



RHODE ISLAND DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT  
Office of Water Resources

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**RIPDES SMALL MS4 ANNUAL REPORT**  
GENERAL INFORMATION PAGE

RIPDES PERMIT #RIR0400 031

REPORTING PERIOD:

☐ YEAR 18

Jan 2021-Dec 2021

**OPERATOR OF MS4**

Name: City of Warwick			
Mailing Address: 3275 Post Road			
City: Warwick	State: RI	Zip: 02886	Phone: 401.738.2003
Contact Person: Eric J. Earls, PE	Title: DPW Director		
	Email: eric.j.earls@warwickri.com		
Legal status (circle one): PRI - Private <b>PUB - Public</b> BPP - Public/Private STA - State FED - Federal Other (please specify):			

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

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

**CERTIFICATION**

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

Print Name Eric J. Earls, PE

Print Title Director of Public Works

Signature

Date

6/29/22





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

### SECTION I. OVERALL EVALUATION:

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

Include information relevant to the implementation of each measurable goal, such as activities, topics addressed, audiences and pollutants targeted. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for choosing the education activity to address the pollutant of concern.

**(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)**

**Responsible Party Contact Name:** Eric J. Earls, P.E

**Phone:** 401.738.2003

**Email:** eric.j.earls@warwickri.com

IV.B.1.b.1	Use the space below to provide a General Summary of activities implemented to educate your community on how to reduce stormwater pollution. For TMDL affected areas, with stormwater associated pollutants of concern, indicate rationale for choosing the education activity. List materials used for public education and topics addressed. Summarize implementation status and discuss if the activity is appropriate and effective.
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The DPW previously engage the Southern Rhode Island Conservation District (SRICD) on an outreach campaign regarding stormwater issues. The City had awarded a contract to SRICD to manage a public outreach campaign, including determining the proper "message", public outreach and meeting, social media, mailings, etc. This project has led to the creation of a website dedicated to Warwick stormwater, [simplestepswarwick.com](http://simplestepswarwick.com), to inform the public about the benefits of improving water quality, the steps currently being taken, and what the public can do to assist.

City of Warwick Recycling Calendar - The calendar is sent to every home owner in the City and informs the residents of how to properly dispose of household and yard wastes. The City of Warwick continues to be successful in educating the public in the disposal of waste properly. The City's Recycling Program remains a leader in the industry and many other City Programs, such as the Oil Igloo and the Municipal Recycling Facility Drop-off, are frequently visited by residents of the City. Copies are attached in Appendix A.

Warwick Recycling/Sanitation Webpage - Webpage provides links to information regarding the proper disposal of household and yard waste and its importance to the environment. <http://www.warwickri.gov/recycsanit/sanitation.htm>

Warwick Planning Department Webpage - Webpage provides links to the *Warwick Harbor Management Plan, the Governor's Narragansett Bay & Watershed Planning Commission and Greenwich Bay Special Area Management Plan (SAMP)*. [http://www.warwickri.gov/index.php?option=com\\_content&view=category&id=67&Itemid=159](http://www.warwickri.gov/index.php?option=com_content&view=category&id=67&Itemid=159).

Warwick Sewer Authority (WSA) Webpage - WSA Webpage provides educational information on the sewer plants operation, future sewer projects, the Greenwich Bay TMDL, the Mandatory Sewer Connection Program, etc. <http://www.warwicksewerauthority.com>.

Warwick Sewer Authority Mailings - Mandatory Sewer Connection Program Brochures are sent to residents when sanitary sewers become available.

Neighborhood Cleanups – The DPW assists various Neighborhood Associations with collection of wastes after volunteer clean-ups.

Pet Waste Stations - Plastic bags and disposal locations are provided at several locations throughout the City. As funding becomes available, additional stations will be installed.

Responsible Parties – the Planning Department, the Warwick Sewer Authority (WSA) and the Department of Public Works (Sanitation/ Recycling Division, Highway Division and Engineering Division).

IV.B.1.b.2	Use the space below to provide a general summary of how the public education program was used to educate the community on how to become involved in the municipal or statewide stormwater program. Describe partnerships with governmental and non-governmental agencies used to involve your community.
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The public outreach via the calendar, social media, and posters provide the public and other entities with guidance on proper techniques associated with a healthy environment. They include instructions on how to properly recycle, minimize fertilizer use, refrain from feeding water fowl, cleaning up pet waste, etc.

**PUBLIC EDUCATION AND OUTREACH cont'd**

Check all topics that were included in the Public Education and Outreach program during this reporting period. For each of the topics selected, provide:

Target Audience(s): Public Employees, Residents, General Public, Businesses, Industries, Restaurants, Contractors, Developers, Agriculture, Other (describe);

Target Pollutant(s): (e.g. pet waste, fertilizers, Total Suspended Solids, etc.);

Strategies/Media: Direct Mailings, List Servs, Kiosks or Other Displays, Newspaper Ads or Articles, Public Events or Presentations, School Programs, Printed Materials, Direct Trainings, Videos, Webpage, Other (describe)

Topic	Target Audience(s)	Target Pollutant(s)	Strategies/Media
<input type="checkbox"/> Construction Sites			
<input type="checkbox"/> Pesticide and Fertilizer Application	All	Fertilizers	Posters
<input type="checkbox"/> General Stormwater Management Info	All	All	Posters, website
<input type="checkbox"/> Pet Waste Management	All	Pet Waste	Posters, website
<input type="checkbox"/> Household Hazardous Waste Disposal	All	All	Posters, website
<input type="checkbox"/> Recycling	All	All	Posters, website, social media
<input type="checkbox"/> Illicit Discharge Detection and Elimination			
<input type="checkbox"/> Riparian Corridor Protection/Restoration			
<input type="checkbox"/> Infrastructure Maintenance			
<input type="checkbox"/> Trash Management	All	All	Posters, website, social media
<input type="checkbox"/> Smart Growth			
<input type="checkbox"/> Vehicle Washing			
<input type="checkbox"/> Storm Drain Marking			
<input type="checkbox"/> Water Conservation			
<input type="checkbox"/> Green Infrastructure/Better Site Design/LID			
<input type="checkbox"/> Wetland Protection			
<input type="checkbox"/> Other:			
<input type="checkbox"/> None			

**Additional Measurable Goals and Activities**

Please list all stormwater training attended by your staff during the 2021 calendar year and list the name(s) and municipal position of all staff who attended the training.

