

Stormwater Control Plan for Group 1A (4090900) Aquidneck Island

Waterbody	RI Waterbody ID	EPA Approval Date	Amendment Date(s)
<i>Almy Pond</i>	<i>RI0010047L-01</i>	<i>TBD</i>	<i>N/A</i>
<i>Bailey's Brook</i>	<i>RI0007035R-01</i>	<i>TBD</i>	<i>N/A</i>
<i>East Passage</i>	<i>RI0007029E-01O</i>	<i>TBD</i>	<i>N/A</i>
<i>Gardiner Pond</i>	<i>RI0007035L-01</i>	<i>TBD</i>	<i>N/A</i>
<i>Lawton Brook</i>	<i>RI0007035R-04</i>	<i>TBD</i>	<i>N/A</i>
<i>Lawton Valley Reservoir</i>	<i>RI0007035L-06</i>	<i>TBD</i>	<i>N/A</i>
<i>Lily Pond</i>	<i>RI0010047L-02</i>	<i>TBD</i>	<i>N/A</i>
<i>Little Creek</i>	<i>RI0010031R-02</i>	<i>TBD</i>	<i>N/A</i>
<i>Maidford River</i>	<i>RI0007035R-02A</i>	<i>TBD</i>	<i>N/A</i>
<i>Maidford River</i>	<i>RI0007035R-02B</i>	<i>TBD</i>	<i>N/A</i>
<i>Melville Ponds</i>	<i>RI0007029L-01</i>	<i>TBD</i>	<i>N/A</i>
<i>Nelson Paradise Pond</i>	<i>RI0007035L-02</i>	<i>TBD</i>	<i>N/A</i>
<i>Nonquit Pond</i>	<i>RI0007035L-08</i>	<i>TBD</i>	<i>N/A</i>
<i>North Easton Pond</i>	<i>RI0007035L-03</i>	<i>TBD</i>	<i>N/A</i>
<i>Pachet Brook</i>	<i>RI0010031R-03</i>	<i>TBD</i>	<i>N/A</i>
<i>Paradise Brook</i>	<i>RI0007035R-03</i>	<i>TBD</i>	<i>N/A</i>
<i>Potter Cove</i>	<i>RI0007029E-03</i>	<i>TBD</i>	<i>N/A</i>
<i>Saint Mary's Pond</i>	<i>RI0007035L-05</i>	<i>TBD</i>	<i>N/A</i>
<i>South Easton Pond</i>	<i>RI0007035L-04</i>	<i>TBD</i>	<i>N/A</i>
<i>Sisson Pond</i>	<i>RI0007035L-10</i>	<i>TBD</i>	<i>N/A</i>
<i>Watson Reservoir</i>	<i>RI0007035L-07</i>	<i>TBD</i>	<i>N/A</i>

Executive Summary

This Stormwater Control Plan (SCP) is an assessment of the Rhode Island Department of Transportation (RIDOT) roadway discharge to a group of impaired waterbodies and identification of potential stormwater treatment measures to address water quality issues. This SCP satisfies the applicable compliance requirements under the RI Pollutant Discharge Elimination System (RIPDES) permit¹ and the USEPA Final Consent Decree, dated December 22, 2015².

This report assesses 21 impaired waterbody segments as listed in **Table 1** below and as shown in **ArcGIS Online Figure 1/2: Group SCP Watershed Locus**. The Group 1A waterbodies are part of the Narragansett Bay Watershed, located within the Towns of Portsmouth, Middletown, Tiverton, and Little Compton and the City of Newport. 16 of the 21 waterbodies are located on Aquidneck Island, discharging to the Upper East Passage, Lower East Passage, Sakonnet River, and Aquidneck Island – Frontal Atlantic Ocean. Three (3) waterbodies are located in mainland Tiverton and Little Compton and two (2) are located on Prudence Island. **Table 2** below provides a summary of the watershed statistics and applicable TMDL documents. The evaluation and recommendation for improvements to the existing stormwater systems within SCP Group 1A contained within this report, will serve as an update to RIDOT's stormwater management plan as required by the TMDL.

Note: SCP data may have been updated since submission of this SCP Group (refer to the SCP database for any updates). The data presented in the following SCP report(s) reflects what was approved by EPA at the time of SCP submittal.

Group 1A Watershed Summary

Towns:	Portsmouth, Middletown, Newport, Tiverton, Little Compton
General Land Uses:	Forest, Farmland, Residential, Commercial
Watershed Size:	16,269 acres
Impervious Cover:	11.8% (1,921 ac)
RIDOT Roadways:	RI-114, RI-138, RI-138A, RI-214, Union Ave, Middle Rd, Hanging Rock Rd, Sachuest Point Rd
Applicable TMDLs:	Total Maximum Daily Loads for Phosphorus To Address 9 Eutrophic Ponds in Rhode Island – September 2007 Statewide Bacterial TMDL – September 2011

¹ General Permit Rhode Island Pollutant Discharge Elimination System Storm Water Discharge from Small Municipal Separate Storm sewer Systems and from Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s RIDOT Permit Number RIR040000-36.

² United States of America, December 22, 2015. Final Consent Decree. Civil Action No. CV-15-433.

