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RIPDES SMALL MS4 ANNUAL REPORT

GENERAL INFORMATION PAGE

RIPDES PERMIT # RIR100455

REPORTING PERIOD (check one):

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|---------------------------------|--------------------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> YEAR 1 | <input checked="" type="checkbox"/> YEAR 2 | <input type="checkbox"/> YEAR 3 | <input type="checkbox"/> YEAR 5 |
| March 04-Dec 04 | Jan 05-Dec 05 | Jan 06-Dec 06 | Jan 07-Dec 07 |
| | | | Jan 08-Dec 08 |

OPERATOR OF MS4

Name: UNIVERSITY OF RHODE ISLAND			
Mailing Address: SHERMAN BUILDING, 523 PLAINS AVENUE			
City: KINGSTON	State: RI	Zip: 02881	Phone: (401) 874-5488
Contact Person: JEROME SIDIO	Title: DIRECTOR, FACILITIES SERVICES		
Legal status (circle one):			
PRI - Private	PUB - Public	BPP - Public/Private	STA - <u>State</u>
FED - Federal			
Other (please specify):			

OWNER OF MS4 (if different from OPERATOR)

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

CERTIFICATION

<p>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.</p>	
Print Name	___ JEROME B. SIDIO _____
Print Title	___ DIRECTOR, FACILITIES SERVICES _____
Signature	_____ Date <u>3/03/06</u>



**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		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 st year)	X			Re-evaluating BMP as related to goal. See note on Cooperative Extension Program, below.		X		
IV.B.1.b.4		Strategies to list target pollutant sources the public education program is designed to address (1 st year)	X			Re-evaluating BMP as related to goal. See note on Cooperative Extension Program, below.		X		
B. ADDITIONAL MEASURABLE GOALS:										
	1A	Classroom Education on Storm Water – Develop Implementation Strategies (1 st Year)		X		Re-evaluating BMP. See note on Cooperative Extension Program, below.		X		
	1B	Flyer and Brochure Distribution – Develop Implementation Strategies (1 st Year)		X		Re-evaluating BMP. See note on Cooperative Extension Program, below.		X		
	1C	Using the Media – Develop Implementation Strategies (1 st Year)		X		Re-evaluating BMP. See note on Cooperative Extension Program, below.		X		

II. OVERALL EVALUATION:

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)

IV.B.1.b A number of activities were instituted by several different organizations within the University during 2005 to support Public Outreach efforts. The primary departments involved include the College of Environmental and Life Science (CELS), and within the College, the Cooperative Extension Office. Additionally, the Department of Safety and Risk Management, the Facilities Services Department, and the College of Engineering all have educational components.

Attached is a brief summary of accomplishments related to URI's stormwater management activities. Since we've had the pervious pavement fact sheets on the web, we've also responded to numerous phone calls and emails from consultants, town officials and interested citizens on this topic. Conservation commissions and others report using the information in public hearings on proposed development projects to support better site design and reduced impervious cover.

The URI Nonpoint Education for Municipal Officials (NEMO) is part of the National NEMO Network and provides outreach to municipal officials on controlling effects of changing land use on local water resources. The program focuses on use of GIS-based watershed assessment tools to provide local decision-makers with the knowledge and educational resources to identify local water quality problems and to adopt effective pollution controls within a watershed context.

Publications

McNally, C., L. Philo, and L. Joubert. 2005. Permeable Pavement: What' s It Doing on My Street? An introduction to permeable pavement alternatives. University of Rhode Island Cooperative Extension, NRS Dept. Kingston, RI. Contribution #5000

McNally, C., L. Philo, and L. Joubert. 2005. The University of Rhode Island' s Permeable Parking Lots: A Case Study of Alternative Pavement Materials. University of Rhode Island Cooperative Extension, NRS Dept. Kingston, RI. Contribution #5001

McNally, C., L.Philo, and T. Boving. 2005. Porous Pavement and Groundwater Quality Technical Bulletin. University of Rhode Island Cooperative Extension, NRS Dept. Kingston, RI. Contribution #5002

Presentations

Lorraine Joubert/ Lisa Philo	Source Water Protection Workshops with RI local officials and water suppliers.	Linking land use to water quality and addressing local actions/Dec. 16, Feb. 2, Feb. 16, Apr. 18, May 2, May 4, May 16, May 26/North Smithfield, Coventry, Charlestown, Cumberland, Portsmouth
Lisa Philo	<i>RI NEMO: A story of survival and success</i> , NEMO U4 (Annual Meeting of National NEMO)	Overview of Source Water Assessment Program/Apr. 4-7, 2005/Washington, D.C.
Lorraine Joubert	Drinking Water Protection Workshops	Display board, RI Land and Water Conservation Summit, March 2005. University of Rhode Island. Kingston, RI.
Lisa Philo	<i>Are Your Land Use Practices Protecting Your Town's Water Resources</i> , League of Cities and Towns Annual Meeting	Display board/Jan. 27, 2005/Warwick, RI
Lorraine Joubert	<i>The URI Porous Pavement Parking Lot</i>	CT Stormwater Quality Manual Training/Aug. 2, 2005/Haddam, CT

B. APPROPRIATENESS AND EFFECTIVENESS:

IV.B.1.b The program is currently in the initial stages of development, and concentrated on porous pavement for the first year. At the beginning of this year, the Cooperative Extension Program received a grant from RIDEM to develop a statewide approach to Education and outreach that will be made available to all small MS4s for use in the permit process.

