



## RIPDES SMALL MS4 ANNUAL REPORT

### GENERAL INFORMATION PAGE

RIPDES PERMIT #  RIR040036

REPORTING PERIOD (check one):

☐ YEAR 1

March 04-Dec 04

☒ YEAR 2

Jan 05-Dec 05

☐ YEAR 3

Jan 06-Dec 06

☐ YEAR 4

Jan 07-Dec 07

☐ YEAR 5

Jan 08-Dec 08

#### OPERATOR OF MS4

Name: James Capaldi, Director, RHODE ISLAND DEPARTMENT OF TRANSPORTATION			
Mailing Address: 2 Capitol Hill			
City: Providence	State: RI	Zip: 02903	Phone: 401 222 2023
Contact Person: Edward Szymanski	Title: Associate Chief Engineer		
Legal status (circle one):			
PRI - Private	<u>PUB - Public</u>	BPP - Public/Private	STA - State
FED - Federal			
Other (please specify):			

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

Name: SAME			
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	<u> JAMES CAPALDI, PE </u>
Print Title	<u> DIRECTOR </u>
Signature	_____ Date _____





# **MINIMUM CONTROL MEASURE #1: PUBLIC EDUCATION AND OUTREACH (Part IV.B.1 General Permit)**

## **I. MEASURABLE GOALS:**

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.1.b.2	1A, 1B	Develop strategies on how to inform the community on how to become involved in the storm water program and how operators will utilize partnerships with governmental and non-governmental entities. (1 <sup>st</sup> year)	X			URI Agreement (Draft submitted with SWMPP, 2004)	TBD			X
		Start informing community/Utilize partnerships (2 <sup>nd</sup> year)		X		Established partnership with URI in 2004; Agreement signed February 2006; educational material available December 2006 (est.), workshops/training to be available in 2007 through 2009 (Year 3 through 5).	TBD			X
IV.B.1.b.4	1A, 1B	Develop strategies to list target pollutant sources the public education program is designed to address (1 <sup>st</sup> year)	X			URI Agreement	TBD			X
		Start listing target pollutant sources the public education program is designed to address (2 <sup>nd</sup> year)	X			URI Agreement	TBD			X
B. ADDITIONAL MEASURABLE GOALS:										
	1A, 1B	Partner with URI Cooperative Extension to Provide Training to State and Municipal Officials and Coordinated Public Outreach Message. <b>Measurable Goal: Educational materials selected and available for use by end of Year 2.</b>		X		URI Agreement signed February 2006; educational material available December 2006 (est.), workshops/training to be available in 2007 through 2009 (Year 3 through 5).	TBD			X
	1C	Develop Website - Storm Water Page, SWMPP description, links, and Web-based resource library - guidance, curriculum. <b>Measurable Goal: Storm Water page added to RIDOT website within Year 2.</b>		X		Anticipated to launch April 2006; will notify municipal storm water coordinators via email of availability.	TBD			X
		<b>Measurable Goal: Update regularly Years 3-5.</b>			X	Not required in Year 2.	TBD			X
	1D	Publish storm water materials in DOA and RIDOT Newsletter. <b>Measurable Goal: Develop and publish materials within Year 3.</b>			X	Not required in Year 2.	TBD			X
	1E	Continue Existing Program: RIDOT Winter Training existing program	X			RIDOT winter training program for erosion control source reduction (annually).	X			X

TBD: To Be Determined

	1F	Develop storm water training to be provided as part of the winter training program. <b>Measurable Goal: Develop or contract for storm water training curriculum in Year 2.</b> Continue through Year 5.	X			National Highway Institute courses; URI training/workshops Year 3 through 5.	TBD			X
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## II. OVERALL EVALUATION - PUBLIC EDUCATION AND OUTREACH:

### A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

RIDOT has signed an agreement with the University of Rhode Island Cooperative Extension for services to establish RIDOT compliance with obligations under Storm Water Phase II for *Public Education and Outreach* minimum measure and the *Public Involvement and Participation* minimum measure. DEM will provide technical assistance to RIDOT by reviewing URI's deliverables for technical accuracy and compliance with Storm Water Phase II to achieve approval. In undertaking this effort, RIDOT anticipates that a number of very valuable public education and outreach tools will be produced that will be applicable to the Storm Water Phase II needs of Rhode Island municipalities and that will be valuable to the general public as tools for managing storm water. Through this agreement, RIDOT will achieve full compliance with the *Public Education and Outreach* minimum measure. RIDOT also has several other BMPs that will be employed under this measure.

**Permit ID IV.B.1.b.2; BMP IDs 1A, 1B:** The Office of Environmental and Intermodal Planning is responsible for partnering with the URI Cooperative Extension to provide training to State and municipal officials and 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. The RIDOT/DEM/URI Agreement was signed in February 2006, and educational materials will be available December 2006. Various target pollutant sources will be addressed by this BMP. ATTACHMENT A

**BMP ID 1C:** The Office of Environmental and Intermodal Planning anticipate launching a storm water page to the RIDOT website in April 2006. Municipal storm water coordinators will be notified via email of availability. The website will provide a description of the Phase II program, RIDOT's SWMPP, Annual Reports, links to related sites, and a web-based resource library. This BMP is anticipated to occur in Year 3.

**BMP ID 1D:** The Office of Environmental and Intermodal Planning will develop and publish storm water materials in the DOA and RIDOT newsletter in Year 3. The target audience will be State personnel. This BMP is on track to occur in Year 3.

**BMP ID 1E, 1F:** RIDOT has an existing winter training program for RIDOT personnel. This training includes stormwater specific training as an integrated part of other courses. National Highway Institute courses *WATER QUALITY MANAGEMENT OF HIGHWAY RUNOFF* and *DESIGN AND IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL* will be offered to augment existing program (offered Year 2 Winter Training Session and will be available Year 3-5). The URI Agreement will also provide training and workshops to augment the existing program (available Year 3 – 5). This BMP is an existing program, however, better records need to be maintained to provide data. Data not available Year 2.

The URI Agreement will satisfy this minimum control measure when fully implemented. The Agreement was signed in February 2006. Educational materials will be available in December 2006 and workshops will begin February 2007 through 2009. All aspects of the URI Agreement will be addressed in the revised Storm Water Management Plan (to be submitted to RIDEM in July 2006) and subsequent Annual Reports.

**B. APPROPRIATENESS AND EFFECTIVENESS:**

Each BMP will provide a positive impact to the environment by educating the target audience (State/Municipal Officials, RIDOT personnel, and the public) in recognizing causes and effects of storm water degradation.

The success of the partnership with the URI Cooperative Extension will be determined by the submittal of deliverables in a timely manner, post-survey of those attending training sessions and pre- and post-survey of target audiences for public outreach efforts. The success of internal training will also be evaluated by post-surveys of those attending trainings.

All measures are still deemed appropriate. Effectiveness of these measures will be determined based on post-implementation outcome of URI Agreement.



## MINIMUM CONTROL MEASURE #2: PUBLIC INVOLVEMENT/PARTICIPATION (Part IV.B.2 General Permit)

### I. MEASURABLE GOALS:

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.2.b.2.i	2B	Develop strategies to identify the target audiences of the public involvement program and description of the groups engaged (1 <sup>st</sup> year)	X			URI Agreement (Draft submitted with SWMPP, 2004)	TBD			X
		Start identifying target audiences of the public involvement program and describing the groups engaged (2 <sup>nd</sup> year)	X			Municipal officials, DOT, general public	TBD			X
IV.B.2.b.2.ii	2B	Develop strategies to describe types of public involvement activities in the program (1 <sup>st</sup> year)	X			URI Agreement	TBD			X
		Start describing types of public involvement activities in the program (2 <sup>nd</sup> year)	X			Workshops, trainings, and web information	TBD			X
IV.B.2.b.2. iii		The operator must provide adequate public notice of the draft annual report and provide the opportunity for public comment (annually)			X	Annual Report for 2005 will be public noticed in April 2006.	TBD			X
B. ADDITIONAL MEASURABLE GOALS:										
	2A	Continue Existing Programs: Adopt a Highway/Spot. Provide bags, litter picks, transportation, and traffic control.	X			Program continued.	X			X
	2B	Proposed Program: Partner with URI Cooperative Extension to Provide Public Outreach Program <b>Measurable Goal: Develop partnership with an outreach group by the end of Year 2.</b>	X			URI partnership developed in 2003 in preparation of DOT/DEM/URI Agreement and Stormwater Management Plan.	TBD			X
	2C	Continue Existing Program: Fund clean up efforts - Prison cleanup crews; Woonasquatucket River Cleanup	X			Program continued.	X			X
	2E	Continue Existing Program: Enhancement Program.	X			Program continued.	X			X
	2F	Continue Existing Program: Stormwater Retrofit Program	X			Program continued.	X		X	

## II. OVERALL EVALUATION - PUBLIC INVOLVEMENT/PARTICIPATION:

### A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

RIDOT has signed an agreement with the University of Rhode Island Cooperative Extension for services to establish RIDOT compliance with obligations under Storm Water Phase II for *Public Education and Outreach* minimum measure and the *Public Involvement and Participation* minimum measure. DEM will provide technical assistance to RIDOT by reviewing URI's deliverables for technical accuracy and compliance with Storm Water Phase II to achieve approval. In undertaking this effort, RIDOT anticipates that a number of very valuable public education and outreach tools will be produced that will be applicable to the Storm Water Phase II needs of Rhode Island municipalities and that will be valuable to the general public as tools for managing storm water. Through this agreement, RIDOT will not achieve full compliance with the *Public Involvement and Participation* minimum measure; therefore, RIDOT has several other BMPs that will be employed under this measure.

