5	Describe and indicate activities and corrective actions for the <u>evaluation of compliance</u> . 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.
---------------------------------	--

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.

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

EFFECTIVENESS - RIDOT considers this measure effective.

YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance has hired a consultant to review and update all facility SWPPPs, as needed. New SWPPPs will be provided to RIDEM with the 2011 Annual Report.

IV.B.6.b.6	Describe all <u>employee training programs</u> 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.
------------	---

BMP ID 6C, 6D, 6E – Employee training

Please see Minimum Measure 1.

IV.B.6.b.7	Describe actions taken to ensure that new flow management projects undertaken by the operator are assessed for potential water quality impacts and existing projects are assessed for incorporation of additional water quality protection devices or practices. Evaluate appropriateness and effectiveness of this requirement.
------------	--

Not applicable to RIDOT

Additional Measurable Goals and Activities

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

A Winter Operations Manual is still under development.

The RIDOT Maintenance Division has an anti-icing program in place. Anti-icing practices include pre-treating roadways with an Anti-Icing solution. This reduces the amount of salt and sand required during the storm event. Anti-Icing equipment is being purchased as replacement of older vehicles. As the vehicle capability increases, so will the anti-icing program.

The RIDOT Maintenance Division has evaluated economically and environmentally feasible alternatives to the use

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

of sodium chloride for our de-icing operations, and the current standard operating procedures for winter operations. Given the high expense associated with known alternatives, means to reduce the use of sodium chloride is also being evaluated and tested as part of this effort. **ATTACHMENT I**

In addition to instituting a new standard operating procedures at all salt-storage facilities, RIDOT Maintenance is also in the process of building new salt storage sheds at a number of facilities. Building infrastructure has a high capital cost associated with it, so as can be expected, it will take several years for RIDOT to be able to become fully compliant and have all salt covered. However, RIDOT is committed to working with RIDEM to establish measurable goals that may be achieved financially, while keeping the environment protected.

The RIDOT Belleville Facility salt storage barn was completed in 2010.

RIDOT anticipates building two new storage barns for the 2011/2012 season.

The RIDOT Maintenance Division hired a vendor to cover all exposed salt piles in the 2010/2011 winter season.

RIDOT Maintenance updated the Snow Plow Vendor RFP requiring vendors to calibrate equipment at RIDOT Maintenance facilities for the 2010/2011 winter season. **ATTACHMENT J**

RIDOT Maintenance purchased a Salt Brining Machine in 2010; anticipated use for 2011/2012.

RIDOT Maintenance installed/tested a "Closed Loop System" on a RIDOT plow/salt/sand truck. This test was to determine and evaluate salt application.

RIDOT Maintenance updated the 'end of season salt/sand transport' RFP to include more large material haulers to expedite the final state-wide consolidation of salt/sand piles to covered locations.

RIDOT Maintenance is involved in both state-wide and regional Snow Summits to proactively work with RI cities and towns and other NE states to minimize salt/sand application.

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

EFFECTIVENESS - RIDOT considers this measure effective.

YEAR 8 (2011) EXPECTED ACTIONS - RIDOT Maintenance will continue this program. RIDOT Maintenance will continue to upgrade equipment 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:
	Same as 2009 database		

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			

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

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 construction projects are required to use the 2010 Rhode Storm Water Design and Installation Standards Manual which requires water quality BMPs & LID.

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 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.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd

Top 20 Priority Outfalls from URI Study (with Phase III Amendments by CEI):				
Outfall	Priority	Outfall Description	Status	Construction Cost
P54	5	I-95 at the Route 37 interchange	Constructed 2002	\$ 532,758.30
P30	6	Route 113 and I-95 interchange		
P75	7	Route 113 and 295 interchange		
P68	1	P68A: Wellington Ave P68B: Doric Ave	Constructed 2003	\$ 755,885.40
P61	8	I-95 at Maple Street		
P38-2	12	I-95 southbound and the Airport connector	Constructed 2005	\$ 659,676.70
P41	19	I-95 and Route 37 overpass		
P71	13	intersection of I-95 and 295, (includes outfall P69)		
P113	17	295 south of Meshanticut Brook		
W6	2	Mancini Drive	Constructed 2010	\$ 798,211.97
P106	11	Route 2 off ramp from 295 southbound	Conceptual Design	
S1	4	West bank of the Pawtucket River at the I-95 bridge	Designed 2007, but on hold for Pawtucket River Bridge Replacement Project. Permit Application anticipated March 2011	
S2	9	East bank of the Pawtucket River at the I-95 bridge		
S3	14	Seekonk River near Blake Street		
W23	15	south side of the river near Providence Place Mall	Designed 2007, but will be included in the Providence Viaduct Project	
W2	18	North side of the river near Providence Place Mall		
M32	10	I-95 and Moshassuck bridge/culvert	No Build Option recommended	
M34	3	Smithfield Ave		
M30	16	East side of I-95 south of outfall M32 and the bridge/culvert		
P65	20	I-95 and Route 37		
Additional Stormdrain Retrofit Projects				
		Beavertail Road	Constructed 2000	
		Old Stafford Road	Constructed 2001	\$ 244,188.99
		Stafford Road		
		Gano Street	Constructed 2003	
		Thurbers Avenue	Constructed 2003	
		Highland Avenue	Constructed 2004	
		Warren Ave	Constructed 2004	
		Post Road	Constructed 2004	
		Runnins River Outfalls	Constructed 2004	\$ 287,862.95
		Scarborough State Beach – “Smart Sponge”	Constructed 2005	\$ 394,974.90
		Scarborough Beach Modeling Study – Phase I	2007	\$16,670 (ASA) \$16,000 (CEI)
		Scarborough Beach Modeling Study – Phase II	2010	\$ 312,736.71 PRELIM DESIGN
		BMP Monitoring	Inspections: 2009 Cleaning: 2010	\$ 363,057.70
		BMP Monitoring	Monitoring: 2011	