The URI Cooperative Extension Office received a RIDEM grant to develop an Educational Training Program, for Storm Water Management, that will be taught through the NEMO outreach program. This new program will provide an effective and efficient means to develop an educational package that can be used by municipalities across the state.



**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		Strategies to identify the target audiences of the public involvement program and description of the groups engaged (1 st year)	X				X			
IV.B.2.b.2.ii		Strategies to describe types of public involvement activities in the program (1 st year)	X				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		The report was prepared late due to lack of manpower to compile the information. The report is currently on track to be completed by April 7, and public comments received by April 20.	X			

B. ADDITIONAL 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
	2A	Stream Cleanup and Monitoring Programs – Organize One Cleanup Event (1 st – 5 th Year)	X				X			
	2B	Stencil Storm Drains – Stencil 25% of URI' s Storm Drains (2 nd Year)		X		No stenciling took place in year two. The program will start in year 3.	X			

	2C	Stencil Storm Drains – Stencil 50% of URI' s Storm Drains (4 th Year)			X		X			
	2D	Stencil Storm Drains – Stencil 100% of URI' s Storm Drain (5 th Year)			X		X			
	2E	University Storm Water Committee – Establish the Committee, Hold Required Meetings (1 st Year)	X				X			
	2F	University Storm Water Committee – Hold Quarterly Meetings (2 nd – 5 th Year)			X	No meetings were held in year 2. The Committee started meeting regularly in year 3 and will meet quarterly.	X			
	2G	Pet Waste Collection – Design Signs for Common Areas (2 nd Year)	x				X			
	2H	Pet Waste Collection – Post Signs (3 rd Year)			X		x			

II. OVERALL EVALUATION:

PUBLIC INVOLVEMENT/PARTICIPATION cont' d

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)

IV.B.2.b.2.ii The Cooperative Extension Office provided significant opportunities for public involvement and outreach. Through a series of ongoing programs and new initiatives, and working with a number of partners at the local, state, and Regional level, the office provided a wealth of information throughout Rhode Island.

URI Nonpoint Education for Municipal Officials (NEMO) offers training in the science, management, and regulation of water resources for community leaders and volunteer board members. Our goal is to provide decision makers with the skills and resources to identify local water quality problems and to adopt effective pollution controls. A variety of educational programs are offered throughout the year, ranging from evening or one day workshops to intensive, small group trainings that are tailored to meet the participants' interests and needs. We focus on use of Geographic Information Systems in watershed assessment conducted in partnership with communities. Technical assistance in protecting local watersheds is available to communities on a case-by-case basis.

The University of Rhode Island Watershed Watch Program (URIWW) is a statewide volunteer monitoring program. It focuses on providing current information on the water quality of surface water resources throughout Rhode Island, including lakes, ponds, reservoirs, rivers, streams and the marine environment. The heart of the program consists of weekly measurements taken by numerous trained volunteer monitors. The program emphasizes watershed scale monitoring because the water quality of a given body of water is a reflection of the activities in the lands and waters that surround it and lie upstream. The program is intended to encourage communities and shoreline residents to understand the need to cooperatively manage and improve the water quality of all the water bodies within a watershed. In this way we can ensure that Rhode Island's bays, estuaries, and freshwater resources remain one of the state's great assets.

Goals

- * To promote active citizen participation in water quality protection.
- * To educate the public about water quality issues.
- * To obtain multi-year surface water quality information in order to ascertain current conditions and to detect trends.

MANAGE is a watershed risk-assessment tool that uses computer generated maps and other data to evaluate pollution risks of land use and landscape features. Designed as a decision support system, MANAGE generates site-specific information needed to support local management actions. As part of URI Cooperative Extension's educational and technical assistance to RI communities, MANAGE is applied by Cooperative Extension in partnership with municipal officials and other community groups.

The goal of Rhode Island's Source Water Assessment Program is to better protect drinking water supplies at their source by evaluating threats to water quality and making this information available to water suppliers, town officials, and landowners. This is part of a national initiative, established under the Safe Drinking Water Act and led by the US Environmental Protection Agency.

SAFEWATER - This project is a joint effort by three Rhode Island communities - New Shoreham, South Kingstown, and Charlestown, in partnership with URI Cooperative Extension Water Quality Program. The goal is to establish comprehensive local wastewater management programs in each community using a watershed approach with selective use of advanced treatment systems in high risk areas to protect critical groundwater supplies and sensitive coastal waters.

Pet Waste – The Narragansett Bay Campus developed and installed signs for pet waste management; these signs will also be used on the Kingston Campus.

B. APPROPRIATENESS AND EFFECTIVENESS:

The URI Cooperative Extension Office provides information and outreach to the local community on water quality management for municipal and state officials, and to the general public. The office received a RIDEM grant this year to develop an Educational Training Program for Storm Water Management that will be taught through the NEMO outreach program. This new program will provide an effective and efficient means to develop an educational package that can be used by municipalities across the state.