**BMP ID 2A:** The Maintenance Division has continued with the Adopt-a-Highway and Adopt-a-Spot programs providing bags, litter picks, transportation and traffic control. The target audiences of this BMP include the public, commercial and industrial businesses, trade associations, environmental groups and educational organizations. Litter is the target pollutant source for this BMP. The level of public participation determines the success of this goal. Program information and data for Year 2 are available at <http://www.dot.state.ri.us/programs/AdoptaSpot/index.htm> and <http://www.dot.state.ri.us/programs/adoptahwy/> ATTACHMENT B

**Permit ID IV.B.2.b.2.i; IV.B.2.b.2.ii; BMP ID 2B:** The Office of Environmental and Intermodal Planning 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. Educational materials should be available December 2006 and workshops will begin February 2007 through 2009. ATTACHMENT A

**BMP ID 2C:** The Maintenance Division has continued with cleanup efforts. The target audiences for this BMP include the public, neighborhood associations, environmental groups and educational organizations. Litter and bulky/solid waste are the pollutant sources of focus in this BMP. Data collection started in March 2005 for Prison Crew Cleanup efforts along RIDOT roadways. ATTACHMENT C

**BMP ID 2D:** Deleted per RIDEM

**BMP ID 2E:** The Design Office and Office of Environmental and Intermodal Planning are responsible for the enhancement program – documenting existing funding and funding for the future. The target audiences include the public, neighborhood associations and environmental groups. Target pollutant sources include sediment, hydrocarbons, and airborne contaminants. The program projects are funded with Enhancement Program &/or Congestion Management and Air Quality (CMAQ) Funds or other sources that address environmental quality. This program has continued to be funded. ATTACHMENT D

**BMP ID 2F:** The Office of Environmental and Intermodal Planning will continue with the storm water retrofit program. RIDOT initially utilized a stakeholder group to prioritize the Storm Drain Retrofit Demonstration Program outfall selection process. This stakeholder group included the Rhode Island Department of Environmental Management, Federal Environmental Protection Agency, Save the Bay, and community representatives from Cranston, Warwick, and West Warwick, as well as representatives from the Pawtuxet River Authority. It was mutually agreed that RIDOT would proceed with the design and construction of five outfalls on the Pawtuxet River as a first priority. A Design Study Report for the remaining fifteen outfalls from the original University of Rhode Island study was prepared. During FY2003, the Department procured additional consultant services through an RFP process. Crossman Engineering was the selected consulting firm and design efforts on additional storm water projects began in FY2004. As of February 2006, ten (10) retrofits have been completed. four (4) are in construction. and three (3) projects will go out to bid in Spring 2006. RIDOT will continue to advance storm water

abatement components that are prioritized with RIDEM. Future elements for incorporation into RIDOT's program will include recommendations from federally approved TMDL studies that are completed by RIDEM. ATTACHMENT E

**Permit ID IV.B.2.b.2.iii** – The 2005 Annual Report has been drafted and public noticed concurrently with the 2004 Annual Report in April 2006.

## **B. APPROPRIATENESS AND EFFECTIVENESS:**

**BMP ID 2A:** Both the Adopt-a-Highway and Adopt-a-Spot programs provide opportunities for public involvement, and are still deemed appropriate and effective BMPs.

**BMP ID 2B:** The success of the partnership with the URI Cooperative Extension will be determined by the submittal of deliverables in a timely manner, post-survey of those attending training sessions and pre- and post-survey of target audiences for public outreach efforts. The URI agreement was signed in February 2006. Educational materials should be available December 2006 and workshops will begin February 2007 and continue through 2009. This BMP will provide training and workshop opportunities for the public, State/Municipal officials, and RIDOT personnel, and is deemed appropriate for this measure. Effectiveness will be determined after the completion of the project.

**BMP ID 2C:** The Maintenance Division has continued to provide opportunities for public involvement by assisting in cleanup efforts. This is still deemed an appropriate and effective BMP, however data collection needs to be improved to be able to measure success.

**BMP ID 2D:** **BMP DELETED** The continuance of the Winter Training Program was deemed an inappropriate measure by RIDEM (November 2004) for this minimum measure. Therefore, it has been deleted from this measure, but will continue to be tracked under the Public Education and Good Housekeeping measures.

**BMP ID 2E:** The enhancement program provides opportunities for public involvement, and is still deemed appropriate and effective BMPs.

**BMP ID 2F:** This program was designed from research at the University of Rhode Island and funded by RIDOT. Also, a stakeholder group (including RIDEM, EPA, Save the Bay, and community representatives from Cranston, Warwick, and West Warwick, as well as representatives from the Pawtuxet River Authority) were involved in the prioritization of retrofits. RIDOT will continue this program, and will track results. This program utilized public agencies in its development, and is considered an appropriate and effective BMP.





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

## **I. MEASURABLE GOALS:**

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			ON-YES	NO	TRK		YES	NO	YES	NO
IV.B.3.b.1	3A, B	Development of an outfall map showing the location of all outfalls and names of receiving waters (3 <sup>rd</sup> year)			X		X		X	
IV.B.3.b.2		Strategies for tagging outfall pipes if GIS maps are not being developed (1 <sup>st</sup> year)	NA	NA	NA	GIS maps are being developed.				
IV.B.3.b.3	3C	Develop procedures for recording of additional elements			X		TBD			X
IV.B.3.b.4		Develop and introduce an ordinance to prohibit and enforce illicit discharges to the MS4 (1 <sup>st</sup> year)	NA	NA	NA	RIDOT does not have regulatory authority.	NA	NA	NA	NA
		Ordinance adoption (2 <sup>nd</sup> year)	NA	NA	NA		NA	NA	NA	NA
IV.B.3.b.5. i	3Diii	Develop strategies for locating priority areas which include areas with higher likelihood of illicit discharges (1 <sup>st</sup> year)	X			RIDOT will develop an IDDE program during 2006 that will address requirements under Permit ID# IV.B.3.b.5.	TBD			X
		Implement strategies (2 <sup>nd</sup> year)	X							
IV.B.3.b.5. ii		Develop procedures for receipt and consideration of complaints (1 <sup>st</sup> year)		X						
		Implement procedures (2 <sup>nd</sup> year)		X						
IV.B.3.b.5. iii	3Diii	Develop procedures for tracing the source of an illicit discharge (1 <sup>st</sup> year)		X						
		Implement procedures (2 <sup>nd</sup> year)		X						
IV.B.3.b.5. iv		Develop procedures for removing the source of the illicit discharge (1 <sup>st</sup> year)		X						
		Implement procedures (2 <sup>nd</sup> year)		X						
IV.B.3.b.5. v		Develop procedures for program evaluation and assessment (1 <sup>st</sup> year)		X						
		Implement procedures (2 <sup>nd</sup> year)		X						
IV.B.3.b.5. vi	3C	Develop procedures for inspection of all catch basins and manholes for illicit connections and non-storm water discharges (1 <sup>st</sup> year)		X						

		Implement procedures (2 <sup>nd</sup> year)		X						
		Inspections taking place at least once (4 <sup>th</sup> year)			X					
IV.B.3.b.5. vii	3Fii	Develop procedures for conducting a minimum of two dry weather surveys, one between Jan 1 <sup>st</sup> and April 30 <sup>th</sup> and one between July 1 <sup>st</sup> and Oct 31 <sup>st</sup> . (Sanitary sewers- bacteria sampling is only required once between July 1 <sup>st</sup> and Oct 31 <sup>st</sup> (1 <sup>st</sup> year)		X						
		Implement procedures (2 <sup>nd</sup> year)		X						
		Two dry weather surveys to be completed (4 <sup>th</sup> year)			X					
IV.B.3.b.6		Develop procedures for coordinating with physically interconnected MS4s, including state and federal owned or operated MS4s, when illicit discharges are detected or reported (1 <sup>st</sup> year)		X				TBD		X
		Implement procedures (2 <sup>nd</sup> year)		X				TBD		X
IV.B.3.b.7		Develop procedures for referral to RIDEM of non-storm water discharges not authorized by this permit or a pre-existing permit (1 <sup>st</sup> year)		X				TBD		X
		Implement procedures (2 <sup>nd</sup> year)		X				TBD		X
IV.B.3.b.9		Develop procedures for tracking and recording actions to detect and address illicit discharges (1 <sup>st</sup> year)		X				TBD		X
		Implement procedures (2 <sup>nd</sup> year)		X				TBD		X
<b>B. ADDITIONAL MEASURABLE GOALS:</b>										
	<b>3A</b>	<b>Proposed Program: OUTFALL MAPPING</b>								
	i	Proposed Program: Select consultant/vendor to map storm water outfalls, Create Spatial Database (GIS) for Structure Attributes, Maintenance and Asset Management. <b>Measurable Goal: Hire mapping vendor within Year 2.</b>		X				X		X
	ii	<b>Measurable Goal: Complete mapping of outfalls within Woonasquatucket and Moshassuck River Watersheds within Year 2.</b>	X					X		X
	iii	<b>Measurable Goal: Complete mapping of outfalls within Runnins River, Pawtuxet River-North Branch and Narragansett Bay-Upper Bay Watersheds within Year 3.</b>			X			X		X
	iv	<b>Measurable Goal: Complete mapping of outfalls within Pawtuxet River-South Branch, Narragansett Bay-West Bay and Conanicut Island Watersheds within Year 4.</b>			X			TBD		X