Table 1: Group 1A Summary

Water Body Segment	RIDEM WBID	Impairment(s) ¹	Evaluation Methodology	RIDOT Reduction Target % (Load/Acres)	Existing Treatment	Potential Treatment	Remaining RIDOT Reduction Target ²	NonRIDOT Treatment Credit (%)
<i>Almy Pond</i>	<i>RI0010047L-01</i>	<i>Total Phosphorus*</i>	<i>TMDL Method</i>	<i>The Almy Pond subwatershed does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.</i>				
<i>Bailey's Brook & Tribs</i>	<i>RI0007035R-01</i>	<i>Enterococcus** Total Phosphorus Lead***</i>	<i>IC Method</i>	<i>69% (27.8 ac)</i>	<i>16.1 ac</i>	<i>25.1 ac</i>	<i>0 ac</i>	<i>74%</i>
<i>East Passage</i>	<i>RI0007029E-01O</i>	<i>Dissolved Oxygen</i>	<i>N/A</i>	<i>The East Passage subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.</i>				
<i>Gardiner Pond</i>	<i>RI0007035L-01</i>	<i>Total Phosphorus Total Organic Carbon</i>	<i>N/A</i>	<i>The Gardiner Pond subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.</i>				
<i>Lawton Brook</i>	<i>RI0007035R-04</i>	<i>Benthic-Macroinvertebrate Bioassessments</i>	<i>IC Method</i>	<i>62% (4.4 ac)</i>	<i>0 ac</i>	<i>7.3 ac</i>	<i>0 ac</i>	<i>65%</i>
<i>Lawton Valley Reservoir</i>	<i>RI0007035L-06</i>	<i>Total Phosphorus Total Organic Carbon</i>	<i>IC Method</i>	<i>4.8% (0.2 ac)</i>	<i>0 ac</i>	<i>0.5 ac</i>	<i>0 ac</i>	<i>15%</i>
<i>Lily Pond</i>	<i>RI0010047L-02</i>	<i>Total Phosphorus Enterococcus</i>	<i>N/A</i>	<i>The Lily Pond subwatershed does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.</i>				
<i>Little Creek</i>	<i>RI0010031R-02</i>	<i>Enterococcus</i>	<i>N/A</i>	<i>The Little Creek subwatershed does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.</i>				

Maidford River	RI0007035R-02A	Fecal Coliform** Total Phosphorus Lead Turbidity Benthic-Macroinvertebrate Bioassessments	IC Method	9% (0.4 ac)	0 ac	2.0 ac	0 ac	5%
Maidford River	RI0007035R-02B	Fecal Coliform**	IC Method	17% (0.7 ac)	0 ac	1.6	0 ac	58%
Melville Ponds	RI0007029L-01	Total Phosphorus	IC Method	47% (3.9 ac)	0 ac	4.9 ac	0 ac	52%
Nelson Paradise Pond	RI0007035L-02	Total Phosphorus Total Organic Carbon	N/A	The Nelson Paradise Pond subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.				
Nonquit Pond	RI0007035L-08	Total Phosphorus Total Organic Carbon	N/A	The Nonquit Pond subwatershed has less than 10% impervious cover, therefore an SCP was not prepared for this segment.				
Water Body Segment	RIDEM WBID	Impairment(s) ¹	Evaluation Methodology	RIDOT Reduction Target % (Load/Acres)	Existing Treatment	Potential Treatment	Remaining RIDOT Reduction Target ²	NonRIDOT Treatment Credit (%)
North Easton Pond	RI0007035L-03	Total Phosphorus* Chlorophyll-a Total Organic Carbon	TMDL Method	80% (15.8 lb/yr)	0 lb/yr	18.5 lb/yr	0 lb/yr	69%
South Easton Pond	RI0007035L-04	Total Phosphorus Total Organic Carbon	N/A	The South Easton Pond subwatershed has been combined with the North Easton Pond subwatershed, therefore a separate SCP was not prepared for this segment.				
Pachet Brook	RI0010031R-03	Enterococcus Fecal Coliform	N/A	The Pachet Brook subwatershed has less than 10% impervious cover, therefore an SCP was not prepared for this segment.				
Paradise Brook	RI0007035R-03	Fecal Coliform Total Phosphorus Turbidity	N/A	The Paradise Brook subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.				

Potter Cove	RI0007029E-03	Dissolved Oxygen	N/A	The Potter Cove subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.
Saint Mary's Pond	RI0007035L-05	Total Phosphorus Total Organic Carbon	N/A	The Saint Mary's Pond subwatershed has less than 10% impervious cover, therefore an SCP was not prepared for this segment.
Sisson Pond	RI0007035L-10	Total Phosphorus Total Organic Carbon	N/A	The Sisson Pond subwatershed has less than 10% impervious cover and does not contain any RIDOT roads, therefore an SCP was not prepared for this segment.
Watson Reservoir	RI0007035L-07	Total Phosphorus Total Organic Carbon	N/A	The Watson Reservoir subwatershed has less than 10% impervious cover, therefore an SCP was not prepared for this segment.

1. RIDEM, March 2018, 2016 Integrated Water Quality Monitoring and Assessment List – Appendix A 2016 Index of Waterbodies and Category Listing. Available at: <http://dem.ri.gov/programs/benviron/water/quality/surfwq/pdfs/iwr16.pdf>. Only stormwater-related impairments as defined by the Consent Decree: United States of America, December 22, 2015. Final Consent Decree. Civil Action No. CV-15-433
 2. Remaining RIDOT reduction target accounting for existing and potential STUs.
- * Impairment is covered by TMDL: Total Maximum Daily Loads for Phosphorus To Address 9 Eutrophic Ponds in Rhode Island – September 2007
- ** Impairment is covered by TMDL: Statewide Bacterial TMDL – September 2011