MINIMUM CONTROL MEASURE #3: ILLICIT 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?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.3.b.1		Development of an outfall map showing the location of all outfalls and names of receiving waters (3 rd year)			X	Contract in place to complete the map by the end of this calendar year.	X			
IV.B.3.b.2		Strategies for tagging outfall pipes if GIS maps are not being developed(1 st year)	X				X			
IV.B.3.b.4		Introduction of an ordinance to prohibit and enforce illicit discharges to the MS4 (1 st year)		X		URI is not a municipality and cannot issue ordinances. See Part II	X			
		Ordinance adoption (2 nd year)	X			(See Part II)	X			
IV.B.3.b.5. i		Strategies for locating priority areas (1 st year)	X				X			
IV.B.3.b.5. ii		Procedures for receipt and consideration of complaints (1 st year)	X				X			
IV.B.3.b.5. iii		Procedures for tracing the source of an illicit discharge (1 st year)	X				X			
IV.B.3.b.5. iv		Procedures for removing the source of the illicit discharge (1 st year)	X				X			
IV.B.3.b.5. v		Procedures for program evaluation and assessment (1 st year)		X		Further discussion will take place at the SWMPP Committee Meetings to address the program evaluation and assessment. This will be completed by the next report.				
IV.B.3.b.5. vi		Procedures for inspection of all catch basins and manholes for illicit connections and non-storm water discharges (1 st year)	X				X			
		Inspections taking place at least once (4 th year)			X	Subject to available funds	X			
IV.B.3.b.5. vii		Procedures for conducting a minimum of two dry weather surveys, one between Jan 1 st and April 30 th and one between July 1 st and Oct 31 st . (Sanitary sewers- bacteria sampling is only required once between July 1 st and Oct 31 st (1 st year)	X				X			
		Two dry weather surveys to be completed (4 th year)			X	Two samples scheduled for year three	X			
IV.B.3.b.6		Procedures for coordinating with physically interconnected MS4s, including state and federal owned or operated MS4s, when illicit discharges are detected or reported (1 st year)	X				X			
IV.B.3.b.7		Procedures for referral to RIDEM of non-storm water discharges not authorized by this permit or a pre-existing permit (1 st year)	X				X			

IV.B.3.b.9		Procedures for tracking and recording actions to detect/address illicit discharges (1 st year)	X					X			
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B. ADDITIONAL 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
	3A	Develop a Complete Storm Water System Map – Inspect and GPS Locate All Outfalls (3 rd Year)			X		X			
	3B	Develop a Complete Storm Water System Map – Update Map (4 th – 5 th Year)			X		X			
	3C	Develop a Complete Storm Water System Map – Inspect all Catch Basins and Manholes (4 th Year)			X		X			
	3D	Inspect and Sample URI Discharges – Inspect All University Discharges (3 rd Year)			X		X			
	3E	Inspect and Sample URI Discharges – Complete Dry – Weather Surveys (4 th Year)			X		X			
	3F	Illegal Dumping Education – Expand Upon Current Hazardous Waste Management Program (1 st – 5 th Year)		X		Re-evaluating BMP education. See note on Cooperative Extension Program, MCM #1		X		
	3G	Illicit Discharge Policy – The University Will Enforce Its Current Hazardous Waste Management Program (1 st – 5 th Years)	X				X			
	3H	Illicit Discharge Policy – The University Will Develop Procedures to Report and Document Policy Violations (1 st Year)	X				X			
	3I	Illicit Discharge Policy – Procedures Developed for Referral to RIDEM of Unauthorized Non-Storm Water Discharge (1 st Year)	X				X			
	3K	Illicit Discharge Policy – Procedures Developed for Coordination with Interconnected MS4s (1 st Year)	X				X			

II. OVERALL EVALUATION:

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)

IV.B.3.b.1: Several years ago we developed a base map with all inflows and outfalls, and these will be confirmed under the present Drainage Master Plan contract. Several new inflows will be developed over the next several years as a result of new construction, and these inflows will be added to the map as they are developed. The system is not GIS, but this will also be completed through a mapping program over the next four years.

IV.B.3.b.4: URI is not a municipality, but local policies, to include the Spill Prevention Control and Containment Plan (SPCC) are in place that prohibit illicit discharges, and inspections are conducted at potential source areas, such as the vehicle maintenance shop, by both Facilities Services staff and S&RM. Testing is coordinated by Facilities Services and performed bi-annually by local laboratories to identify any illicit discharges into the waste stream. These inspections are being expanded this year to include the storm water system. Additionally, an annual inspection is conducted with the Town of South Kingstown for potential illicit discharges into the sanitary and storm system.

IV.B.3.b.5. ii: Both the Department of Safety and Risk Management, and the Facilities Service Control Center receive complaints. The complaints are followed up by either an investigator from S&RM, or the Utilities Engineer, or Assistant Director for Lands & Grounds, depending on the nature of the complaint. The complaints are logged on our Work Order System, and the work orders are closed once the remedial action is complete. Illicit discharges are categorized as Priority 1s, or Emergencies, depending on the nature of the complaint. We do not allow any known " non-allowable discharges in the system. Inspections are performed on a regular basis, at least annually, but not recorded. We have continuous flow in the storm water system as a result of ground water infiltration into the system. The ground water levels through out the campus vary but runs into the 2' to 4' range.