	v	Measurable Goal: Complete mapping of outfalls within Narragansett Bay-East Bay, Aquidneck Island and Westport River Watersheds within Year 5.			X	Proposed for Year 5.	TBD		X	
	vi	Measurable Goal: Complete mapping of outfalls within Pawcatuck River, Thames River, Coastal Watersheds within Year 5.			X	Proposed for Year 5.	TBD		X	
	vii	Existing Program: Outfall location data collection completed Saugatucket River, Stafford Pond and Blackstone River Watersheds	X			Completed 2002, 2003	TBD		X	
	<b>3B</b>	<b>Proposed Program: OUTFALL DATABASE</b>								
		Proposed Program: Create Spatial Database (GIS) for Structure Attributes, Maintenance and Asset Management. Measurable Goal: Develop database with applicable parameters within Year 2	X			Database created; populated with each subbasin data as completed.	TBD		X	
	i	Measurable Goal: Select Asset Management software within Year 2.		X		Committee is working on software selection	TBD		X	
	ii	Measurable Goal: Asset Management Software rollout by end of Year 3			X	Not required in Year 2.	TBD		X	
	iii	Measurable Goal: Enter field data collected for the Saugatucket River Watershed outfall mapping within Year 3.	X			Achieved– data entered into database as collected			X	
	iv	Measurable Goal: Following pilot program, enter subsequent sub-basin outfall data within Year 3.	X			Achieved – data entered into database as collected			X	
	<b>3C</b>	Proposed Program: Develop procedure for recording "additional elements". Measurable Goal: Design policy memo developed by end of Year 3.			X	Not required in Year 2.			X	
	<b>3D</b>	<b>ID Existing and plan for future connections</b>								
	i	Existing Program: Drainage discharges to system accounted for through PAP system drainage. Volume limited by existing DPM.	X			On-going program	X		X	

	ii	Proposed Program: Adopt/Evaluate Design Policy Memo for New Connections/Discharges to include geo-referencing. <b>Measurable Goal: Revised DPM regarding drainage connections by end of Year 2.</b>		X		Anticipate discussion/writing/redesign in 2006.	TBD		X	
	iii	Proposed Program: Identify Existing Connections/Discharges. Limited to review of PAP records for last three years and identification of significant contributors discharging to system. <b>Measurable Goal: Identify existing connections/discharges by end of Year2.</b>		X		Anticipate identifying existing connections/discharges in 2006.	TBD		X	
	3E	Proposed Program: Survey storm water outfalls for dry weather flows within Years 3 – 5.								
	i	<b>Measurable Goal: Survey Outfalls to identify Dry Weather Flows within Blackstone, Woonasquatucket and Moshassuck River Watersheds within Year 3.</b>			X	Proposed for Year 3.	TBD		X	
	ii	<b>Measurable Goal: Survey Outfalls to identify Dry Weather Flows within Runnins River, Pawtuxet River-North Branch, Narragansett Bay-Upper Bay Watersheds within Year 4.</b>			X	Proposed for Year 4.	TBD		X	
	iii	<b>Measurable Goal: Survey Outfalls to identify Dry Weather Flows within Pawtuxet River-South Branch, Narragansett Bay-West Bay and Conanicut Island Watersheds within Year 5.</b>			X	Proposed for Year 5.	TBD		X	
	iv	<b>Measurable Goal: Survey Outfalls to identify Dry Weather Flows within Narragansett Bay-East Bay, Aquidneck Island, and Westport River Watersheds within Year 5.</b>			X	Proposed for Year 5.	TBD		X	
	v	<b>Measurable Goal: Survey Outfalls to identify Dry Weather Flows within Pawcatuck River, Thames River, Coastal Watersheds within Year 5.</b>			X	Proposed for Year 5.	TBD		X	
	3F	<b>Proposed Program: Sample Outfalls under Dry Weather Conditions Years 2 – 5</b>					TBD		X	
	i	<b>Measurable Goal: Sample outfalls at Saugatucket River and Stafford Pond within Year 2.</b>		X		Anticipated completion Year 3	TBD		X	
	ii	<b>Proposed Program: Select consultant/vendor to sample storm water outfalls with dry weather flows. Measurable Goal: Hire vendor within Year 3.</b>			X	Proposed for Year 3.	TBD		X	

	iii	Measurable Goal: Vendor to Sample Dry Weather Flows within the Saugatucket River and Stafford Pond Watersheds within Year 3.			X	Proposed for Year 3.	TBD		X	
	iv	Measurable Goal: Vendor to Sample Dry Weather Flows within Blackstone, Woonasquatucket and Moshassuck River Watersheds within Year 4.			X	Proposed for Year 4.	TBD		X	
	v	Measurable Goal: Vendor to Sample Dry Weather Flows within Runnins River, Pawtuxet River-North Branch and Narragansett Bay-Upper Bay Watersheds within Year 4.			X	Proposed for Year 4.	TBD		X	
	vi	Measurable Goal: Vendor to Sample Dry Weather Flows within Pawtuxet River-South Branch, Narragansett Bay-West Bay and Conanicut Island Watersheds within Year 5.			X	Proposed for Year 5.	TBD		X	
	vii	Measurable Goal: Vendor to Sample Dry Weather Flows within Narragansett Bay-East Bay, Aquidneck Island, and Westport River Watersheds within Year 5.			X	Proposed for Year 5.	TBD		X	
	viii	Measurable Goal: Vendor to Sample Dry Weather Flows within Pawcatuck River, Thames River, Coastal Watersheds within Year 5.			X	Proposed for Year 5.	TBD		X	

## II. OVERALL EVALUATION - ILLICIT DISCHARGE DETECTION AND ELIMINATION:

### A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

**Permit ID# IV.B.3.b.5 – IDDE Plan:** RIDOT will develop an IDDE program during 2006 that will address requirements under Permit ID# IV.B.3.b.5. RIDOT has most procedures in place, though not documented or formalized in a Design Policy Memo (DPM), Work Breakdown Structure (WBS), or Standard Operating Procedure (SOP). The RIDOT IDDE Program will be 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 will be modified to reflect RIDOT authority and procedures. RIDOT will rely on RIDEM for enforcement once illicit connections are documented.

**BMP ID 3A – Outfall Mapping:** RIDOT prioritized mapping of storm water outfalls through coordination meetings with the RIDEM Office of Water Resources. RIDOT is mapping its entire system, instead of just the system located in the Urban or Densely populated areas, as required by the Permit. This will require additional time, and is not anticipated to be completed by Year 3 (also required under the Permit). RIDOT chose to complete the inventory by drainage basins and the ranking is largely based on completed federally approved TMDL studies. The Office of Environmental and Intermodal Planning, supported by the MIS Office, has been inventorying outfalls through plan research and field data collection using GPS. The GIS database currently contains almost 1900 mapped locations with a database and photos. This effort will continue with the help of summer interns. Procedures for recording and adding additional elements will be dependent upon the vendor or contractor selected and will be developed in conjunction with RFP for hiring the contractor to survey and sample outfalls (est. 2006). Additional Elements will be mapped for the Asset Management Software (to be installed in Maintenance, Year 4 (See BMP 5i, BMP 6R)).

### ATTACHMENTS F, G

The Office of Environmental and Intermodal Planning and the GIS Office are responsible for hiring a mapping vendor to finish mapping outfalls along divided highways. This vendor will also be responsible for the sampling of dry weather outfalls once mapping of outfalls is complete. An RFP is anticipated to be drawn up in Summer 2006 to hire a vendor for mapping and sampling in 2007.

Mapping of the Saugatucket and Taunton River sub-basins were completed in the summer of 2002. The Blackstone River Basin which includes the Blackstone, Branch, Chepachet, and Clear River sub-basins was mapped during the summer of 2003. In the summer of 2004, the Moshassuck River, the Woonasquatucket River, and a portion of the Pawtuxet River basins had storm water outfall inventories conducted.

**BMP ID 3B – Outfall Database:** A spatial database has been created for the Outfall Locations. As mapping data is collected, the GIS Office will be responsible for updating the database.

Asset Management: The GIS Office, the Office of Environmental and Intermodal Planning and the Maintenance Division will collaborate on the selection of Asset Management Software. RIDOT is currently in the process of selecting a vendor/software. The Maintenance Division has formed an Asset committee and a RFP is anticipated to be going out for bid in the Summer of 2006 to acquire a consultant and asset management system. The Outfall data will be a subset of data in this database, as will the 'additional elements' such as catch basins, drainage ponds, stormwater treatment units, etc.

**BMP ID 3C – Additional Elements:** The Office of Environmental and Intermodal Planning and the MIS Office will develop a Design Policy Memo (DPM) detailing the procedure for locating additional elements (catch basins, man holes, etc.), recording pertinent information about them and amending mapping to depict these features. The DPM is expected to be vendor-dependent, and developed by the end of Year 3.

