

Town of Haverhill
MS4 Permit No. FLS000018-004
Part V. – Monitoring Requirements; Sub-part A. –
Assessment Program

Assessment Program Objective

The purpose of this assessment program is to provide information for the Town of Haverhill to determine the overall effectiveness of its Stormwater Management Program (SWMP) in reducing stormwater pollutant loadings from its Municipal Separate Storm Sewer System (MS4) to receiving water bodies.

Assessment Program Components

As required by the MS4 Permit, the following parts make up this Assessment Program:

- A. **A Water Quality Monitoring Plan** – The Town of Haverhill is relying on the water quality data as collected by the Palm Beach County NPDES Co-Permittee Joint Water Quality Monitoring Program.
- B. **A Pollutant Loading Estimate Plan** – The Town of Haverhill consists primarily of residential land uses. Commercial properties are concentrated on the Palm Beach County (PBC) roadways which transect the Town, such as Belvedere Road and Haverhill Road. These roadways are served by separate PBC stormwater systems. The Town’s two major NPDES outfalls serve residential drainage areas and discharge is to the Lake Worth Drainage District’s L-4 Canal, which discharges to the South Florida Water Management’s C-51 Canal.

Although currently, there is no indication that the Town has water quality issues, the objective of the Pollutant Loading Estimate Plan is to estimate Pollutant Loading from the MS4 contributing area based on land uses and Best Management practices (BMPs).

- C. **An Evaluation and Response Plan** – The response plan is the plan of action to be taken based on the results of the Water Quality Monitoring Plan and Pollutant Loading Estimate Plan to:
 - 1. Evaluate trends in pollutant loading from the MS4
 - 2. Evaluate trends in water quality (of discharge from the MS4)
 - 3. Identify portions of the MS4 to be targeted for loading reduction/corrective action

Part A – Water Quality Monitoring Plan

As a co-permittee, the Town of Haverhill uses the ambient water quality data obtained through the Palm Beach County MS4 NPDES Program, where Northern Palm Beach County Improvement District is the Lead Permittee.

Monitoring Locations

Based on the location of the outfalls from our MS4, the Town of Haverhill will rely on two monitoring stations that have been established and from which data is collected by the Palm Beach County NPDES

Co-Permittee Joint Water Quality Monitoring Program. The monitoring locations are listed in the table below:

MS4 Monitoring Stations Table

Monitoring Station No.	Location Description	Northing/Easting	Receiving Water Body	Verified Impaired?	Adopted TMDL
37B	C-51	853637.29/916592.84	C-51 Stub Canal	No	No
C51S155	C-51 at S-155 Structure	841132.85/964349.43	C-51 Stub Canal	No	No

Sampling Method and Monitoring Parameters

Information on the sampling and monitoring parameters is contained in the group Joint Annual Report (refer to www.pbc-npdes.org under Annual Reporting). The Town will review the water quality data in the C-51 Basin to identify notable nutrient water quality and perform an assessment comparison with applicable water quality standards.

Part B – Pollutant Loading Estimate Plan

The Palm Beach County MS4 permittee group will be developing pollutant loading estimates during the 3rd year of this permit cycle, using the SIMPLE protocol. In order to provide each permittee with pollutant loading estimates that reflect their respective MS4 areas, the group effort will provide the loading estimates “by MS4,” in addition to “by watershed” (as was done in past permit cycles). Prior to Year 3, the Town of Haverhill will participate in this effort by reviewing its MS4 contributing areas to the receiving water, and will provide updated information on the area extents and the land uses located therein. In addition, any water quality best management practices (BMPs) that are in place within the MS4 area, will be identified, along with their geospatial extent.

The group’s estimated pollutant loading results will be provided to each permittee for use in this assessment effort.

To determine a practical estimate of the current pollutant loading, the Town of Haverhill will use the land-use based pollutant loading estimates provided by the group as the starting point from which pollutant load reductions will be subtracted. The pollutant load reductions will be estimated based on the BMPs that have been put in place within the MS4 contributing areas. In this way, when future estimates are done, and potentially additional reduction measures or BMPs are put in place, the estimated pollutant loading will reflect the reductions.

Part C – Evaluation and Response Plan

Once the Assessment Program is approved by FDEP, presumably sometime during Year 2 of the permit cycle, the Town of Haverhill will utilize data based on the sample results compiled in the Joint Annual

Report. The first annual report on the Assessment Program will be concurrent with the Year 3 Annual Report Form (March 2020).

Water quality monitoring results will be available annually, and the most recent year's data will be compared to that which came before, with respect to our MS4 C-51 sampling points. A summary of the water quality monitoring data trends/graphs, with respect to our MS4 and monitoring stations C51S155 and 37B will be developed, evaluated and included with the Town's Annual Assessment Report.

The pollutant loading estimates developed during Year 3 of the permit cycle will be reviewed and compared with previous permit cycles, with respect to our MS4. In addition, receiving water trending reports/graphs for various parameters, as presented in the Joint Annual Report will be reviewed and a discussion will be included in the Assessment Program Annual Report.

Based on the data from the water quality monitoring and pollutant loading estimates, an effort will be made to determine the effectiveness of the Town's Stormwater Management Programs (litter control, public education, maintenance, construction inspections, etc.) and to identify areas of the MS4 that may need improvement.