**Trainings:**

Building Greener Futures: Green Jobs Training & Bioswales in New Haven, CT

GoToWebinar - EPA's Transportation Stormwater Permit Compendium

A Tree Grows in Chelsea: Greening our Gateway Cities

Introducing The Urban Raingarden™ Biofiltration System

Managing Phosphorus Pollution with Stormwater Bioretention: A Soil Study

Exploring Sediment Control During Inclement Weather Events

Building Greener Boston: Creating and Connecting the Green Infrastructure Workforce

Soak up the Rain Providence Stormwater Innovation Center Webinar

GoToWebinar - Managing Stormwater Through Green Infrastructure & Low Impact Development

Attending name of staff and title: Eric J. Earls, PE, DPW Director

Attending name of staff and title: Eric Hindinger, Program Manager



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

### SECTION I. OVERALL EVALUATION:

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

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

**(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)**

**Responsible Party Contact Name:** Eric J. Earls, P.E

**Phone:** 401.738.2003

**Email:** eric.j.earls@warwickri.com

IV.B.2.b.2.ii	Use the space below to describe audiences targeted for the public involvement minimum measure, include a description of the groups engaged, and activities implemented and if a particular pollutant(s) was targeted. If addressing TMDL requirements indicate how the audience(s) and/or activity address the pollutant(s) of concern. Name of person(s) and/or parties responsible for implementation of activities identified. Assess the effectiveness of BMP and measurable goal.
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The City works to provide opportunities for the public to participate in developing, implementing, and reviewing their storm water management program.

The City is working on a program to install new signs encouraging people to pick up after their pets and the harm of feeding waterfowl. We are currently researching examples of these signs that have been successful in other communities.

Signs have been installed within the Bigbelly® trash receptacles at Oakland Beach. These include public service messages relevant to the beach, specifically regarding not feeding birds and picking up pet waste.

The City's Public Works Department regularly assists with community cleanups. These efforts consist of beach and park cleanups and work to involve citizens in activities that have proven benefits to flooding and water quality.

The City has used a consultant, Southern Rhode Island Conservation District (SRICD), to assist with public outreach. That outreach effort included the City distributing informational mailing stuffers in the water/sewer billing cycles.

NRICD held two workshops on "Gardening to Protect Warwick's Waters" on April 26, 2018 at the Oakland Beach Branch of the Boys and Girls Club of Warwick and on May 9, 2018 at the Warwick Public Library. The Conservation Districts have also created a website to deliver stormwater related information to the Public; the website can be found on the following link - <https://simplestepswarwick.com/>. The City has engage in discussions with SRICD to implement similar programs for the 2022 calendar year.

Opportunities provided for public participation in implementation, development, evaluation, and improvement of the Stormwater Management Program Plan (SWMPP) during this reporting period. Check all that apply:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Cleanup Events  | <input type="checkbox"/> Storm Drain Markings |
| <input type="checkbox"/> Comments on SWMPP Received | <input type="checkbox"/> Stakeholder Meetings |
| <input type="checkbox"/> Community Hotlines         | <input type="checkbox"/> Volunteer Monitoring |
| <input type="checkbox"/> Community Meetings         | <input type="checkbox"/> Plantings            |
| <input type="checkbox"/> Other (describe)           |   |

Additional Measurable Goals and Activities

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

Was the availability of this Annual Report and the Stormwater Management Program Plan (SWMPP) announced via public notice? ☒ YES ☐ NO

If YES, Date of Public Notice: April 21, 2022

**PUBLIC INVOLVEMENT/PARTICIPATION cont'd**

How was public notified:

- |   |   |
|---|---|
| <input type="checkbox"/> List-Serve (Enter # of names in List: _____) | <input checked="" type="checkbox"/> Newspaper Advertising |
| <input type="checkbox"/> TV/Radio Notices                             | <input type="checkbox"/> Town Hall posting                |
| <input type="checkbox"/> Website                                      | <input type="checkbox"/> Other:                           |

Enter Web Page URL: \_\_\_\_\_

Was public meeting held?    ☒ YES    ☐ NO

Date: June 1, 2022                      Where: City Hall, Lower Level Conference Room

Summary of public comments received: See Attached Comments in Appendix A

Planned responses or changes to the program: See Attached Comments in Appendix A



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

### SECTION I. OVERALL EVALUATION:

GENERAL SUMMARY, STATUS, APPROPRIATENESS AND EFFECTIVENESS OF MEASURABLE GOALS	
<p>Include information relevant to the implementation of each measurable goal, such as activities implemented (when reporting tracked and eliminated illicit discharges, please explain the rationale for targeting the illicit discharge) to comply with on-going requirements, and illicit discharge public education activities, audiences and pollutants targeted. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern.</p> <p><b>(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (*) if this person/entity is different from last year.)</b></p> <p><b>Responsible Party Contact Name:</b> <u>Eric J. Earls, P.E</u></p> <p><b>Phone:</b> <u>401.738.2003</u> <b>Email:</b> <u>eric.j.earls@warwickri.com</u> <b>Has this person received training on Illicit Discharge Detection and Elimination (IDDE)?</b> _____</p> <p><b>If yes, when and where?</b> <u>In 2014, during the RIDEM MMAP program, RIDEM personnel worked with the City's DPW personnel to train them in the inspection process.</u></p>	
IV.B.3.b.1:	<p>If the outfall map was not completed, use the space below to indicate reasons why, proposed schedule for completion of requirement and person(s)/ Department responsible for completion. (The Department recommends electronic submission of updated EXCEL Tables if this information has been amended.)</p> <p><b>Number of Outfalls Mapped within regulated area:</b> <u>499</u></p> <p><b>Percent Complete:</b> <u>100%</u></p> <p><b>If 100% Complete, Provide Date of Completion:</b> <u>6/2018</u></p>
IV.B.3.b.2	<p>Indicate if your municipality chose to implement the tagging of outfalls activity under the IDDE minimum measure, activities and actions undertaken under the 2021 calendar year.</p> <p><u>Outfall tagging is not necessary as the outfalls will be located by a GPS unit and imported into digital maps, as referenced above.</u></p>
IV.B.3.b.3	<p>Use the space below to provide a summary of the implementation of recording of system additional elements (catch basins, manholes, and/or pipes). Indicate if the activity was implemented as a result of the tracing of illicit discharges, new MS4 construction projects, and inspection of catch basins required under the IDDE and Pollution Prevention and Good Housekeeping Minimum Measures, and/or as a result of TMDL related requirements and/or investigations. Assess effectiveness of the program minimizing water quality impacts.</p> <p><u>The City entire drainage system is available on paper plans. This includes all the catch basins, manholes, and pipes. As referenced above, the City's consultant has completed the GIS mapping of the City's drainage infrastructure, including connectivity.</u></p> <p><u>The City has always had an understanding of the entire drainage infrastructure, as indicated by the systems being available on paper plans. So as the GIS mapping component moves forward the City will incorporate the entire drainage system into the maps.</u></p> <p><u>Mapping the interconnectivity was not part of any specific investigation.</u></p>
IV.B.3.b.4	<p>Indicate if the IDDE ordinance was <b>not</b> developed, adopted, and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement.</p> <p><b>Date of Adoption:</b> <u>08/17/2016</u></p> <p>If the Ordinance was amended in 2021, please indicate why changes were necessary.</p>