Drainage ponds are scheduled to be inventoried by the Design Office through field data collection using GPS. A data dictionary has been set up to collect these features as polygons and generate a point feature for generalization. An inventory of storm water treatment units (STU) is completed. The STU GIS database

was developed through field data collection by the Design Office with support by the GIS Office. As new STU are installed, the Design Office plans to locate them with GPS. **ATTACHMENT H**

A GIS database has been completed for the snow plow routes. The sweeping routes are partially completed using linear referencing. An effort to complete the routes by Spring 2006 is underway by the Maintenance Division.

**BMP ID 3D – Existing/Future Connections:** The Design Office oversees the drainage discharges to the RIDOT system accounted for through Physical Alteration Permits (PAP) system drainage. PAPs 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 encouraged to treat storm water. Existing connections/discharges into the RIDOT system will be examined through a limited review of PAP records for the last three years and identification of significant contributors discharging to the system. Identifications of existing connections and/or discharges are anticipated for 2006. The PAP records will also be reviewed when an illicit discharge is located to aid in identification of existing contributors. A new or revised policy for PAP policy/regulation is anticipated by the end of Year 3 to include geo-referencing to facilitate mapping of “additional elements”. It is anticipated that discussion/ writing/ redesign will be in 2006.

**ATTACHMENT I**

**BMP ID 3E – Outfall Surveys:** Outfalls have been examined for dry weather discharges during the initial Outfall Mapping (BMP 3A) that occurred during dry weather conditions during between July and October each year. January – May surveys still need to be completed for each basin. A vendor will be hired within Year 3 to survey outfalls.

**BMP ID 3F – Outfall Sampling:** A vendor will be hired within Year 3 to sample outfalls discharging under dry weather conditions.

**B. APPROPRIATENESS AND EFFECTIVENESS:**

**Permit ID# IV.B.3.b.4 – Ordinance:** The General Permit requires that to the extent allowable under State law, the MS4 must prohibit and enforce, through an ordinance or other regulatory mechanism available to the operator, un-authorized non-storm water discharges into the system. However, RIDOT does not have the authority to establish such an ordinance to prohibit and enforce illicit discharges to the MS4. RIDOT will develop a standard reporting system for relaying information on illicit discharges to RIDEM if enforcement is required. This will be part of the IDDE plan developed in Year 3.



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

## **I. MEASURABLE GOALS:**

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			ON-YES	NO	TRK		YES	NO	YES	NO
IV.B.4.b.1	4A-4E	Development and introduction of a mechanism to require erosion and sediment control, control of other wastes, and sanctions to ensure compliance (1 <sup>st</sup> year)	X			Current RIDOT Standard Specifications require Erosion and Sediment Controls and compliance.		X		X
		Mechanism adoption (2 <sup>nd</sup> year)	X			Revisions proposed for Year 3.	TBD			X
IV.B.4.b.2		Procedures for issuing permits and implementing policies and procedures for all construction projects disturbing ≥1 acre (2 <sup>nd</sup> year)	NA	NA	NA	Not applicable – RIDOT does not have permitting authority.	NA	NA		X
		Implementation of procedures (end of 2 <sup>nd</sup> year)								
IV.B.4.b.4		Implementation of program to review 100% of plans and SWPPPs for construction projects 1-5 acres not reviewed by other State Programs (2 <sup>nd</sup> year)	X			Since March 2004, it has been standard practice to review 100% of all plans and SWPPPs; however, it is not a formalized Standard Operating Procedure, and not well documented.	X			X
IV.B.4.b.5		Procedures for coordination of site plan and SWPPP review when relying on State program reviews of construction activity (2 <sup>nd</sup> year)	X			Since March 2004, it has been standard practice to meet with coordinating agencies re: construction plans and SWPPPs; however, it is not a formalized Standard Operating Procedure, and not well documented.	X			X
		Implementation of procedures (end of 2 <sup>nd</sup> year)								
IV.B.4.b.7	4B	Inspect 100% of all construction projects within the regulated area that discharge or have the potential to discharge to the MS4 (2 <sup>nd</sup> year)	X			Continuation of an existing inspection program on a project specific basis. RIDOT will perform weekly or monthly inspection of construction projects, as appropriate.	X			X
IV.B.4.b.8		Procedures for referral to the State of non-compliant construction site operators (2 <sup>nd</sup> year)	NA	NA	NA	RIDOT has authority over contractors via Standard Specifications	NA	NA	NA	NA
B. ADDITIONAL MEASURABLE GOALS:										
	4A	Proposed Program: Review blue book and draft revision to make specification tighter. Measurable Goal: Outline for a revised specification available for use in Year 3.			X	Proposed for Year 3.	TBD			X



	4B	Proposed Program: Modify standard specification to require inspection a minimum of once per week, and during (or immediately after) each storm, or once per week during periods of dry weather or minor storms. <b>Measurable Goal: Revised specification available for use in Year 3.</b>			X	Proposed for Year 3.	TBD			X
	4C	Proposed Program: Modify standard specification to require contractor to keep surplus erosion and sediment control materials on-site. <b>Measurable Goal: Revised specification available for use in Year 3.</b>			X	Proposed for Year 3.	TBD			X
	4D	Proposed Program: Mandate BMP inspection schedule to be once per week by Wednesday. To be completed by the contractor per the specification. <b>Measurable Goal: Revised specification available for use in Year 3.</b>			X	Proposed for Year 3.	TBD			X
	4E	Proposed Program: Revise WBS/DPM to include project specific inspection checklist to be developed during design phase, identifying BMPs by station and sensitive areas to be inspected. Checklist to be used by designated RIDOT or contractor personnel. <b>Measurable Goal: Revised WBS available for use in Year 3.</b>			X	Proposed for Year 3.	TBD			X
	4F	Existing Program: Inspection program on project specific basis.	X			On-going program. The Natural Resources Unit inspects major projects; working towards inspecting every project on a proactive basis.	X			X
	4G	Existing Program: Erosion and sediment control inspection techniques provided at RIDOT winter training.	X			On-going program. NHI course on Erosion and Sediment Control offered in March 2006 for Winter Training 2005/2006.	X			X
	4H	Existing Program: Standard specification requires contractor to control waste and dispose of properly.	X			On-going program	X			X

4I	Proposed Program: Modify RIDOT Policy to require preparation of SWPPPs for all projects to be included in Construction Documents (P,S&E) prepared by consultant during design phase. Contractor to sign NOI form and share liability. <b>Measurable Goal: Revised WBS available for use in first quarter of Year 3.</b>			X	Currently require preparation of SWPPPs for all construction projects > 1 acre; not formalized in DPM, or Current Spec	TBD			X
4J	Proposed Program: Develop a contract enforcement mechanism for RIDOT to enforce BMPs. <b>Measurable Goal: Outline of enforcement procedure available in Year 3.</b>			X	Proposed for Year 3.	TBD			X
4K	Proposed Program: Develop or contract for waste control training for RIDOT Resident Engineers and Inspectors. <b>Measurable Goal: Training curriculum available for use in first quarter of Year 3.</b>			X	Proposed for Year 3.	TBD			X
4L	Implement Training Program. <b>Measurable Goal: Training curriculum in use in first quarter of Year 3.</b>			X	Proposed for Year 3.	TBD			
4M	Proposed Program: Meetings with contractor prior to construction commencement to review environmental constraints and conditions. <b>Measurable Goal: Procedure developed for conducting pre-construction environmental meetings in Year 2.</b>	X			Environmental personnel attend pre-construction meetings. Procedure in place, but not standardized or electronically documented.	X			X
4N	Proposed Program: pilot program kick-off meetings on three projects. <b>Measurable Goal: Pre-construction environmental meetings held for three new projects during Year 3.</b>	X				X			X
4O	Proposed Program: conduct meetings at project kick-off for 10 projects. Projects would be selected based on applicability. <b>Measurable Goal: Pre-construction environmental meetings held for ten new projects during Years 3, 4 and 5.</b>	X				X			X

## II. OVERALL EVALUATION - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL:

### A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

Permit ID IV.B.4.b.1 – Current Specifications (Rhode Island DOT Standard Specifications for Road and Bridge Construction (i.e. ‘Blue Book’)) require erosion and sediment controls, proper disposal of waste, and inspections; however, they are not enforced. Revised specifications will require appropriate measures and will provide enforcement ‘teeth’ with repercussions. A revised specification is anticipated for use in Year 3. The Design Office and Office of Environmental and Intermodal Planning will be responsible for reviewing the blue book and drafting a revision to make the specification tighter. **ATTACHMENT H**

The Natural Resources Unit (of the Office of Environmental and Intermodal Planning) meets with contractors prior to construction commencement to review environmental constraints and permit conditions. RIDOT reviews all applications submitted to RIDEM, CRMC, ACOE and USCG. Coordination meetings are held quarterly, or more frequently as necessary, to discuss and resolve construction-related issues.

**BMP ID 4A - E:** The Design Office and the Office of Environmental and Intermodal Planning will review the blue book and draft revisions to make the specification tighter. Revisions include modifying the standard specification to:

- require the contractor to keep surplus erosion and sediment control materials on-site
- require inspection a minimum of once per week during or immediately after each storm or once per week during periods of dry weather or minor storms
- require weekly BMP inspections
- include a project specific inspection checklist to be developed during design phase, identifying BMPs by station and sensitive areas to be inspected

A revised specification anticipated to be available for use in Year 3.