SPECIAL RESOURCE PROTECTION WATERS (SRPWs)

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

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

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

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

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



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Office of Water Resources



INSTRUCTIONS FOR THE RI POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS AND INDUSTRIAL ACTIVITY AT ELIGIBLE FACILITIES OPERATED BY REGULATED SMALL MS4s ANNUAL REPORT FORM

WHO MUST SUBMIT AN ANNUAL REPORT:

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

The Annual Report must be submitted to:

RIDEM
Office of Water Resources
RIPDES Program
Permitting Section
235 Promenade Street
Providence, RI 02908
ATTN: Jennifer Stout

INSTRUCTIONS FOR COMPLETION:

GENERAL INFORMATION PAGE:

"RIPDES Permit #"

Include your permit ID # to ensure proper tracking.

"Operator of MS4"

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

"Owner of MS4"

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

"Certification"

State and federal statutes provide for severe penalties for submitting false information on this application form. State and federal regulations require this application to be signed as follows (RIPDES Rule 12);

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

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

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

SECTION I- OVERALL EVALUATION OF BMPS AND MEASURABLE GOALS:

One or more pages, front and back, are provided to report on the status of measurable goals which have been developed to aid in the implementation of strategies, procedures, and programs used to achieve each of the six minimum control measures in Part IV.B of the General Permit. This section provides narrative space for a descriptive explanation and evaluation of the actions taken to satisfy each of the minimum control measures for the 2010 calendar year. Please type or print. If additional space is needed, modify as necessary. Please submit attachments to the appropriate minimum control measure following the format provided.

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

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

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

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

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

SECTION II- ADDITIONAL ANNUAL REPORT REQUIREMENTS

Section II refers to additional reporting requirements that the General Permit requires to be submitted to the Department as part of the Annual Report. Section II requirements apply to Minimum Control Measures 2 through 6.

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

Minimum Control Measure #3: Section II.A:
Provide the number of illicit discharges identified in 2010, number of illicit discharges tracked in 2010, number of illicit discharges eliminated in 2010, 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 2010. 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 7 (2010) and any additional information. This includes, but is not limited to a summary of the reviews, responsible parties, and types of projects reviewed.

Minimum Control Measure #4: Section II.B:
Construction inspection information for erosion and sediment control should be submitted annually as stated in Part IV.G.2.n. Provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #5: Section II.B:
Post-construction inspection information for proper installation of post-construction structural BMPs should be submitted annually as stated in Part IV.G.2.o. This should provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #5: Section II.C:
Inspection information for proper operation and maintenance of post-construction structural BMPs should be submitted annually as stated in Part IV.G.2.p. This should provide a summary of the number of site inspections conducted, inspections that have resulted in enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

Minimum Control Measure #6: Section II.A:
As prescribed in Part IV.B.6.b.1.i of the General Permit, the MS4 operator must identify and list the specific

location and description of all structural BMPs in the SWMPP at the time of application and update the information in the annual report.

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

Minimum Control Measure #6: Section II.C:
As noted in Part IV.G.2.j of the General Permit, specify any planned municipal construction projects or opportunities to include water quality BMPs, low impact development, or seek to promote infiltration and recharge.

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.

RI DEPARTMENT OF TRANSPORTATION

RIPDES SMALL MS4 2008 ANNUAL REPORT

ELECTRONIC ATTACHMENTS

- A: University of Rhode Island Cooperative Extension 2010 Progress Report – Storm Water Phase II Public Outreach, Education, Involvement and Participation
- B: RIDOT Public Notice – Providence Journal – April 1, 2011
- C: Route 44 Outfall Investigation/Closure
- D: RIDOT Active Construction Projects
- E: RIDOT 2010 Final Inspections
- F: RIDOT Catchbasin Inspections
- G: RIDOT Construction Cleaning
- H: Roadside Grasses Reports
- I: Salt Alternatives
- J: Salt Stockpile Covers