IV.B.3.b.6/7: URI follows state and federal requirements; in Rhode Island, any reportable quantity spill of chemical or petroleum products require notification to the DEM, the National Response Center and 911. This is detailed in the SPCC plan. These procedures hook into the RIEMA and fire marshal as needed. On the federal level info is faxed immediately to the EPA, Coast Guard, and State agencies. The operator types the report as you speak. A reportable chemical spill down the sewer would also be reported to the pretreatment plant/Peter Bates directly. If necessary, they can shut valves to prevent flow/damage to the sewer plant. If material goes to a drain, we call-in one of the 5 vendors on the State MPA for petroleum and chemical emergencies (list includes Clean Harbors and Lincoln Environmental). This prevents the problem of underestimating the situation. The MPA requirements insure completion to RIDEM standards. If necessary DEM will pull drain covers to insure all pollution is cleaned. S&RM currently has a PO in place for both Lincoln and Clean Harbors, as this is the most expedient procedure.

IV.B.3.b.9: We keep records of complaints at S&RM, file incident reports with DEM, and follow-up for corrective action with the "perpetrator" when known. If a spill happens we respond and record the action. S&RM teaches the annually required HAZCOM and hazardous waste classes, and we instruct all those trained to report all environmental problems via campus police since this is the only number manned 24/7. The Chemical Hygiene officers are on-call.

B. APPROPRIATENESS AND EFFECTIVENESS:

The program is effective, but not resourced to the level desired to achieve the best results. As an example, some catch basins can only be inspected annually, and only 25-30% of the catch basins can be cleaned each year.



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?	
			YES	NO	ON-TRK		YES	NO	YES	NO
IV.B.4.b.1		Development and introduction of a mechanism to require erosion and sediment control, control of other wastes, and sanctions to ensure compliance (1 st year)	X				X			
		Mechanism adoption (2 nd year)	X				X			
IV.B.4.b.2		Procedures for issuing permits and implementing policies and procedures for all construction projects disturbing ≥1 acre (2 nd year)	X				X			
		Implementation of procedures (end of 2 nd year)								
IV.B.4.b.4		Implementation of program to review 100% of plans and SWPPPs for construction projects ≥ 1 acre not reviewed by other State Programs (2 nd year)	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 nd year)	X				X			
		Implementation of procedures (end of 2 nd year)								
IV.B.4.b.7		Inspect 100% of all construction projects within the regulated area that discharge or have the potential to discharge to the MS4 (2 nd year)	X				X			
IV.B.4.b.8		Procedures for referral to the State of non-compliant construction site operators (2 nd year)	X				X			

B. ADDITIONAL 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
	4A	Develop University Policies – Develop a Storm Water Erosion and Control Policy Regarding Construction Activities (1 st Year)		X		The need for a separate policy is under review by the Committee. See section A, General Summary, below.	X			
	4B	Develop University Policies – Develop Methods for Issuing and Tracking Permits (1 st Year)		X		Reevaluating vehicle to use to establish policy for external contractors. See section A, General Summary, below.		X		
	4C	Develop University Policies – Adopt and Implement Policies and Procedures (2 nd Year)		X		Reevaluating vehicle to use to establish policy for external contractors. See section A, General Summary, below.		X		

A. 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)

The primary organization responsible for achieving the measurable goals for construction site runoff control is the Office of Capital Projects.

IV.B.4b.1 ' Development and introduction of a mechanism ... (1st year)' : The primary mechanism to control contract work is through the General Plans and Specifications of the University. Division 2, Site Construction, requires erosion and sediment control, and control of other wastes. Failure to comply results in a breach of contract and is dealt with according to contract law. Within the Office of Capital Projects a weekly Staff Meeting is held wherein projects are reviewed to include erosion and sediment control issues. Each Project Manager is reminded to include inspections for compliance with erosion and sediment control issues. In specific situations contractors have been directed to improve or re-establish control measures required in the specifications.

' Mechanism adoption (2nd year)' : The mechanism described above is in operation.

IV.B.4.b.2 ' Procedures for issuing permits and implementing policies ...' : The University does not issue permits, but does implement policy. The primary policy, as described above, is the issuance of the General Plans and Specifications in every contract. The University continues to develop the Operations and Maintenance program. Operational reviews were initiated within the Office of Capital Projects with the incorporation of discussions with the project managers, with the communication outreach during design development as relating to storm water drainage and wetlands impacts, and the initiation of a wetlands file for all campus-wide activities.

' Implementation of Procedures (end of 2nd year): The mechanism described above has been implemented.

IV.B.4.b.4 ' Implementation of program to review 100% of plans ...' : The review of projects under design for compliance with SWMPP is required in the OCP guidance and mandates for project design. The design reviews are conducted on all construction projects. Part of those reviews insure compliance with all required federal, state, and local code and regulatory requirements, to include the SWMPPP.