**ILLCIT DISCHARGE DETECTION AND ELIMINATION cont'd**

<p>In an email date 3.17.22, the City Solicitor's office provided confirmation that this ordinance is enforceable. "With regard to soil erosion and sediment control, RIGL 45-26-3 authorizes municipal councils to enact sediment and erosion control ordinances. RIGL 45-46-5 provides a model ordinance and RIGL 45-46-4(a) allows the municipality to enact the model ordinance along with its own performance standards that are "reasonable and prudent provisions for addressing soil and sediment control measures." The Warwick soil and sediment control ordinance is based on the model ordinance and is largely identical with it. There is no issue with enforceability of that ordinance."</p>	
IV.B.3.b.5.ii, iii, iv, & v	<p>Use the space below to provide a summary of the implementation of procedures for receipt and consideration of complaints, tracing the source of an illicit discharge, removing the source of the illicit discharge and program evaluation and assessment as a result of removing sources of illicit discharges. Identify person(s) / Department and/or parties responsible for the implementation of this requirement.</p> <p>Upon receipt, complaints are logged, reviewed by DPW personnel and evaluated if further investigation is warranted. If it is determined that there is an illicit discharge, the source of the discharge is determined. If the source of the discharge is located, the responsible party is notified to rectify the situation. If necessary, the City will request assistance from RIDEM to rectify the situation. Complaints of illegal discharge may originate from the Building Dept., Planning Dept., the DPW, or the general public. The DPW is generally responsible for the investigation and ultimate resolution.</p>
IV.B.3.b.5.vi	<p>Use the space below to provide summary of implementation of catch basin and manhole inspections for illicit connections and non-stormwater discharges. If the required measurable goal of inspecting all catch basins and manholes for this purpose was not accomplished, please indicate reasons why, the proposed schedule of completion and identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement. The operator must keep records of all inspections and corrective actions required and completed.</p> <p><b>Number of Catch Basins and Manholes Inspected for illicit connections/IDDE: 7711</b>  <b>Percent Complete: 100%</b>  <b>Date of Completion: 06/2018</b></p>
<p>The City's consultant, Beta Group, has mapped and inspected catch basins and manholes. Additionally, the City's staff is cleaning and inspecting catch basins and manholes. This work is being performed in accordance with the Consent Agreement between the City and RIDEM. Documentation associated with the work performed by Beta Group is provided in Appendix C. Documentation associated with the City's work is provided in Appendix J.</p>	
IV.B.3.b.5.vii	<p>If dry weather surveys including field screening for non-stormwater flows and field tests of selected parameters and bacteria were not completed, indicate reasons why, proposed schedule for the completion of this measurable goal and person(s) / Department and/or parties for the completion of this requirement. Evaluate effectiveness of the implementation of this requirement. <b>The results of the dry weather survey investigations should be submitted to RIDEM electronically, if not already submitted or if revised since 2009, in the RIDEM-provided EXCEL Tables and should include visual observations for all outfalls during both the high and low water table timeframes, as well as sample results for those outfalls with flow. The EXCEL Tables must include a report of all outfalls and indicate the presence or absence of dry weather discharges.</b></p> <p><b>Number of Outfalls Surveyed Jan-Apr: _100_____</b>      <b>Number of Outfalls Surveyed Jul-Oct: _100_____</b>  <b>Percent Complete: _____ %</b>  <b>Date of Completion: 10/26/2019</b></p>
<p>In 2018, the City's consultant Crossman Engineering was retained to conduct dry-weather surveys at 100 outfalls for the period of January 1, 2019 – April 30, 2019 and 101 outfalls during the July 1, 2019 – October 31, 2019 periods. A copy of this documentation is included in Appendix H.</p>	
IV.B.3.b.7	<p>Use the space below to provide a description of efforts and actions taken as a result of for coordinating with other physically interconnected MS4s, including State and federal owned or operated MS4s, when illicit discharges were detected or reported. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.</p>
<p>The City has been in contact with RIDOT regarding their stormwater program and working on coordinating efforts to minimize redundancy and maximize efficiency. The City is working with RIDOT on several stormwater projects within the City. We will continue to coordinate maintenance and mapping with RIDOT. The City has not identified and illicit discharges associated with interconnected MS4s.</p>	



**ILLCIT DISCHARGE DETECTION AND ELIMINATION cont'd**

IV.B.3.b.8	Use the space below to provide a description of efforts and actions taken for the referral to RIDEM of non-stormwater discharges not authorized in accordance to Part I.B.3 of this permit or another appropriate RIPDES permit, which the operator has deemed appropriate to continue discharging to the MS4, for consideration of an appropriate permit. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.
Not Applicable.	
IV.B.3.b.9	Use the space below to provide a description of efforts and actions taken to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste, as well as allowable non-stormwater discharges identified as significant contributors of pollutants. Include a description on how this activity was coordinated with the public education minimum measure and the pollution prevention/good housekeeping minimum measure programs. Identify person(s) / Department and/or parties responsible for the implementation of this requirement. Evaluate effectiveness of the implementation of this requirement.
<p>In the past the DPW has worked with the Southern Rhode Island Conservation District (SRICD) on an outreach campaign regarding stormwater issues. The City hired SRICD to manage a public outreach campaign, including determining the proper "message", public outreach and meeting, social media, mailings, etc. Mailers were inserted into municipal water bills that contained information pertaining to relevant stormwater issues. This project has led to the creation a website dedicated to Warwick stormwater, <a href="http://simplestepswarwick.com">simplestepswarwick.com</a>, to inform the public about the benefits of improving water quality, the steps currently being taken, and what the public can do to assist. This year DPW has initiated conversations with SRICD to engage them for these services again.</p> <p>The Public is informed of the hazards of improper disposal via the webpage, mailing and the City calendar. Residents are informed of the proper disposal requirements for recyclables, yard waste, motor oil, tires, etc.</p> <p>Employees are trained in spill prevention, spill response and informed to notify appropriate personnel in the event of a spill. DPW vehicles are equipped with oil spill kits for immediate response.</p> <p>Rhode Island Airport Corporation (RIAC) – The City has had discussions with RIAC regarding several potential stormwater treatment areas.</p>	
Additional Measurable Goals and Activities	

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

# of Illicit Discharges Identified in 2021:0	# of Illicit Discharges Tracked in 2021:0
# of Illicit Discharges Eliminated in 2021:0	# of Complaints Received:0
# of Complaints Investigated:0	# of Violations Issued:0
# of Violations Resolved:0	# of Unresolved Violations Referred to RIDEM:0
Total # of Illicit Discharges Identified to Date (since 2003):	Total # of Illicit Discharges remaining unresolved at the end of 2021:0
Summary of Enforcement Actions:	
Total # of Outfalls identified and mapped to date: <u>  499  </u>	
Total # of Interconnections with other MS4s identified and mapped to date: <u>  Specific number not confirmed  </u>	
Extent to which the MS4 system has been mapped (% complete): <u>  100%  </u>	

**ILLICIT DISCHARGE DETECTION AND ELIMINATION cont'd**

Identify how the following components of the MS4 system have been mapped:	Not mapped	GIS	Auto CAD	Paper	Other (please specify)
Catch basins	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Manholes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pipes, ditches, and other conduits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flow direction and connectivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interconnections with other regulated MS4s	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MS4-owned stormwater controls (BMPs, not including catch basins or manholes)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Delineation of outfall catchment/drainage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Interconnection:	Date Found:	Location:	Name of Connectee:	Originating Source:	Planned and Coordinated Efforts and Activities with Connectee:



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

### SECTION I. OVERALL EVALUATION:

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

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

**(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)**

**Responsible Party Contact Name:** Eric J. Earls, P.E

**Phone:** 401.738.2003

**Email:** eric.j.earls@warwickri.com

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

**Date of Adoption:** \_\_\_\_\_

If the Ordinance was amended in 2021, please indicate why changes were necessary. **Please also indicate if amendments have been made based on the 2010 RI Stormwater Design and Installation Standards Manual, and provide references to the amended portions of the local codes/ordinances.**

The ordinance was adopted in 2016 as part of the City's Consent Agreement with RIDEM.