**BMP ID 4F:** The Office of Environmental and Intermodal Planning is responsible for the existing inspection program on a project specific basis. Inspections are currently performed on a complaint-driven basis. RIDOT will work towards a proactive inspection schedule with documentation.

**BMP ID 4G:** The Office of Environmental and Intermodal Planning is responsible for including erosion and sediment control inspection techniques at RIDOT winter training. This is accomplished through the use of National Highway Institute courses offered in cooperation with the URI Transportation Center.

**BMP ID 4H:** Existing Program: The standard specification requires the contractor to control waste and dispose of it properly. The Project Engineer will ensure that the construction contractor controls litter on the site.

**BMP ID 4I:** The Design Office and the Office of Environmental and Intermodal Planning will modify RIDOT Policy to require preparation of SWPPPs for all projects to be included in Construction Documents (P,S &E) prepared by the consultant during the design phase. The contractor will sign the NOI form and share liability. The revised WBS will be available for use in the first quarter of Year 3.

**BMP ID 4J:** RIDOT will develop a contract enforcement mechanism to enforce BMPs relative to inspection, waste control, etc. as described in the SWPPP. An outline of the enforcement procedure will be available in Year 3.

**BMP ID 4K, 4L:** The Construction Division will develop or contract for waste control training for the RIDOT Resident Engineers and Inspectors. The training curriculum will be available for use in the first quarter of Year 3. The Environmental and Intermodal Planning Department will implement this training program to the RIDOT resident engineers and inspectors with litter being the target pollutant source for this BMP.

**BMP ID 4M, 4N, 4O:** The Environmental and Intermodal Planning Department currently meets with contractors prior to construction commencement to review environmental constraints and permit conditions. A formal procedure will be developed for pre-construction environmental meetings in Year 3.

RIDOT routinely reviews all applications submitted to RIDEM, CRMC, ACOE and USCG. Coordination meetings are held quarterly, or more frequently as necessary, to discuss and resolve construction related issues.

**B. APPROPRIATENESS AND EFFECTIVENESS:**

All measures are deemed appropriate, but effectiveness cannot be determined until measure is fully implemented.



**MINIMUM CONTROL MEASURE #5:  
POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT  
(Part IV.B.5 General Permit)**

**I. MEASURABLE GOALS:**

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.5.b.2	5A	Description of how the program is consistent with the State of Rhode Island Storm Water Design and Installation Manual and will be tailored for the community/facility, minimize water quality impacts, and maintain pre-development runoff conditions (2 <sup>nd</sup> year)	X			Current RIDOT DPM requires that all new construction meet the State Water Quality Standards and redevelopment projects must incorporate retrofit actions to improve storm water quality to the maximum extent practicable.	X			X
IV.B.5.b.3		Procedures for pre-application meetings (2 <sup>nd</sup> year)	X			Pre-construction meetings are held for every new construction project. RIDOT requests meetings with regulatory authorities as appropriate on a project by project basis.	X			X
IV.B.5.b.4		Implementation of program to review 100% of plans for development projects one or more acres not reviewed by other State Programs (2 <sup>nd</sup> year)	X			Program in place.	X			X
IV.B.5.b.5		Description of how the program will coordinate with existing State programs requiring post-construction storm water management (2 <sup>nd</sup> year)	X			Program in place.	X			X
IV.B.5.b.6		Procedures for referral to the State of new discharges of storm water associated with industrial activity (2 <sup>nd</sup> year)	X			RIDOT has sought permits as necessary.	X			X
IV.B.5.b.9		Develop and introduce regulatory mechanism to address post-construction (1 <sup>st</sup> year)	NA	NA	NA	RIDOT does not have regulatory authority; Defaults to state regulatory programs.				
		Mechanism adoption (2 <sup>nd</sup> year)	NA	NA	NA					
IV.B.5.b.10		Procedures for post-construction inspections of BMPs and inspect 100% of all development ≥ 1 acre that discharge or have the potential to discharge to the MS4. (2 <sup>nd</sup> year)	X			Procedure in place. Will be implemented in Year 3 as part of asset management program.	TBD			X
		Implementation of procedures (end of 2 <sup>nd</sup> year)								

IV.B.5.b.12		Development of a program to identify existing storm water structural BMPs discharging to the MS4 with a goal of ensuring long-term O&M of the structural BMP's. (2 <sup>nd</sup> year)	X			Informal program in place – ongoing process.	TBD			X
<b>B. ADDITIONAL MEASURABLE GOALS:</b>										
	5A	Existing Program: Current RIDOT DPM requires that all new construction meet the State Water Quality Standards and redevelopment projects must incorporate retrofit actions to improve storm water quality to the maximum extent practicable.	X			On-going program.	X			X
	5B	Existing Program: Current maintenance practices include snow removal, street sweeping and catch basin cleaning.	X			A set of Standard Operating Procedures are anticipated to be drawn up 2006/2007.	X			X
	5C	Existing Program: Location of Drainage Structures			X	Will be address in measure 3C.	TBD			X
	5D	Proposed Program: Final Acceptance of Construction work by Maintenance Personnel. Audit to ensure project completeness. <b>Measurable Goal: Maintenance division personnel present at final acceptance beginning third quarter of Year 3.</b>			X	Proposed for Year 3.	TBD			X
	5E	Proposed Program: Expanded As-Built Plan requirement. As-built plans would be prepared based on Resident Engineer's project diary, and made available to RIDOT staff, including maintenance through current plan file management system available on internal network.			X	Proposed for Year 3.	TBD			X
	i	<b>Measurable Goal: Develop an as-built plan policy during Year 3.</b>			X	Proposed for Year 3.	TBD			X

	ii	Measurable Goal: As feasible, implement new policy as-built plan policy during Year 4.			X	Proposed for Year 4.	TBD			X
	iii	Measurable Goal: Evaluate effectiveness of policy during Year 5. Revise or abandon program as appropriate.			X	Proposed for Year 5.	TBD			X

## II. OVERALL EVALUATION - POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT:

### A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

Most measures are in place, however, the procedures and results are not documented. Data collection and tracking are not standardized, but it is anticipated that an Asset Management program (that will be implemented in 2006) will address this issue. Standard procedures will be developed in Year 3.

**PERMIT ID: IV.B.5.b.2; BMP ID 5A:** The Design Office is responsible for the continuation of the RIDOT DPM re: State water quality standards. Current RIDOT DPM requires that all new construction meet the State water quality standards for pollutant removal from storm water and redevelopment projects must incorporate retrofit actions to improve storm water quality to the maximum extent practicable. Management of post-construction runoff is incorporated into project designs. The Design Office and the Office of Environmental and Intermodal Planning will coordinate to revise the DPM to make necessary changes for enforcement.

**PERMIT ID: IV.B.5.b.3, PERMIT ID: IV.B.5.b.4, PERMIT ID: IV.B.5.b.5** - RIDOT's Natural Resource Unit reviews all construction design plans that require Permits from regulatory agencies (RIDEM, CRMC, Coast Guard, etc). The Natural Resource Unit also reviews plans for projects with >1-acre disturbance that do not require Permits from a Regulatory Agency. Pre-application meetings are requested on a project-by-project basis. RIDOT also coordinates a Quarterly Interagency Meeting with RIDEM, CRMC, Coast Guard, etc. to review projects.

**PERMIT ID: IV.B.5.b.6** – RIDOT Maintenance Facilities had Stormwater Pollution Prevention Plans and Spill Prevention Plans prepared for each Facility in 2004. The maintenance facilities and salt storage facilities are the only facilities that RIDOT would have to manage stormwater discharges that could fall under Industrial Discharge. RIDOT construction projects with industrial discharges are limited to Maintenance Facilities and Salt Storage Facilities. Facility SWPPPs and SPPs are submitted with this annual report to DEM. Future Facilities will have a SWPPP created and submitted to DEM.

**PERMIT ID: IV.B.5.b.9** – RIDOT does not have regulatory authority, and therefore cannot create an ordinance to regulate post-construction runoff. However, current RIDOT Standard Specifications require measures to address post-construction runoff, and every contract must meet these Standards.

**PERMIT ID: IV.B.5.b.10, BMP ID 5D:** The Finals Section notifies the relevant Offices (the Office of Environmental and Intermodal Planning, the Design Section, and the Maintenance Division) and representative personnel are present at final inspection of construction work. This facilitates understanding of drainage systems, and improves knowledge of system components.

**PERMIT ID: IV.B.5.b.12, BMP ID 5C:** The Office of Environmental and Intermodal Planning, the MIS Office, and the Design Office are responsible for obtaining the location of drainage structures. This will be tasked with the new Asset Management Software that is anticipated to be implemented in Year 3. New drainage structures will be GPSed as projects are completed. Drainage ponds are scheduled to be inventoried by Design through field data collection using GPS in Year 3. A data dictionary has been set up to collect these features as polygons and generate a point feature for generalization. Inventory of Stormwater Treatment Units is completed. The STU GIS database was developed through field data collection by Design

**with support by GIS. As new STU are installed Design plans to locate them with GPS.**

**BMP ID 5B:** The Maintenance Division is responsible for snow removal, street sweeping and catch basin cleaning. Sweeping and catch basin cleaning work is completed on an as needed/ as possible basis. Completion of work is dependent on available manpower. A set of Standard Operating Procedures is anticipated to be drawn up 2006/2007. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 5E:** The Construction Section will implement an as-built plan requirement. As-built plans would be prepared based on Resident Engineer's project diary and made available to RIDOT staff, including maintenance through a current plan file management system available on the internal network. As-built plans depict the project as actually constructed. This will facilitate location and mapping of "additional elements" and maintenance. The as-built plan policy will be developed in Year 3 and implemented during Year 4. The Chief Engineer will be responsible for evaluating the effectiveness of the as-built plan policy and will revise or abandon it as deemed necessary. The effectiveness of the policy will be evaluated during Year 5 and the program will be revised or abandoned as appropriate.