IV.B.4.b.5 ' Procedures for coordination of site plan and SWMPP review when relying on State Program reviews of construction activity (2nd year)' : URI does not rely on State Program reviews of construction activity, but conducts reviews within the Office of Capital Projects as outlined above. Site construction activity is reviewed within the Office of Capital Projects in two (2) separate venues. The first is the weekly construction management meeting and the identification of construction site issues, as described earlier. The second is the independent peer review of ongoing construction activities and the ability to question an activity on site which conflicts with the Long Range Storm Water Management Plan. The SWMPPP is reviewed by the Engineer of Record, or the PM, and the findings are integrated into the project design review described above. Although the Storm Water Management Plan is new, the essence is well known to the OCP staff and the project managers identify problems in site development and construction

' Implementation of procedures (end of second year): The URI Facilities Group will enact a review committee for site development and new construction on campus. This group will have the ability to review construction plans during the development stage, and will involve more community participation.

IV.B.4.b.7 ' Inspect 100% of all construction projects within the regulated ...' : There are two methods of inspection that are incorporated into the SWMPP construction plan. The primary method of inspection is through the Office of Capital Projects, and requires inspection by either the Engineer of Record or the Project Management Section, depending on the size and complexity of the project. The secondary method of inspection is under development and involves inspection by the SWMPP Committee. The Committee will participate in the design review, and will also have the ability to review the project under construction, and report any variations identified to the Project Manager for resolution. The Facilities Group is presently in the process of organizing this committee and its mandate as outlined in the University of Rhode Island Phase II Storm Water Management Plan.

IV.B.4.b.8 ' Procedures for referral to the State ...' : The University Office of Capital Projects is responsible to report any contractors that fail to comply with required SWPPP functions for specific construction activities, or to report any circumstance where a construction activity, or failure in maintenance, may negatively impact the watershed. Additionally, the Office of S&RM can independently report the same findings.

B. APPROPRIATENESS AND EFFECTIVENESS:

IV.B.4b.1 ' Development and introduction of a mechanism' The current system of managing the SWMPP through the General Plans and Specifications is working. The requirements are clearly defined and legally enforceable. The remedies are standard elements of the purchasing process and well defined by contract law. However, additional efforts will be made to inspect and enforce erosion control measures.

IV.B.4.b.2 ' Procedures for issuing permits and implementing policies ...' : Same as IV.B.4b1 (above)

IV.B.4.b.4 ' Implementation of program to review 100% of plans and SWMPPs...The effectiveness of this program was demonstrated in three projects this past year: the warehouse expansion and EMS building; the L&G building; and the two new parking lots. In the development and construction of the Warehouse Expansion and the new EMS Building the original design parameters did not require a State review, however an in-house check for design and BMPs identified concerns with the on site infiltration plan. These plans were upgraded to the intended design standards and allowed for further review to coordinate with planned municipal work to improve overall drainage control. Another project demonstrating planning improved drainage control came with the Design/Build development of the new Lands & Grounds facility for the University. This plan resulted in the improvement of an existing asphalt area to provide for on site drainage sedimentation and control. A third example came from the construction progress review of two (2) separate parking areas on the University campus. One of these lots had submitted for wetlands review and approval, the other had not been deemed required for this review. As the construction season closed in 2005, there were notable deficiencies in the completion of the drainage control systems. Meetings were held with the consulting project managers, designers and contractors to highlight the work required and to establish a priority in its completion.

IV.B.4.b.5 ' Procedures for coordination of site plan and SWMPP review when relying on State Program reviews. The program is working effective to date, and has identified several projects where the coordination between the site plan and the SWMPP had to be modified (as described above).

IV.B.4.b.7 ' Inspect 100% of all construction projects within the regulated ...' This plan is working effectively, as the EOR and the PM have ownership of the project and the technical expertise to provide oversight. The SWMPP Committee will provide additional input and an " extra set of eyes" to assist in the management of the process.

IV.B.4.b.8 ' Procedures for referral to the State ...' : There has been some incidental contact to the Office of Capital Projects over the past year and those notices have resulted in corrective action from the contractor. There are no incidents where a contractor has failed to take corrective action when presented with a concern on compliance to the SWMPP.

**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		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 nd year)	X				X			
IV.B.5.b.3		Procedures for pre-application meetings (2 nd year)		X		URI controls all construction on campus, and does not require applications. Pre-construction meetings are held and storm water management issues covered.	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 nd year)	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 nd year)		X		Will be completed during 3 rd year.				
IV.B.5.b.6		Procedures for referral of new discharges of storm water associated with industrial activity (2 nd year)	X				X			
IV.B.5.b.9		Develop and introduce regulatory mechanism to address post-construction runoff (1 st year)		X		Construction contracts are used to monitor post construction runoff		X		
		Mechanism adoption (2 nd year)		X		Construction contracts are used to monitor post construction runoff		X		
IV.B.5.b.10		Procedures for post-construction inspections of BMPs and inspect 100% of all development ≥ 1 acre within the regulated area that discharges to the MS4 (2 nd year)	X				X			
		Implementation of procedures (end of 2 nd year)								
IV.B.5.b.12		Development of a program to identify existing structural BMPs (2 nd year)	X				X			

B. ADDITIONAL 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
	5A	Post Construction Runoff Policy – Develop a Policy Regarding Post Construction Runoff (1 st Year)		X		Revaluating need for BMP – similar to IV.B.5.b.10.	X			
	5B	Post Construction Runoff Policy – Adopt Post Construction Runoff Policy (2 nd Year)		X		Revaluating need for BMP – similar to IV.B.5.b.10.	x			
	5C	BMP Inspection and Maintenance – Review All Plans and Complete Site Inspections for Construction Projects (2 nd – 5 th Year)			X					