IV.B.4.b.6 Use the space below to describe actions taken as a result of receipt and consideration of information submitted by the public.

The Engineering Department is notified of any complaint/comments from the public with regards to construction project. Information is recorded and a site visit is conducted to verify the validity of the complaint/comment. If there is any issue with regard to the construction the Construction Supervisor is notified and directed to correct the problem. The City has the authority to withhold Certificates of Occupancy until corrective actions are taken.

IV.B.4.b.8 Use the space below to describe activities and actions taken as a result of referring to the State non-compliant construction site operators. The operator may rely on the Department for assistance in enforcing the provisions of the RIPDES General Permit for Stormwater Discharges Associated with Construction Activity to the MS4 if the operator of the construction site fails to comply with the local and State requirements of the permit and the non-compliance results or has the potential to result in significant adverse environmental impacts.

If a construction site is found to be non-compliant, the Site supervisor is notified of the infractions and directed to rectify the problem. If this request is ignored the RI DEM and/or RI CRMC is contacted and apprised of the situation and a joint effort is put forth to fix the situation. The Contractor is responsible for correcting all adverse impacts associated with non-compliance issues. The City has the authority to withhold Certificates of Occupancy until corrective actions are taken.

Additional Measurable Goals and Activities

## CONSTRUCTION SITE STORMWATER RUNOFF CONTROL cont'd

**SECTION II. A - Plan and SWPPP/SESC Plan Reviews during Year 18 (2021), Part IV.B.4.b.2:** Issuance of permits and/or implementation of policies and procedures for all construction projects resulting in land disturbance of greater than 1 acre.  
**Part IV.B.4.b.4:** Review 100% of plans and SWPPPs/SESC Plans for construction projects resulting in land disturbance of 1-5 acres must be conducted by adequately trained personnel and incorporate consideration of potential water quality impacts.

# of Construction Applications Received: ____517____
# of Construction Reviews Completed: ____517____
# of Permits/Authorizations Issued: ____466____
Summary of Reviews and Findings, include an evaluation of the effectiveness of the program.  <a href="#">The Engineering Division reviews all proposed development plans. These projects/plans are recorded and documented on an excel spreadsheet. A copy of the spreadsheet is included in Appendix D.</a>
Identify person(s) /Department and/or parties responsible for the implementation of this requirement:  Eric Hindinger, Program Manager
Identify the type and date of training this person(s)/parties has/have received to be considered "adequately trained":  19 years of experience processing similar construction permits and countless training seminars throughout those years.

**SECTION II.B - Erosion and Sediment Control Inspections during Year 18 (2021), Parts IV.G.2.n and IV.B.4.b.7:** Inspection of 100% of all construction projects within the regulated area that discharge or have the potential to discharge to the MS4. (The program must include two inspections of all construction sites, first inspection to be conducted during construction for compliance of the Erosion and Sediment controls at the site, the second to be conducted after the final stabilization of the site.) Inspections must be conducted by adequately trained personnel.

# of Active Construction Projects: 4	
# of Site Inspections: 6	# of Complaints Received: 0
# of Violations Issued: 0	# of Unresolved Violations Referred to RIDEM: 0
Summary of Enforcement Actions, include an evaluation of the effectiveness of the program.  N/A	
Identify person(s) /Department and/or parties responsible for the implementation of this requirement:  Eric J. Hindinger, Program Manager	
Identify the type and date of training this person(s)/parties has/have received to be considered "adequately trained":  19 years of experience processing similar construction permits and countless training seminars throughout those years.	



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

**SECTION I. OVERALL EVALUATION:**

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

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

**(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)**

**Responsible Party Contact Name:** Eric J. Earls, P.E

**Phone:** 401.738.2003

**Email:** eric.j.earls@warwickri.com

IV.B.5.b.5	Use the space below to describe activities and actions taken to coordinate with existing State programs requiring post-construction stormwater management.
------------	--

Post-construction stormwater controls for subdivisions and residential developments are inspected by the Engineering Division of the DPW. The Engineering Division also requires plans for the operation and maintenance of storm water management systems to be submitted to the City. The Engineering Division is working on a program to provide home owners associations with a "Maintenance Checklist and Inspection form" to be filled out and returned on an annual basis. A copy of the checklist is attached under Appendix E.

IV.B.5.b.6	Use the space below to describe actions taken for the referral to RIDEM of new discharges of stormwater associated with industrial activity as defined in RIPDES Rule 31(b)(15) (the operator must implement procedures to identify new activities that require permitting, notify RIDEM, and refer facilities with new stormwater discharges associated with industrial activity to ensure that facilities will obtain the proper permits).
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All necessary state permits are required to be obtained, prior to release of a building permit. The development must be approved by the Planning Department, Public Works Department, and other departments as well. The Engineering office did not receive any applications for developments with new stormwater discharges associated with industrial activity, nor detected any existing facilities that need RIPDES permitting.

IV.B.5.b.9	Indicate if the Post-Construction Runoff from New Development and Redevelopment Ordinance was <b>not</b> developed, adopted, and submitted to RIDEM, explain reasons why, submit proposed schedule for completion and identify person(s) / Department and/or parties responsible for the completion of this requirement. <b>Date of Adoption:</b> _____ If the Ordinance was amended in 2021, please indicate why changes were necessary. <b>Please also indicate if amendments have been made based on the 2010 RI Stormwater Design and Installation Standards Manual, and provide references to the amended portions of the local codes/ordinances.</b>
------------	--

The ordinance was adopted in 2016 as part of the City's Consent Agreement with RIDEM. In an email date 3.17.22, the City Solicitor's office provided confirmation that this ordinance is enforceable.

"With regard to the ordinance regulating discharges into the City's Storm Sewer System, RIGL 45-6-1, et seq., is cited as the enabling authority. The authorized penalties allowed in an ordinance enacted under that chapter are set forth in RIGL 45-6-2. The \$250 per violation fine set forth in Sec. 66-20 is enforceable, as RIGL 45-6-2 authorizes a fine of up to \$500 dollars per violation."