#### **B. APPROPRIATENESS AND EFFECTIVENESS:**

**PERMIT ID: IV.B.5.b.9** – RIDOT does not have regulatory authority, and therefore cannot create an ordinance to regulate post-construction runoff. However, current RIDOT Standard Specifications require measures to address post-construction runoff, and every contract must meet these Standards. This measure is not appropriate for RIDOT.





# **MINIMUM CONTROL MEASURE #6:** **POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS (Part IV.B.6 General Permit)**

## **I. MEASURABLE GOALS:**

A. REQUIRED MEASURABLE GOALS:										
Permit ID#	BMP ID	List Measurable Goal	Was goal met?			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.6.b.1.i	6R	Develop procedures for identifying, locating and describing all structural BMPs owned and operated by the small MS4 operator (1 <sup>st</sup> year)	X			Program in place for outfalls and storm water treatment units. Proposed Asset Management Program will identify procedure.	X			X
		Implementation of program (2 <sup>nd</sup> year)	X				TBD			X
IV.B.6.b.1.ii	6R	Develop procedures for inspecting and cleaning BMPs (1 <sup>st</sup> year)	X			Informal procedures in place.		X		X
		Implementation of program (2 <sup>nd</sup> year)		X		To be completed in Year 3.		X		X
IV.B.6.b.1.iii	6L	Develop procedures for an annual catch basin inspection and cleaning program (1st year)	X			Program in place - informal procedure. Cleaning prioritized based on schedule and complaints received. Opportunistic cleaning performed as part of every roadway construction on reconstruction (1R, 2R, 3R) projects.	X			X
		Implementation of program (3 <sup>rd</sup> year)	X			Not required Year 2.	X			X
IV.B.6.b.1.iv	6S	Develop procedures to minimize erosion of road side shoulders and ditches (1st year)	X			Problems addressed through construction projects. Working with URI turf science department to develop a salt tolerant, low irrigation requiring turf for road shoulders.	X			X
		Implementation of program (2 <sup>nd</sup> year)		X		Program still under evaluation.	TBD			X
IV.B.6.b.1.v		Develop procedures to identify and report annually the known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation (1 <sup>st</sup> year)	X			Documented during outfall mapping and inspection.	X			X
		Implementation of program (2 <sup>nd</sup> year)	X			Documented during outfall mapping, surveying, and sampling.	X			X
IV.B.6.b.1.vi	6T	Develop procedures for a road sweeping program that includes sweeping all streets and roads within the regulated area annually ( 1 <sup>st</sup> year)	X			Sweeping does occur, need to improve on documentation.	X			X
		Implementing the program to occur annually (3 <sup>rd</sup> year)	X				X			X
IV.B.6.b.1.vii		Develop procedures for describing maintenance activities, schedules and long-term inspection procedures for controls to reduce floatables (1 <sup>st</sup> year)		X		Procedure evaluated but determined to be infeasible.	NA	NA		X
		Implementation of program (2 <sup>nd</sup> year)		X			NA	NA		X

IV.B.6.b.1. viii		Develop procedures for the proper disposal of removed waste from the MS4 (1 <sup>st</sup> year)	X			Program in place. Procedure not formalized in writing.	X			X
		Implementation of program (2 <sup>nd</sup> year)	X			Program in place. Procedure not formalized in writing.	X			X
IV.B.6.b.2		Develop strategies for the reporting and description of all operations under legal control that may have the potential to introduce pollutants into storm water runoff (1 <sup>st</sup> year)	X			Construction SWPPPs. Maintenance facility SWPPPs, SPCC.	X			X
		List and description must have been submitted in March 2004		X		<b>Submitted with this 2005 Annual Report</b>	X			X
IV.B.6.b.4		Develop procedures for the development of a BMP, O&M, and good housekeeping program for non-industrial facilities with the potential to introduce pollutants to their storm water discharges with the goal of minimizing or eliminating pollutant runoff (1 <sup>st</sup> year)	X			Facilities have SWPPPs and SPCCs.	X			X
		All recommended BMPs to be implemented by 4 <sup>th</sup> year			X	Inspections and training to be performed.	TBD			X
IV.B.6.b.7		Develop procedures for assessment of flow management projects (1 <sup>st</sup> year)								X
		Implementation of program (2 <sup>nd</sup> year)								X
IV.B.6.b.8		Develop procedures for implementing proper erosion and sediment and water quality control for construction projects (1 <sup>st</sup> year)	X			Construction Projects are designed/reviewed utilizing <i>RI Stormwater Design &amp; Installation Standards Manual</i> and the <i>RI Soil Erosion Sediment Control Handbook</i> .	X			X
		Implementation of program (2 <sup>nd</sup> year)	X			Ongoing program	X			X
<b>B. ADDITIONAL MEASURABLE GOALS:</b>										
	6A	Existing Program: Signage in Low Salt Areas	X			On-going program.	X			
	6B	Existing Program: Use of straight salt for de-icing on interstates and heavily traveled roadways. Reduces sedimentation and clean up requirements of sand applications.	X			On-going program.	X			
		Proposed Program: Investigate developing an Anti-Icing Management Program <b>Measurable Goal: Equipment investigated and evaluated by end of Year 5.</b>	X			Limited Anti-icing program in place.	X			
	6C	Existing Program: Winter training for RIDOT Maintenance Personnel.	X			On-going program. Design and permitting phase.	X			

	6D	Proposed Program: Develop storm water training program to be included in current training sessions. <b>Measurable Goal: Storm Water training curriculum complete by end of Year 2.</b>		X		URI Agreement will provide storm water training beginning 1 <sup>st</sup> quarter Year 4 - 5. NHI Courses available in Year 3 – 5.	TBD			
	6E	Proposed Program: Implement storm water training. <b>Measurable Goal: Storm Water training curriculum included in winter training during the first quarter of each year beginning Year 3.</b>			X	Storm water training program to be developed.	TBD			
	6F	Existing Program: All Water Quality Units statewide inspected September 2002. <b>Measurable Goal: Inspect Annually</b>		X		Water quality units are not inspected annually or cleaned when necessary due to lack of equipment and manpower.	TBD			
	6G	Proposed Program: Rent equipment to clean Water Quality units and evaluate need to purchase equipment or subcontract the cleaning to a contractor. <b>Measurable Goal: Cleaning equipment rented, used and evaluated. Decision made on future cleaning practices by end of second quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6H	Proposed Program: Implement Water Quality Unit cleaning program <b>Measurable Goal: Water Quality unit cleaning program in use beginning in third quarter of Year 3. All vortechs units to be inspected once annually and cleaned in accordance with manufacturer's specifications.</b>			X	Not required in Year 2.	TBD			
	6I	Proposed Program: Develop a Standard Operating Procedure for maintenance of swales. <b>Measurable Goal: Develop standard operating procedure by end of first quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6J	Implement Standard Operating Procedure. <b>Measurable Goal: Standard Operating Procedure in use beginning in third quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6K	Existing Program: Northwest division all CBs cleaned within last three years. Newport division all CBs within last 2 years. <b>Measurable Goal: Maintain cleaning frequency.</b>	X			On-going program.	X			
	6L	Proposed Program: 600 catch basins will be cleaned annually statewide as manpower is available. Priority will be established based on results of cleaning records. <b>Measurable Goal: 600 catch basins cleaned each year of Years 2 – 5.</b>	X			Program in place – informal procedure. Cleaning prioritized based on schedule and complaints received.	X			

	6M	Proposed Program: Inventory existing detention basins. <b>Measurable Goal: Database of detention basin locations by end of second quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6N	Proposed Program: Develop inspection, maintenance, and mowing protocol for Detention Basins. <b>Measurable Goal: Detention basin inspection and maintenance protocol available for use by second quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6O	Implement Protocol. <b>Measurable Goal: Begin inspecting and maintaining detention basins. Ten (10) basins to be inspected annually beginning in first quarter of Year 4 and cleaned as necessary.</b>			X	Not required in Year 2.	TBD			
	6P	Proposed Program: Develop Standard Operating Procedure for maintaining drainage structures in wetlands. <b>Measurable Goal: Standard operating procedure approved by RIDOT by end of Year 3.</b>			X	Not required in Year 2.	TBD			
	6Q	Proposed Program: Negotiate Memorandum of Agreement with RIDEM for maintaining drainage structures in wetlands. <b>Measurable Goal: Begin negotiating MOA with RIDEM during first quarter of Year 3.</b>			X	Not required in Year 2.	TBD			
	6Ri	Proposed Program: Develop method for tracking inspections of drainages structures. <b>Measurable Goal: Evaluate current record keeping practices during Year 2.</b>	X			Program in place for inspection of outfalls and storm water treatment units. Informal procedures in place for inspecting and cleaning BMPs. No record keeping practices.	X			
	ii	<b>Measurable Goal: Conduct needs assessment regarding asset management software during Year 3.</b>	X			Not required in Year 2.	TBD			
	iii	<b>Measurable Goal: Evaluate needs for computer hardware to support record keeping and inspection effort. Requisition new equipment during Year 3.</b>			X	Not required in Year 2.	TBD			
	iv	<b>Measurable Goal: Implement new record keeping programs including software and hardware during Year 4.</b>			X	Not required in Year 2.	TBD			
	6S	Proposed Program: Develop a procedure for minimizing erosion of roadway shoulders. <b>Measurable Goal: Develop SOP to identify, investigate problem and incorporate repair into construction contracts.</b>	X			Problems addressed through construction projects. Working with URI turf science department to develop a salt tolerant, low irrigation requiring turf for road shoulders.	X			

