

Date Submitted to EPA: 12/21/2018
EPA Approved: TBD
Date Amended: N/A
Amendment Notes: N/A

Narragansett Bay Watershed SCP Paradise Brook (RI0007035R-03) Middletown, RI

Subwatershed Summary

- The subwatershed is located in Middletown, RI.
- The subwatershed is 361 acres and 8.0% impervious.
- The general land uses within the subwatershed are deciduous forest, brushland, cropland, and low- and medium-density residential.
- A TMDL for Bacteria for Paradise Brook does not require any specific actions from RIDOT.
- The subwatershed does not contain any RIDOT roads or any "Other RIDOT roadways"

Site Description

Paradise Brook (RI0007035R-03) is located within the Narragansett Bay Watershed. The Paradise Brook subwatershed is located in the eastern part of Middletown. Paradise Brook originates at the north end of the subwatershed just south of Fayal Lane, where it drains mostly agricultural land. The brook flows south through woodland and brushland, enters some residential areas, and continues on through more woodland before discharging to Nelson Paradise Pond.

The Rhode Island Department of Environmental Management (RIDEM) water quality classification for the Paradise Brook is Class AA. Class AA waters are designated as a source of public drinking water supply (PDWS) or as tributary waters within a public drinking water supply watershed, for primary and secondary contact recreational activities and for fish and wildlife habitat. According to RIDEM's Clean Water Act (CWA) Integrated List of Waterbodies – Appendix A 2016 Index of Waterbodies and Category Listing,¹ the impairments affecting this waterbody segment are total phosphorus, turbidity, and fecal coliform. RIDEM has classified Paradise Brook as a Category 5 impaired waterbody that is not supporting fish and wildlife habitat or primary and secondary contact recreation. Fish consumption and public drinking water supply have not been assessed. A TMDL for fecal coliform was developed in September 2011 that identified agricultural activities, wildlife and domestic animal waste, stormwater runoff from developed areas, and illicit discharges as sources of the impairment². The TMDL states "Middletown and RIDOT will have no changes to their Phase II permit requirements and no TMDL Implementation Plan (TMDL IP) will be

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>

² Rhode Island Statewide TMDL for Bacteria Impaired Waters – Paradise Brook

required at this time for the Paradise Brook watershed". TMDLs for the phosphorus and turbidity impairments are scheduled for 2018.

According to 2011 land use data obtained from the Rhode Island Geographic Information System (RIGIS),³ the general land uses within the Paradise Brook subwatershed are deciduous forest, brushland, cropland, and low- and medium-density residential. The subwatershed is approximately 361 acres, 8.0% of which are impervious based on impervious cover data from RIGIS.

The Paradise Brook subwatershed (RI0007035R-03) has less than 10% impervious cover, a TMDL stating RIDOT is not responsible for TMDL actions, and no RIDOT roadways or "Other RIDOT roadways"; therefore, preparation of an SCP is not required for the Paradise Brook water body segment.

³ Rhode Island Department of Environmental Management, Rhode Island Department of Administration, Statewide Planning Program, Photo Science, Inc. www.rigis.org