II. OVERALL EVALUATION:

POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

A. GENERAL SUMMARY AND STATUS OF MEASURABLE GOALS:

IV.B.5b4': The primary mechanism to control contract work is through the General Plans and Specifications of the University. Division 2, Site Construction, requires erosion and sediment control, and control of other wastes. Failure to comply results in a breach of contract and is dealt with according to contract law. Within the Office of Capital Projects a weekly Staff Meeting is held wherein projects are reviewed to include erosion and sediment control issues. Each Project Manager is reminded to include inspections for compliance with erosion and sediment control issues. In specific situations contractors have been directed to improve or re-establish control measures required in the specifications.

IV.B5.b.3': The University does not issue applications, but does implement policy. The primary policy, as described above, is the issuance of the General Plans and Specifications in every contract. The University continues to develop the Operations and Maintenance program. Operational reviews were initiated within the Office of Capital Projects with the incorporation of discussions with the project managers, with the communication outreach during design development as relating to storm water drainage and wetlands impacts, and the initiation of a wetlands file for all campus-wide activities.

IV.B.5.b.4: URI does not rely on State Program reviews of construction activity, but conducts reviews within the Office of Capital Projects as outlined above. Site construction activity is reviewed within the Office of Capital Projects in two (2) separate venues. The first is the weekly construction management meeting and the identification of construction site issues, as described earlier. The second is the independent peer review of ongoing construction activities and the ability to question an activity on site which conflicts with the Long Range Storm Water Management Plan. The SWMPPP is reviewed by the Engineer of Record, or the PM, and the findings are integrated into the project design review described above. Although the Storm Water Management Plan is new, the essence is well known to the OCP staff and the project managers identify problems in site development and construction

IV.B.5.b.6 – New discharges associated with industrial activity will be reviewed by the Facilities Group at the time of construction, and compliance with regulatory guidelines, and maintenance and operations procedures, will be verified at that time.

B. APPROPRIATENESS AND EFFECTIVENESS:

Post Construction efforts are as effective as the construction efforts. There are mechanisms in place to insure contractors properly compete the work required, but additional emphasis will be place on post construction inspections.

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**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		Procedures for identifying, locating and describing all municipally owned structural BMPs (1 st year)	X				X			
IV.B.6.b.1.ii		Procedures for inspecting and cleaning BMPs (1 st year)	X				X			
IV.B.6.b.1.iii		Procedures for an annual catch basin inspection and cleaning program (1st year)	X				X			
		Implementation of program (3 rd year)			X		X			

IV.B.6.b.1. iv		Procedures to minimize erosion of road side shoulders and ditches (1st year)	X				X			
IV.B.6.b.1.v		Procedures to identify and report annually the known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation (1st year)	X				X			
IV.B.6.b.1. vi		Procedures for a road sweeping program that includes sweeping all streets and roads within the regulated area annually (1st year)	X				X			
		Implementing the program to occur annually (3rd year)	X				X			
IV.B.6.b.1. vii		Description of maintenance activities, schedules and long-term inspection procedures for controls to reduce floatables (1st year)	X				X			
IV.B.6.b.1. viii		Procedures for the proper disposal of removed waste from the MS4 (1st year)	X				X			
IV.B.6.b.2		Operator must report and describe all operations under legal control that may have the potential to introduce pollutants into storm water runoff (1st year)	X				X			
IV.B.6.b.4		Procedures for the development of an 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 (1st year)	X				X			
		All recommended BMPs to be implemented by 4th year			X		X			
IV.B.6.b.7		Procedures for assessment of flow management projects (1st year)	X				X			
IV.B.6.b.8		Procedures for implementing proper erosion and sediment and water quality control for construction projects (1st year)	X				X			

B. ADDITIONAL MEASURABLE GOALS:

Permit ID#	BMP ID	List Measurable Goal	Was goal met? ON-			If not met briefly list reasons, current status, plans and new date for meeting the goal	Effective?		TMDL?	
			YES TRK	NO			YES	NO	YES	NO
	6A	Operations and Maintenance Program – Develop Program (1st Year)		X		BMPs in place, formal program To be completed by the end of year 4.	X			
	6B	Operations and Maintenance Program – Update Program (2nd – 5th Year)		X		BMPs in place, formal program To be completed by the end of year 4.	X			
	6C	Catch Basin Cleaning Program – All Catch Basins Cleaned Annually (3rd – 5th Year)			X	Subject to available funds	X			
	6D	Street Cleaning – Sweep All Roads Once Per Year (1st – 2nd Year)	X				X			

	6E	Street Cleaning – Sweep All Roads Twice Per Year (3 rd – 5 th Year)			X	Subject to available funds	X			
	6F	Street Cleaning – Sweep All Parking Lots on Campus (1 st – 5 th Year)	X				X			