IV.B.5.b.12	Use the space below to describe activities and actions taken to identify existing stormwater structural BMPs discharging to the MS4 with a goal of ensuring long term O&M of the BMPs.
-------------	--

Existing structural BMPs are identified and classified throughout the city. The tracking and collating long term O&M for BMPs for developments is done by the Engineering Division. The maintenance of any structural BMP located on non-town property is the obligation of the Homeowners Association. Each Homeowner's Association is required to record a maintenance agreement with the City.

**POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**  
**cont'd**

Additional Measurable Goals and Activities

**SECTION II.A. - Plan and SWPPP/SESC Plan Reviews during Year 18 (2021), Part IV.B.5.b.4:** Review 100% of post-construction BMPs for the control of stormwater runoff from new development and redevelopment projects that result in discharges to the MS4 which incorporates consideration of potential water quality impacts (the program requires reviewing 100% of plans for development projects greater than 1 acre, not reviewed by other State programs). Plan reviews must be conducted by adequately trained personnel.

# of Post-Construction Applications Received: \_\_\_\_\_

# of Post-Construction Reviews Completed: \_\_\_\_\_

# of Permits/Authorizations Issued: \_\_\_\_\_

Summary of Reviews and Findings, include an evaluation of the effectiveness of the program.

The Engineering Division reviews all proposed development plans. These reviews are followed by reviewing any revisions or as-built plans. The Engineering Division will conduct site inspections during construction as well as post-construction to confirm that the contractor has not deviated from the approved plans. These applications are included in Appendix D of this report. RIDEM also conducted an inspection of Winslow Park during this reporting period. A copy of that is also included in Appendix D.

Identify person(s) /Department and/or parties responsible for the implementation of this requirement:

Eric J. Hindinger, Program Manager

Identify the type and date of training this person(s)/parties has/have received to be considered "adequately trained":

19 years of experience processing similar construction permits and countless training seminars throughout those years.

**SECTION II.B. - Post Construction Inspections during Year 18 (2021), Parts IV.G.2.o and IV.B.5.b.10 - Proper Installation of Structural BMPs:** Inspection of BMPs, to ensure these are constructed in accordance with the approved plans (the program must include inspection of 100% of all development greater than one acre within the regulated areas that result in discharges to the MS4 regardless of whom performs the review). Inspections must be conducted by adequately trained personnel.

# of Active Construction Projects:

# of Construction Projects Completed:

# of Site Inspections for proper Installation of BMPs:

# of Complaints Received:

# of Violations Issued:

# of Unresolved Violations Referred to RIDEM:

Summary of Enforcement Actions:

Identify person(s) /Department and/or parties responsible for the implementation of this requirement:

Identify the type and date of training this person(s)/parties has/have received to be considered "adequately trained":

**SECTION II.C. - Post Construction Inspections during Year 18 (2021), Parts IV.G.2.p and IV.B.5.b.11 - Proper Operation and Maintenance of Structural BMPs:** Describe activities and actions taken to track required Operations and Maintenance (O&M) actions for site inspections and enforcement of the O&M of structural BMPs. Tracking of required O&M actions for site inspections and enforcement of the O&M of structural BMPs.

# of Site Inspections for proper O&M of BMPs:

# of Complaints Received:

# of Violations Issued:

# of Unresolved Violations Referred to RIDEM:

**POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**  
**cont'd**

Summary of Activities and Enforcement Actions. Evaluate the effectiveness of the Program in minimizing water quality impacts. The Engineering Division regularly conducts post construction inspections, for the purpose of reviewing the O&M of BMPs. The City of Warwick Engineering Division is developing an inspection form and a filing system to accurately record all inspection. There have been no violations associated with these inspections.

Identify person(s) /Department and/or parties responsible for the implementation of this requirement:  
Engineering Division

**Strategies for requiring the use of non-structural Low Impact Development (LID) site design practices and techniques into stormwater management designs for new and redevelopment projects, check all that apply in your municipality/MS4:**

- ☐ None
- ☐ Ordinances or by-laws requiring LID standards (e.g. reduced road widths, % conservation land, etc.)
- ☐ Ordinances or by-laws requiring LID design at conceptual review (i.e., Pre-application and/or Master Plan) stages for municipal review prior to plans being engineered.
- ☐ Ordinances or by-laws requiring LID standards only in impaired waterbody drainage areas
- ☒ Local development regulations requiring use of LID to the maximum extent practicable
- ☐ LID Guidance available in written form
- ☒ LID Guidance available at pre-application meetings
- ☐ Other strategies to ensure incorporation of LID to the maximum extent practicable, describe:

Person(s)/Department responsible for reviewing submissions for LID:

Person(s)/Department/Board responsible for approving submissions for LID at Preliminary and/or Final Review, if applicable:

**Are you aware of the Municipal LID Self-Assessment that was introduced by the DEM and RI NEMO in 2019 and finalized and distributed in March 2020?**

☐ Yes ☐ No

**A final version of the Municipal LID Self-Assessment is available on the DEM's website:**

<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/t4guide/lid-checklist-primer.pdf>

**Additional guidance is also available:**

<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/t4guide/lid-assessment-fs.pdf>

<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/pdfs/lidfactsheet.pdf>

<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/t4guide/lidplan.pdf>

**Did your community complete the Municipal LID Self-Assessment?** ☐ Yes ☒ No

**If yes and it was completed in 2021, please provide a copy as an attachment to this Annual Report, if you have not already submitted it.**

**If no, does your community plan to complete it?**

☒ Yes ☐ No

**If No, why not?** \_\_\_\_\_

**POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**  
*cont'd*

**Strategies being implemented to ensure long-term Operation and Maintenance (O&M) of privately-owned structural stormwater BMPs, check all that apply in your municipality/MS4:**

- ☐ None
- ☒ Ordinances or by-laws identify BMP inspection responsible party
- ☒ Ordinances or by-laws identify BMP maintenance responsible party
- ☒ Ordinances or by-laws identify BMP inspections and maintenance requirements
- ☒ Ordinances or by-laws provide for easements or covenants for inspections and maintenance
- ☒ Ordinances or by-laws require for every constructed BMP an inspections and maintenance agreement
- ☐ Ordinances or by-laws contain requirements for documenting and detailing inspections
- ☐ Ordinances or by-laws contain requirements for documenting and detailing maintenance
- ☒ Ordinances or by-laws contain authority to enforce for lack of maintenance or BMP failure
- ☐ The MS4 is responsible for inspections of all privately-owned BMPs
- ☐ The MS4 is responsible for maintenance of all privately-owned BMPs
- ☐ Establishment of escrow account for use in case of failure of BMP
- ☐ Other strategies to ensure long-term O&M of privately-owned BMPs, describe:

Does your municipality/MS4 require the use BMPs Operations and Maintenance Agreements? ☒ YES ☐ NO

If YES, please indicate if the Operations and Maintenance Agreements include the following:

- |   |   |  |
|---|---|--|
| a. Party responsible for the long-term O&M of permanent stormwater management BMPs  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| b. A description of the permanent stormwater BMPs that will be operated and maintained  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| c. The location of the permanent stormwater BMPs that will be operated and maintained   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| d. A timeframe for routine and emergency inspections and maintenance of all permanent stormwater management BMPs  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| e. A requirement that all inspections and maintenance activities are documented   | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| f. Annual submission of inspection/maintenance certification/documentation to the MS4   | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| g. Stormwater management easement for access for inspections and maintenance or the preservation of stormwater runoff conveyance, infiltration, and detention areas and other stormwater controls and BMPs by persons other than the property owner | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| h. Steps available for addressing a failure to maintain the stormwater controls and BMPs  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |

Please elaborate, if appropriate:

Does your municipality/MS4 keep an inventory of privately-owned BMPs? ☒ YES ☐ NO

**For privately-owned structural BMPs**, does your municipality/MS4 have a system for tracking:

- |   |   |  |
|---|---|--|
| a. Agreements and arrangements to ensure O&M of BMPs? | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| b. Inspections?                                       | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| c. Maintenance and schedules?                         | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| d. Complaints?  | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| e. Non-Compliance?                                    | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| f. Enforcement actions?                               | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |

Do you use an electronic tool (e.g. GIS, database, spreadsheet) to track post-construction BMPs, inspections, and maintenance? ☐ YES ☒ NO

If yes, please elaborate on which tools are used:

The DPW Engineering Division is attempting to hire a full-time GIS professional to implement this type of program.

*NOTE: BMP maintenance tasks can be a great way to involve and educate the community to their purpose and function. BMPs have the potential to create a highly interactive environment for community members and volunteers to get involved.*





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

### SECTION I. OVERALL EVALUATION:

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

Include information relevant to the implementation of each measurable goal, such as activities and practices used to address on-going requirements, and personnel responsible. Discuss activities to be carried out during the next reporting cycle. If addressing TMDL requirements, please indicate rationale for the activities chosen to address the pollutant of concern.

**(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)**

**Responsible Party Contact Name:** Eric J. Earls, P.E

**Phone:** 401.738.2003

**Email:** eric.j.earls@warwickri.com

IV.B.6.b.1.i Use the space below to describe activities and actions taken to identify structural BMPs (these include but are not limited to: retention/detention basins, vegetated treatment, infiltration and pre-treatment controls, etc.) owned or operated by the small MS4 operator (the program must include identification and listing of the specific location and a description of all structural BMPs in the SWMPP and update the information in the Annual Report). Evaluate appropriateness and effectiveness of this requirement.

**Do you have an inventory of MS4-owned/operated BMPs?** ☒ YES ☐ NO

**Total # of MS4-owned/operated BMPs** (does not include CBs or MHs): 42

IV.B.6.b.1.ii Use the space below to describe activities and actions taken for inspections, cleaning and repair of detention/retention basins, storm sewers and catch basins with appropriate scheduling given intensity and type of use in the catchment area. Evaluate appropriateness and effectiveness of this requirement.

**# of MS4-owned/operated BMPs inspected in 2021:** 1

**# of MS4-owned/operated BMPs maintained/cleaned in 2021:** 0

**# of MS4-owned/operated BMPs repaired in 2021:** 0

Does your municipality/MS4 have a system for tracking:

- |  |   |                             |
|--|---|-----------------------------|
| a. Inspection schedules of MS4-owned BMPs?           | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| b. Maintenance/cleaning schedules of MS4-owned BMPs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| c. Repairs, corrective actions needed?               | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| d. Complaints?                                       | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |

Do you use an electronic tool (e.g. GIS, database, spreadsheet) to track stormwater BMPs, inspections, and maintenance? ☐ YES ☒ NO

**POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd**

IV.B.6.b.1.iii	<p>Use the space below to describe activities and actions taken to support the requirement of yearly inspection and cleaning of all catch basins (a lesser frequency of inspection based on at least two consecutive years of operational data indicating the system does not require annual cleaning might be acceptable). Evaluate appropriateness and effectiveness of this requirement.</p> <p><b>Total # of CBs within regulated area (including SRPW and TMDL areas):</b> <u>5,583</u></p> <p><b># of CBs inspected in 2021:</b> <u>113</u>      <b>% of Total inspected:</b> <u>2</u></p> <p><b># of CBs cleaned in 2021:</b> <u>113</u>      <b>% of Total cleaned:</b> <u>2</u></p> <p>Quantity of sand/debris collected by cleaning of catch basins: <u>N/A</u></p> <p>Location used for the disposal of debris: _____</p> <p>Do you use an electronic tool (e.g. GIS, database, spreadsheet) to track the inspections and cleaning of catch basins?      <input type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p>
<p>Due to mechanical issues the "clamshell" truck was not available. CB cleaning was conducted by the vac-truck. The City has started the procurement process for a new clamshell truck. Unfortunately, due to the current economic conditions, this piece of equipment is not anticipated to arrive until late in 2022. The City has procured the services of an outside vendor to assist with this task. We anticipate getting the program back on a more routine schedule in Spring 2022.</p>	
IV.B.6.b.1.iv	<p>Use the space below to describe activities and actions taken to minimize erosion of road shoulders and roadside ditches by requiring stabilization of those areas. Evaluate appropriateness and effectiveness of this requirement.</p>
<p>The DPW Highway Division regularly inspects the road shoulders during regular operations. Repairs are performed as necessary and reported on the daily foreman's reports.</p>	
IV.B.6.b.1.v	<p>Use the space below to describe activities and actions taken to identify and report known discharges causing scouring at outfall pipes or outfalls with excessive sedimentation, for the Department to determine on a case-by-case basis if the scouring or sedimentation is a significant and continuous source of sediments. Evaluate appropriateness and effectiveness of this requirement.</p>
<p>Scouring caused by discharges are either reported by the public or discovered while inspecting the outfall. Scouring problems are repaired by the DPW.</p>	
IV.B.6.b.1.vi	<p>Use the space below to indicate if all streets and roads within the urbanized area were swept annually and if not indicate reason(s). Evaluate appropriateness and effectiveness of this requirement.</p> <p><b>Total roadway miles within regulated area (including SRPW and TMDL areas):</b> <u>395</u></p> <p><b>Roadway miles that were swept in 2021:</b> <u>180 approx.</u>      <b>% of Total swept:</b> <u>50</u></p> <p>Type of sweeper used:      <input checked="" type="checkbox"/> Rotary brush street sweeper      <input type="checkbox"/> Vacuum street sweeper</p> <p>Quantity of sand/debris collected by sweeping of streets and roads: <u>147 loads x 3.5 CY/load = 514.5 CY (approx.)</u></p> <p>Location used for the disposal of debris: <u>RI Resource Recovery, Johnston, RI</u></p> <p>Do you use an electronic tool (e.g. GIS, database, spreadsheet) to track the annual sweeping of streets and roads?      <input checked="" type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p>
<p>The City completed approximately half of the street sweeping requirements in 2021 before the street sweeping equipment failed. The City has been working on this equipment and we anticipate have two operating street sweepers and one backup as we start the program in Spring 2022. More detailed information is available on the attached spreadsheets.</p>	
IV.B.6.b.1.vii	<p>Use the space below to describe activities and actions taken for controls to reduce floatables and other pollutants from the MS4. Evaluate appropriateness and effectiveness of this requirement.</p>

**POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd**

<p>During sweeping operations potential floatables are removed. The City has also replaced all trash receptacles at Oakland Beach with Big Belly ® solar trash compactors, which minimize the amount of loose trash. They also prohibit access to birds and other vermin.</p>	
<p>IV.B.6.b.1.viii</p>	<p>Use the space below to describe the method for disposal of waste removed from MS4s and waste from other municipal operations, including accumulated sediments, floatables and other debris and methods for record-keeping and tracking of this information.</p> <p>Do you have a system for tracking actions to remove and dispose of waste?      <input checked="" type="checkbox"/> YES      <input checked="" type="checkbox"/> NO</p>
<p>The volume of material removed during sweeping and catch basin cleaning operations is recorded on the foreman's daily work reports. These reports are kept on file within the DPW. These reports are also included in street sweeping documentation included under Appendix I.</p>	
<p>IV.B.6.b.2</p>	<p>Use the space below to describe any operations under the MS4's legal control, including activities and facilities, that have the potential to introduce pollutants into stormwater runoff, such as pesticide/herbicide/fertilizer application, chemical and waste handling and storage, vehicle fueling, vehicle washing, vehicle maintenance, sand/salt storage, snow disposal, facilities such as public works facilities with maintenance and storage yards, waste transfer stations, municipal wastewater and water treatment facilities, and municipal parking owned and operated by the MS4.</p> <p>Does your MS4 have any salt piles, or piles containing salt, used for deicing?  <input checked="" type="checkbox"/> YES      <input type="checkbox"/> NO</p> <p>If yes:          Are these piles, covered to prevent exposure to rain, snow, snowmelt and/or runoff?  <input type="checkbox"/> YES      <input checked="" type="checkbox"/> NO          If yes, check the type of cover used:  <input type="checkbox"/> Weatherproof permanent structure/shelter  <input type="checkbox"/> A temporary, secured, durable, waterproof covering (e.g., tarpaulin, polyethylene, polyurethane)          Are these piles located on impermeable surfaces?  <input checked="" type="checkbox"/> YES      <input type="checkbox"/> NO</p>
<p>The DPW has incorporated a salt shed into our capital improvement budget for FY2023. Currently, DPW maintains hay bales around the salt pile and minimizes the amount of stored material, both for environmental and economic reasons.</p>	
<p>IV.B.6.b.4 and IV.B.6.b.5</p>	<p>Use the space below to describe and indicate activities and corrective actions for the evaluation of compliance. This evaluation must include visual quarterly monitoring; routine visual inspections of designated equipment, processes, and material handling areas for evidence of, or the potential for, pollutants entering the drainage system or point source discharges to a waters of the State; and inspection of the entire facility at least once a year for evidence of pollution, evaluation of BMPs that have been implemented, and inspection of equipment. A Compliance Evaluation report summarizing the scope of the inspection, personnel making the inspection, major observations related to the implementation of the Stormwater Management Plan (formerly known as a Stormwater Pollution Prevention Plan), and any actions taken to amend the Plan must be kept for record-keeping purposes.</p>
<p>The Engineering Division has created a log to track inspections and to document activities and comments. This log will be used as a tracking mechanism to annually review all BMPs. By tracking these inspections the Engineering Division anticipates a more consistent and detailed approach to data collection in subsequent reporting periods.</p>	

**POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd**

IV.B.6.b.6	<p>Use the space below to describe all employee training programs used to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance for the past calendar year, including staff municipal participation in the URI NEMO stormwater public education and outreach program and all in-house training conducted by municipality or other parties. Evaluate appropriateness and effectiveness of this requirement.</p> <p>How many stormwater management trainings have been provided to <i>municipal employees</i> during this reporting period? _____</p> <p>What was the date of the last training? ____/____/____</p> <p>How many <i>municipal employees</i> have been trained in this reporting period? _____</p> <p>What percent of <i>municipal employees</i> in relevant positions and departments received stormwater management training? _____ %</p> <p>Have <i>municipal employees</i> that are responsible for inspecting or cleaning catch basins also been trained to detect and report illicit connections or non-stormwater discharges? _____</p>
<p>In 2017, representatives from the Engineering Division and Highway Division met with representatives from URI Coastal Institute and UNH Stormwater Center to discuss proper maintenance for green infrastructure, specifically, the bioretention areas along Suburban Parkway.</p>	
IV.B.6.b.7	<p>Use the space below to describe actions taken to ensure that new flow management projects undertaken by the operator are assessed for potential water quality impacts and existing projects are assessed for incorporation of additional water quality protection devices or practices. Evaluate appropriateness and effectiveness of this requirement.</p>
<p>Engineering reviews all proposed project and verifies that BMPs are used for all new flow management projects. Design and construction of all BMPs must be completed in accordance with the RIDEM's Rhode Island Stormwater Design &amp; Installation Standards Manual. Erosion and sediment controls must be evaluated and implemented in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook.</p>	
<p>Additional Measurable Goals and Activities</p>	

**SECTION II.A - Structural BMPs (Part IV.B.6.b.1.i)** These include but are not limited to: retention/detention basins, vegetated treatment, infiltration and pre-treatment controls, etc.

BMP ID:	Location:	Name of BMP Owner/Operator:	Description of BMP:	Frequency of Inspection:
See Attached Appendix F				

**POLLUTION PREVENTION AND GOOD HOUSEKEEPING IN MUNICIPAL OPERATIONS cont'd**

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

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

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

The City has completed several supplemental environmental projects, per the NOV. A summary of those projects can be found in Appendix G

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



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

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

(Note: Identify parties responsible for achieving the measurable goals and reference any reliance on another entity for achieving measurable goals. Mark with an asterisk (\*) if this person/entity is different from last year.)