6T	Existing Program: Sweeping completed statewide on annual basis. Work order program currently in use allows for response to complaints. <b>Measurable Goal: Track complaints and prioritize sweeping based on need.</b>	X			Program in place.	X			
6U	Proposed Program: Investigate feasibility of more frequent sweeping. <b>Measurable Goal: Feasibility assessment complete in Year 3.</b>			X	Not required in Year 2.	X			

## II. OVERALL EVALUATION - POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS:

### A.GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

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

Currently the RIDOT Maintenance Division keeps hard-copy records regarding work order requests for maintenance of DOT structures (road sweeping, catch basins, etc.) . The current record keeping practice is effective for dealing with complaints and work orders, however it is not useful for data collection and analysis. The investigation and development of an Asset Management Program began in Year 2. The Maintenance Division, along with the Contracts and Specifications Section, is currently developing a Scope of Work to advertise for an Asset Management consultant to assist in the development of a comprehensive inventory of RIDOTs assets and necessary tools to maintain the database. A consultant is anticipated to be selected by the end of Year 3 and the contract to be awarded in Year 4. This program will enable RIDOT to better maintain and track this data. Until the Software is installed, RIDOT may only be capable of providing a limited amount of supporting data for many of the Good Housekeeping measures (inspections, cleaning activities, complaints).

**BMP ID 6A:** The Maintenance Division is responsible for maintaining the signage in Low Salt Areas.

**BMP ID 6B:** The use of straight salt for de-icing on interstates and heavily traveled roadways reduces sedimentation and cleanup requirements of sand applications. An ANTI-ICING program (incorrectly listed as DE-icing in SWMPP) is 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.

**BMP ID 6C, 6D, 6E:** The existing winter training program for the RIDOT personnel includes erosion control and source reduction. The University of Rhode Island Cooperative Extension will develop a stormwater training program that RIDOT personnel will attend (available Year 4). The National Highway Institute (NHI) offers courses in Storm Water, and RIDOT coordinates these offerings with the assistance of URI's Transportation Center. These courses will be offered in Years 3 - 5.

**BMP ID 6F, 6G, 6H:** The Maintenance Division is responsible for maintaining water quality units. All water quality units statewide were inspected in September 2002. Six of 24 require cleaning per manufacturer's specifications. RIDOT does not own the equipment capable of cleaning these structures. RIDOT will either rent the equipment for cleaning water quality units or subcontract the cleaning. Water quality units should be inspected monthly for the first year after installation in order to develop a permanent inspection schedule and cleaned as necessary. A protocol will be developed and inspections and cleanings tracked. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 6I, 6J:** The Maintenance Division and Office of Environmental and Intermodal Planning are responsible for developing standard operating procedures for swale maintenance. Roadside swales are difficult to clean due to rip rap, etc., and often lead to sediment plumes at the toe of slope that are difficult to access with equipment. A Standard Operating Procedure (SOP) will be developed for maintenance of swales while minimizing disturbance to sensitive areas. The SOP will be developed in Year 3. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 6K, 6L:** The Maintenance Division is responsible for cleaning catch basins. Each Maintenance District has different schedules, abilities, and protocols for cleaning catch basins. Catch basins are primarily cleaned through a complaint-driven process and opportunistic maintenance/construction projects. In the northwest division, all catch basins have been cleaned within the last three years. All catch basins in the Newport Division have been cleaned within the last two years. The Newport and the Northwest divisions will continue with their cleaning schedules. Initially, a goal of 600 catch basins cleaned annually will be established state-wide, and completed as man power is available. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 6M, 6N, 6O:** The Maintenance Division, MIS, and Office of Environmental and Intermodal Planning are responsible for inventorying existing detention basins. This will be completed as part of the Asset Management Software implementation. RIDOT will develop inspection, maintenance and mowing protocol for ensuring proper function and maintenance of detention basins. The protocol will be available for use by the second quarter of Year 3. A goal of ten basins inspected annually beginning in the first quarter of Year 4 and cleaned as necessary will be established. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 6P, 6Q:** The Office of Environmental and Intermodal Planning will develop an SOP for maintaining drainage structures in wetlands. Frequently, drainage outfalls are located at or in wetlands, especially in the case of the older structures. Currently, the RIDOT does not maintain these structures because of concerns about potential impacts to wetlands. The RIDOT will develop a standard operating procedure for maintaining drainage structures in wetlands and negotiate a memorandum of agreement with RIDEM. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**BMP ID 6R:** Currently, the Maintenance Division does not have sufficient software resources to efficiently maintain cleaning and inspection records or model data to identify problem areas. A consultant will be hired under Minimum Measure 3Ai (Mapping Outfalls and Creation of Database) will conduct a needs assessment regarding asset management software during Year 3. Requisition of new computer hardware resources will occur during Year 3. The Asset Management software is on track to be purchased in Year 3 and implemented in late Year 3/ Year 4.

**BMP ID 6S:** RIDOT is working with the University of Rhode Island to develop a slope stabilizing, salt tolerant grass mix. The study with URI on the Salt Tolerant Grass Mixes is entitled Evaluation of Native Grasses for Highway Slope Stabilization and Salt Tolerance. It is a 2-year study and will be conducted with Dr. Rebecca Brown from URI. It will start in Spring 2006 and the final results will be published in Oct of 2008. 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. URI will start taking soil tests in Spring 2006. This project is funded with research monies from FHWA.

The Office of Environmental and Intermodal Planning is working on specifications which can be used in our construction contracts for the use of composted sewage sludge (Class A Biosolids) as a soil amendment. It will be used only on the Interstate or Limited Access Highway (i.e. Rte 10). After the specs are written, there are multiple layers within RIDOT and the construction industry that must review and approve it before it becomes a Standard Specification. Anticipated to occur in Year 3/Year 4.

**BMP ID 6T, 6U:** The Maintenance Division is responsible for the sweeping of State maintained roadways on an annual basis. 100% of roadways systematically swept 2004, 2005; secondary sweeping (and above) are based upon complaints and general need. The work order program currently in use allows for response to complaints. Currently, RIDOT has insufficient resources to conduct roadway sweeping more than once per year. RIDOT will conduct a feasibility assessment to evaluate whether additional equipment or manpower can be allocated for more frequent roadway sweeping. RIDOT will also examine prioritizing secondary sweeping based on TMDL areas. The feasibility assessment will be completed in Year 3. Data collection will be available with the implementation of the Asset Management Software in Year 4.

**B. APPROPRIATENESS AND EFFECTIVENESS:**

These goals are appropriate in that they will provide for pollution prevention and good house keeping.

Existing programs appear to be effective in light of resources presently available. Record keeping practices need to be improved which will be incorporated as part of the Asset Management Program. This is anticipated to improve effectiveness.



### PART III: ADDITIONAL ANNUAL REPORT REQUIREMENTS

#### SECTION I. Please provide an assessment of the progress towards meeting the requirements for the control of storm water identified in an approved TMDL (Part IV.G.2.d).

The **storm water retrofit program** utilized a stakeholder group to prioritize the Storm Drain Retrofit Demonstration Program outfall selection process. This stakeholder group included the Rhode Island Department of Environmental Management, Federal Environmental Protection Agency, Save the Bay, and community representatives from Cranston, Warwick, and West Warwick, as well as representatives from the Pawtuxet River Authority. It was mutually agreed that RIDOT would proceed with the design and construction of five outfalls on the Pawtuxet River as a first priority. A Design Study Report for the remaining fifteen outfalls from the original University of Rhode Island study was prepared. During FY2003, the Department procured additional consultant services through an RFP process. Crossman Engineering was the selected consulting firm and design efforts on additional storm water projects began in FY2004. As of February 2006, ten (10) retrofits have been completed, four (4) are in construction, and three (3) projects will go out to bid in Spring 2006. RIDOT will continue to advance storm water abatement components that are prioritized with RIDEM. Future elements for incorporation into RIDOT's program will include recommendations from federally approved TMDL studies that are prioritized with RIDEM.

Additionally, each construction project is designed and reviewed utilizing the *RI Stormwater Design & Installation Standards Manual* and the *RI Soil Erosion Sediment Control Handbook*. Each project incorporates stormwater BMPs to the maximum extent practicable. TMDLs are consulted during the design of new projects to determine if conditions at any priority outfalls may be improved during project construction.

In Year 3, DOT anticipates working with DEM to develop prioritized TMDL areas to be used in the Design Division, and to be offered to Municipalities.