II. OVERALL EVALUATION:

POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS

<p>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) Discussion continues on the number of structural BMPs on campus, and on the method to determine the necessary frequency of cleaning. Areas such as long term retention basins do not need cleaning as frequent as most catch basins. Within the type (such as catch basins) some need cleaning more frequently than others. Many basins are inspected on a regular basis as part of the daily Grounds Crew routine, but others are inspected less frequently this does not seem to cause a problem. Erosion control on road edges is addressed in numerous locations by concrete curbing. Other techniques have not been effective as the campus is located on a hillside with high volume run-off down the hill. Other methods of using swales and gulleys to channel the water are used where they are able to maintain the high flows. Road sweeping has been increased to 5 times/year to better maintain the volume of debris collected in the road beds. Road sweeping and increased litter pick-up are two of the main efforts used to reduce floatables. URI hired an A&E firm to review drainage across the campus and to prepare a Drainage Master Plan. That plan will be used to assess flow management and determine necessary projects to reduce erosion. The work is scheduled for completion this Fiscal Year.</p>
<p>B. APPROPRIATENESS AND EFFECTIVENESS: All BMPs appear to be effective, but lack the resources necessary to achieve the best results. As an example, some catch basins can only be inspected annually, and only 25-30% of the catch basins can be cleaned each year.</p>

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).

No approved TMDLs within the MS4

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

Date of Public Notice: April 4, 2005	How public was notified: Through the community newspaper, and on the Facilities Services website.
Was public meeting held? <u>YES</u> NO	
Date: April 20, 2006, 4:00PM (not yet held at time of due date)	Where: Sherman Building, URI
Summary of public comments received: Will be received during the week of April 17-April 20.	
Planned responses or changes to the program: Will be determined after review.	

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)

The University improved a drainage design system in coordination with a town-planned effort on Plains Road. The community was planning to replace street structures in Plains Road over the next summer and requested that the University construct our system in concrete to allow for a connection replacing an open trench. This accommodation on the EMS sitework was made and the combined projects will improve drainage control in the area, which is a problem with each heavy rainfall.

The design of the Lands & Grounds Garage reduces storm water run-off from the site. The design places the facility adjacent to the Whitehorn Brook wetland, bringing all roof run-off into a ground water injection system. The system is designed for a 100-year storm flow event and has received RIDEM wetlands approval. The project is subject to the availability of funds for FY 07. In addition to the Cultech storage and infiltration system designed for this purpose, the planned facility utilizes a storage tank for oil/water/sediment control for all interior garage floor run-off. The service allows the interior floor run-off to be treated prior to disposal in the sewer collection system.

The University constructed and occupies two new parking areas. The lot off Flagg Road was designed in a conventional format utilizing drainage structures and holding basins. The design maintains the existing run-off intensities and improves water quality. The second lot construction expands the permeable asphalt system off Plains Road and increased the volume of pavement supporting ground water injection. Maintenance, cleaning and policing of these facilities continues on a regular basis to protect the environment and systems in place.

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:
Area Drain at start of system	Unknown	South of Briar Lane	SK	Street Drain	Recently completed joint project to improve flow through system
Sheet and area flow into WHB	Unknown	At beginning of WHB, on priv prop	Tibbits	Farm and forest	URI has initiated procedures to purchase the property

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

Total Illicit Discharges Identified: NONE	# of Complaints Received:
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM:
Summary of Enforcement Actions:	
Extent to which the MS4 system has been mapped: The existing plan was developed several years ago and was consolidated from other available plans on the system. It is not complete, and experience has shown that we cannot verify the accuracy of the underground lines. The plan has a reasonable degree of accuracy for all inflows. It is in an AutoCAD format and consists of numerous planimetric features, to include catch basins, pavement edges, wetlands, two-foot contours, etc.	

SECTION 6. Plan and SWPPP Reviews

# of Construction Reviews completed:	# of Post-Construction Reviews completed:
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Summary of Reviews and Findings:

Project management reviews were held for SWPPP for the site work at the Independence Hall Renovations. During construction, the sitework caused sedimentation build-up in the exit roadways which was carried out into the street. After reviewing the problem the contractor was directed to place a gravel blanket at the exit to remove the sediment from the vehicles. This solved the problem.

Plan reviews of the EMS construction identified that the design would not meet the desired infiltration objectives for new construction. The effort stimulated a RIDEM review of the design, improved control measures to the original plan, and increased the storage and infiltration area of the CulTech system.

The Warehouse and EMS construction were reviewed through the Office of Capital Projects for compliance to the SWMPP. Following that review and subsequent modifications, the application was submitted to RIDEM, where the design modifications were approved, improving the storm service ability of the injection system for roof run-off.

The plans for the new residential housing predated the SWMPP, and did not encompass drainage planning beyond the immediate area of the planned construction. The paramount objective was to retain or lower the per-construction run-off calculations. The plans developed for this construction did submit to RIDEM wetlands review and approval.

The plans for the Lands & Grounds Facility look beyond the immediate area of construction and reduce the storm flow run-off for storm events. The existing asphalt site is designed to collect for ground injection all roof run-off from the construction. Interior garage bays are designed to collect ice-melt, sand and other water from within the structure and to process that effluent through a settlement basin prior to discharge in the municipal sewer system. Additional basins are planned for installation in the parking lot area to improve water quality of the run-off and to increase the capacity for sediment settlement and increase the collection points.