Responsible Party Contact Name & Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

LIST OF IMPAIRED WATERS:				
Impaired Water Body: Greenwich Bay  WBID:	Pollutants Causing Impairments:  Pathogen/Bacteria	Has TMDL been completed? Has MS4 been notified of TMDL requirements? Has MS4 developed a Scope of Work or TMDL Implementation Plan?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO	
Impaired Water Body: Buckeye Brook and Tribs  WBID:	Pollutants Causing Impairments: Benthic-Macroinvertebrate Bioassessments, Dissolved Oxygen, Total Iron, Dissolved Cadmium, Copper, and Lead	Has TMDL been completed? Has MS4 been notified of TMDL requirements? Has MS4 developed a Scope of Work or TMDL Implementation Plan?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO	
Impaired Water Body: Gorton, Sand, and Warwick Ponds  WBID:	Pollutants Causing Impairments:  Phosphorus	Has TMDL been completed? Has MS4 been notified of TMDL requirements? Has MS4 developed a Scope of Work or TMDL Implementation Plan?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> NO	
What kind of public education and outreach strategy does the MS4 implement to target each pollutant of concern? (e.g., signage on installed stormwater controls, resources on website, pamphlets about litter, pet waste, grass clippings, fertilizer use, etc.)				
Pollutant of Concern:		Strategy:	Target Audience:	
Has the MS4 installed stormwater BMPs or required the installation of stormwater BMPs on private property to address impairments? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
If yes, indicate the name of the impaired water body associated with the stormwater control, type of stormwater control, date installed, ownership, and who is responsible for maintenance:				
Impaired water body	Type of Stormwater Control:	Date Installed:	<input type="checkbox"/> Municipally Owned <input type="checkbox"/> Privately Owned	Who maintains it?
[add as necessary]				

***TOTAL MAXIMUM DAILY LOAD (TMDL) OR OTHER WATER QUALITY DETERMINATION REQUIREMENTS cont'd***

Additional enhanced minimum measures used to address water quality issues (e.g., increased street sweeping or catch basin cleaning in areas with high pollutant loading, installation of floatable traps/screens, etc.):



## SPECIAL RESOURCE PROTECTION WATERS (SRPWs)

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**SECTION I.** In accordance with §1.32(A)(5)(a)(7) of the *Regulations for the Rhode Island Pollutant Discharge Elimination System* (RIPDES Regulations), on or after March 10, 2008, any discharge from a small municipal separate storm sewer system to any Special Resource Protection Waters (SRPWs) or impaired water bodies within its jurisdiction must obtain permits if a waiver has not been granted in accordance with §1.32(G)(5)(c). A list of SRPWs can be found in §1.28 of the *RIDEM Water Quality Regulations* at this link: [Water Quality Regulations \(250-RICR-150-05-1\) - Rhode Island Department of State](#)

The 2018-2020 303(d) Impaired Waters Report can be found here: [iwr1820.pdf \(ri.gov\)](#)

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





# 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 stormwater under the Rhode Island Pollutant Discharge Elimination System (RIPDES) Stormwater General Permit for Small Municipal Separate Storm Sewer Systems and Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s (hereafter referred to as "the General Permit"), must submit an Annual Report, outlined in Part IV.G of the permit. The Report must be submitted each year after permit issuance **by March 10<sup>th</sup>** to track progress of compliance. If you have questions regarding this Annual Report Form contact Jennifer Stout of the Rhode Island Department of Environmental Management (RIDEM), Office of Water Resources, Permitting Section at (401) 222-4700 ext. 277726.

The Annual Report must be submitted to:

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

#### **INSTRUCTIONS FOR COMPLETION:**

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

###### **"RIPDES Permit #"**

Include your permit ID # to ensure proper tracking.

###### **"Operator of MS4"**

Give the legal name of the person, firm, public (municipal) organization, or any other entity that is responsible for day-to-day operations of the MS4 described in this application (as defined in Title 250 RICR-150-10-1 ("RIPDES Regulations") §§1.3 and 1.12). 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 Regulations §§1.3 and 1.12). 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 Regulations §1.12);

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

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

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

##### **SECTION I- OVERALL EVALUATION OF BMPS AND MEASURABLE GOALS:**

One or more pages, front and back, are provided to report on the status of measurable goals which have been developed to aid in the implementation of strategies, procedures, and programs used to achieve each of the six minimum control measures in Part IV.B of the General Permit. This section provides narrative space for a descriptive explanation and evaluation of the actions taken to satisfy each of the minimum control measures for the 2021 calendar year. Please type or print. If additional space is needed, modify as necessary. Please submit attachments to the appropriate minimum control measure following the format provided.

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

Please provide a general summary of actions taken (implementation of BMPs, development of procedures, events, etc.) to meet the measurable goals of the minimum measure. **Be sure to identify parties responsible for achieving each measurable goal** and reference any reliance on another entity for achieving any measurable goal. **Mark with an asterisk (\*) if this person/entity is different from last year.**

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

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

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

## **SECTION II- ADDITIONAL ANNUAL REPORT REQUIREMENTS**

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

**Minimum Control Measure #2: Section II:**

Specify the date of and how the annual report was public noticed. If a public meeting was needed, provide the date and place. Include a summary of public comments received

in the public comment period of the draft annual report and planned responses or changes to the program (new or revised BMP's and measurable goals, partnerships, etc.). Be sure to attach a copy of your public notice (Parts IV.G.2.h and IV.G.2.i) to the Annual Report.

**Minimum Control Measure #3: Section II.A:**

Provide the number of illicit discharges identified in 2021, number of illicit discharges tracked in 2021, number of illicit discharges eliminated in 2021, complaints received, complaints investigated, violations issued and resolved with a summary of enforcement actions, number of unresolved violations that have been referred to RIDEM, the total number of illicit discharges identified to date, and the total number of illicit discharges remaining unresolved at the end of 2021. Include a short narrative describing the extent to which your system has been mapped (Part IV.G.2.m), and the total number of outfalls identified to date.

**Minimum Control Measure #3: Section II.B:**

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

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

Identify the number of construction and post-construction plan and SWPPP/SESC Plan reviews completed during Year 18 (2021) and any additional information. This includes, but is not limited to a summary of the reviews, responsible parties, and types of projects reviewed.

**Minimum Control Measure #4: Section II.B:**

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

**Minimum Control Measure #5: Section II.B:**

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

**Minimum Control Measure #5: Section II.C:**

Inspection information for proper operation and maintenance of post-construction structural BMPs should be submitted annually as stated in Part IV.G.2.p. This should provide a summary of the number of site inspections conducted, inspections that have resulted in

enforcement actions, violations that have been resolved and of those unresolved, referred to RIDEM.

**Minimum Control Measure #6: Section II.A:**

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

**Minimum Control Measure #6: Section II.B:**

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

**Minimum Control Measure #6: Section II.C:**

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

**Minimum Control Measure #6: Section II.D:**

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

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

**Section I:**

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

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

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

***SPECIAL RESOURCE PROTECTION WATERS (SRPWs)***

**Section I:**

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

a SRPW as listed in §1.28 of the *RIDEM Water Quality Regulations* at this link:

[Water Quality Regulations \(250-RICR-150-05-1\) - Rhode Island Department of State](#)

or

an impaired water body including water bodies with no approved TMDL as listed in the 2018-2020 303(d)

*Impaired Waters Report* at this link: [iwr1820.pdf \(ri.gov\)](#)

In accordance with §1.32(A)(5)(a)(7) in the *Regulations for the Rhode Island Pollutant Discharge Elimination System* (RIPDES Regulations), MS4s were required to incorporate any discharges to these waterbodies into their MS4 Program on or after March 10, 2008 unless a waiver has been granted in accordance with §1.32(G)(5)(c).

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