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

Date of Public Notice: <b>May 3, 2006 – June 2, 2006</b>	How public was notified: <b>Providence Journal Print Ad; RIDOT Website; MS4 Coordinators contacted via email</b> <b><u>ATTACHMENT K</u></b>
Was public meeting held? YES <input type="radio"/> <b>NO</b> <input checked="" type="radio"/>	
Date:	Where:
Summary of public comments received: <b>No public comments received.</b>	
Planned responses or changes to the program: <b>N/A</b>	



**SECTION 3. 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)**

All construction projects incorporate stormwater BMPs to maximum extent practicable  
**Enhancement Projects (See Attachment D)**  
**Stormwater Retrofit Program will continue to include Greenwich Bay (See Attachment E)**

**SECTION 4. Interconnections (Part IV.G.2.k and IV.G.2.l)**

Interconnection:	Date Found:	Location:	Connectee:	Originating Source:	Planned and Coordinated Efforts and Activities with Connectee:
		None inventoried: TBD Year 3			

**SECTION 5. Illicit Discharge Inspections to Date (Part IV.G.2.m)**

Total Illicit Discharges Identified: 0	# of Complaints Received: 1
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
Summary of Enforcement Actions:  <b>Complaint is still under investigation.</b>	
Extent to which the MS4 system has been mapped:  <b>RIDOT System being mapped by sub-basin. <u>Attachment G</u></b>	

**SECTION 6. Plan and SWPPP Reviews**

# of Construction Reviews completed:	# of Post-Construction Reviews completed:
Summary of Reviews and Findings:  <b>For all construction projects requiring SWPPPs – all SWPPPs reviewed by the Office of Environmental and Intermodal Planning; Data available starting Year 3.</b>	Summary of Reviews and Finding:  <b>‘As Built Plans’ anticipated to be reviewed in Year 4 (see BMP ID 5E)</b>

**SECTION 7. Erosion and Sediment Control Inspections (Part IV.G.2.n)**

# of Site Inspections:	# of Complaints Received:
# of Violations Issued:	# of Unresolved Violations Referred to RIDEM:
Summary of Enforcement Actions:	
<b>For RIDOT construction projects where a SWPPP is required, weekly erosion and sediment control monitoring is required. RIDOT hires consultants to do the inspections, and provide Monthly monitoring reports. Data available Year 3.</b>	

**SECTION 8. Post Construction Inspections: Proper Installation of Structural BMPs (Part IV.G.2.o)**

# of Site Inspections:	# of Complaints Received:
# of Violations Issued:	# of Unresolved Violations Referred to RIDEM:
Summary of Enforcement Actions:	
<b>All finalized RIDOT construction projects have a final walk-through with representative personnel from Environmental &amp; Intermodal Planning, Maintenance, Design, etc. Data available in Year 3.</b>	

**SECTION 9. Post Construction Inspections: Proper Operation and Maintenance of Structural BMPs (Part IV.G.2.p)**

# of Site Inspections:	# of Complaints Received:
# of Violations Issued:	# of Unresolved Violations Referred to RIDEM:
Summary of Enforcement Actions:	
<b>All finalized RIDOT construction projects have a final walk-through with representative personnel from Environmental &amp; Intermodal Planning, Maintenance, Design, etc. Data available in Year 3.</b>	

**SECTION 10. Structural BMPs (Part IV.B.6.b.1.i) NEED INFO FROM RIDOT**

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

Stormwater Treatment Units: See [Attachment H](#)

Other BMPs (detention ponds, swales, etc.) will be mapped for the Asset Management Software in Year 4/ Year 5.

**SECTION 11. Discharges Causing Scouring or Excessive Sedimentation (Part IV.B.6.b.1.v) NEED INFO FROM RIDOT**

Outfall ID:	Location:	Description of Problem:	Description of Remediation Taken:	Receiving Water Body Name/Description:
		Scouring/Excessive Sedimentation documented with the Outfall mapping. See <a href="#">Attachment F</a> .		

**SECTION 12. 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).**

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# 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, must submit an Annual Report, outlined in Part IV.G of the permit. The Report must be submitted each year after permit issuance by March 10<sup>th</sup> to track progress of compliance. If you have questions regarding this Annual Report Form contact Margarita Chatterton of the Rhode Island Department of Environmental Management (RIDEM), Office of Water Resources, Permitting Section at (401) 222-4700 ext. 7605.

The Annual Report must be submitted to:

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

### **INSTRUCTIONS FOR COMPLETION:**

#### **GENERAL INFORMATION PAGE:**

**"RIPDES Permit #"**

Include your permit ID # to ensure proper tracking.

**"Reporting Period"**

Please check the appropriate annual reporting period.

**"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.

#### **PART 1- MEASURABLE GOALS:**

One page, front and back, is provided to report on the status and effectiveness of measurable goals which have been developed to aid 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. Please type or print in the appropriate areas only. If additional space is needed please submit attachments to the appropriate minimum control measure following the format provided.

The first section entitled "Required Measurable Goals" include mainly strategies, procedures, and programs

which **MUST** be developed/implemented by a specific year as mandated by the permit.

The second section entitled “Additional Measurable Goals” provides space to include your own MS4-specific measurable goals not prescribed in the permit (though noted in your Storm Water Management Program Plan), but are intended to aid in the implementation of strategies, procedures, and programs outlined in the permit to comply with each minimum measure.

*Example: Public Education and Outreach*

“Required Measurable Goals”- Sections IV.B.1.b.2 and IV.B.1.b.4 are considered “Required Measurable Goals” because strategies on how to inform the community on how to become involved in the storm water program and how operators will utilize partnerships, and strategies to list target pollutant sources **MUST** be developed within the first year. These are considered “Required Measurable Goals” because the development of such strategies has a deadline.

“Additional Measurable Goals”- Any further establishment of deadlines, percentages, etc. used to aid the implementation of strategies, procedures, or programs are considered “Additional Measurable Goals.” Examples may include: informing 70% of residents about proper fertilizer use; introduction of an ordinance to control pet waste by the end of the third year. These would classify as “Additional Measurable Goals” because they are not prescribed by the permit but are fulfilling overall minimum measure requirements.

*“Permit ID #”*

The Permit ID # is the part of the permit where you can find a listing or description of the required measurable goal.

*“BMP ID #”*

The BMP ID # refers to the number assigned to a specific requirement or BMP and reported to the Department in the Storm Water Management Program Plan.

*“List Measurable Goal”*

A brief description of the measurable goal with the year it must be completed by in parentheses.

*“Was Goal Met?”*

- Check YES if...the goal was accomplished in its entirety on or before schedule.
- Check NO if...the goal was not met in its entirety on schedule.
- Check ON TRACK if...you are currently working to complete the goal on schedule.

*“If not met...”*

Complete this section only if you have checked NO or ON TRACK in the previous section. If you have not met the measurable goal on time OR are on track with meeting the measurable goal on time, please provide a brief

description as to why the goal has not been met, the current status of actions needed to meet the goal, any current plans, and the date you foresee the goal to be completed by. Please keep this section brief. Additional space is available on the reverse side to expand.

*“Effective”*

To the best of your knowledge please note if the measurable goal has been effective.

*“TMDL”*

Please note if the completion of this measurable goal will satisfy a remedial requirement of an approved TMDL. Please see Addendum A for additional requirements.

**PART II- OVERALL EVALUATION:**

This section provides narrative space for a more descriptive explanation and evaluation of the actions taken to satisfy each of the minimum control measures. 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.

*“General Summary and Status of 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. Please note how successful those actions were on the overall minimum control 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 MS4 General Permit or your Storm Water Management Program Plan (SWMPP). Why or why not? Provide a progress report and discussion of activities that will be carried out during the next reporting cycle to satisfy the requirements of the minimum measures. Also include a discussion of any proposed changes to BMPs or measurable goals.

*“Appropriateness and Effectiveness ”*

Assess the appropriateness of the actions taken to meet the requirements of the minimum measure. In determining appropriateness you may want to consider, but not limited to, the local population, pollution sources, receiving water concerns, integration with local management procedures, and available resources.

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.

### **PART III- ADDITIONAL ANNUAL REPORT REQUIREMENTS**

#### **Section 1:**

Complete this section only if your MS4 is subject to an approved TMDL and you have checked the TMDL column in Part I of the Annual Report if any measurable goal satisfies requirements of an 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).

#### **Section 2:**

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 (Part IV.G.2.h and IV.G.2.i).

#### **Section 3:**

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.

#### **Section 4:**

List 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).

#### **Section 5:**

Provide the number of illicit discharges identified, complaints received, violations with a summary of enforcement actions, and unresolved violations that have been referred to RIDEM. Include a short narrative describing the extent to which your system has been mapped (Part IV.G.2.m).

#### **Section 6:**

Identify the number of construction and post-construction plan and SWPPP reviews completed and any further information. This includes, but not limited to a summary of the reviews, responsible parties, and types of projects reviewed.

#### **Section 7:**

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 those unresolved, referred to RIDEM.

#### **Section 8:**

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 those unresolved, referred to RIDEM.

#### **Section 9:**

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 those unresolved, referred to RIDEM.

#### **Section 10:**

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

#### **Section 11:**

Part IV.B.6.b.1.v of the 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.

#### **Section 12:**

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).