The most significant improvement to the SWMPP effort is the award and progress of the Storm Water Master Plan by the University. This plan is expected to be drafted in April 2006 and to provide a storm water model for the University watershed. This plan will identify specific goals for improvement of drainage controls within the watershed and provide a mechanism to plan future construction in a manner that improves drainage flow.

Summary of Reviews and Finding:

Operation and maintenance plans for all new or modified structures are forwarded to the Maintenance Department after completion of construction. Inclusive within the turnover procedures for all Capital Projects construction is a defined procedure outline, including the turnover of all improvements to the Facilities staff. This meeting involves the Facilities staff with the design engineers and the contractors delivering the improvements turned over.

A review of the parking lot construction systems was initiated by the Office of Capital Projects when negative impacts were witnessed with the construction in place. The review of that work found that the construction had not been completed in accordance with the approved plans and the contractor is now scheduling the repairs as required.

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

# of Site Inspections: Not recorded	# of Complaints Received: Not recorded
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0

Summary of Enforcement Actions:

The MS4 is one square mile in size, so inspections are performed daily by the Lands & Ground Staff through the course of their daily requirements. Since we are not a municipality, we do not issue citations. In general, the Facilities Group performs all maintenance within the MS4 and oversees all construction as outlined above.

The maintenance of the University drainage systems is performed by the Facilities Staff, and the requirements are generated by their daily inspections of structures, roads and embankments. The basins are cleaned annually by contract and inspected by the Facilities Group. As this is part of the daily routine, no records are kept of these inspections.

The Assistant Director for Lands and Grounds oversaw selective cleaning of the Whitehorn Brook drainage basin during the past summer season. This effort cleared the culvert areas at crossings of Whitehorn brook between the University and Route 138. The Route 138 crossing is designed to allow adequate flow in heavy storm events; however, the interim crossings are not designed as a system to pass flow uniformly, and this results in substantial sedimentation and obstruction within the system. The Master Drainage Design Plan will look at this issue and make suggestions for system improvement.

Some project construction identified unwanted erosion or sediment build-up, and those matters were addressed within the contract language using project resources to take immediate corrective action to restore site conditions.

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

# of Site Inspections: Not recorded	# of Complaints Received: Not recorded
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0

Summary of Enforcement Actions:

The post construction inspection of the parking lots identified that the construction was not completed in accordance with the plans. Additional trenching, grading and structure controls were required to reduce storm water run-off. This direction has been made to the contractor and the work is now scheduled for completion.

Site inspections were held with the completion of the building at 210 Flagg Road construction to review the establishment of vegetation on the site for future drainage control and to inspect existing drainage structures. This effort identified the need for improvement/repair to drainage structures within the vicinity of the construction. The necessary repairs were made by the Facilities Group.

Construction at the EMS Facility and the associated site inspections revealed a failing street culvert in the vicinity of the construction. The inspection and identification allowed for the opportunity for the University to work with the town to modify the planned construction on the site to better support the Town' s drainage project, which is scheduled to take place over the summer.

Post construction inspections for sitework and drainage construction were also completed at the new Alumni Building construction on Upper College Road. The inspections affirmed the work in place and no new work was required. Minor warranty work was initiated for minor on-site erosion.

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

# of Site Inspections: 2/year/structure; Not recorded	# of Complaints Received: 0
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0

Summary of Enforcement Actions:

The units are all part of the URI system and managed by URI.

SECTION 10. Structural BMPs (Part IV.B.6.b.1.i)

BMP ID:	Location:	Name of BMP Owner/Operator:	Description of BMP:
	Butterfield Road	Lands & Grounds	Sedimentation Box (septic design with baffles)
	Ryan' s Center	Global	Vortechincs system - Oil & Water separator
	Plains Road and Dairy Barn Parking Lots	Land & Grounds	Porous Pavement system with below grade recharge bed.

SECTION 11. Discharges Causing Scouring or Excessive Sedimentation (Part IV.B.6.b.1.v)

Outfall ID:	Location:	Description of Problem:	Description of Remediation Taken:	Receiving Water Body Name/Description:
	Ballentine Pond	Sedimentation	Clean with backhoe	White Horn Brook
	Roger Williams Pond	Sedimentation	Clean with backhoe	White Horn Brook
	Ellery Pond	Sedimentation	Dredge with equipment	White Horn Brook

SECTION 12. Please include a summary of results of any other information that has been collected and analyzed. This includes any type of data

The University started a design plan to identify the drainage flow within the watershed, and began the establishment of a Wetlands file tracking and inventory. The Storm Water Model is scheduled for review in April/May 2006. This tool will be a key resource in the identification of potential impacts of site work within the campus. The development of a centralized Wetlands Application file is designed to track the preliminary design development of potential wetlands impact projects and to track the progress of that design development through permit application and construction.

We intend to expand the utilization of the Storm Water Model to review planned construction in a longer range University Master Plan that will help guide construction, maintenance and future planning.

The University continues to develop the Operations and Maintenance program. Operational reviews were initiated within the Office of Capital Projects with the incorporation of discussions with the project managers, with the communication outreach during design development as relating to storm water drainage and wetlands impacts, and the initiation of a wetlands file for all campus-wide activities.