

TOWN OF LAKE CLARKE SHORES

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 Lake Clarke Shores 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 Lake Clarke Shores is relying on the group data. Lake Clarke Shores will use these data from the group to evaluate trends and generate its own MS4 assessment.
- B. **A Pollutant Loading Estimate Plan** – The Town of Lake Clarke Shores MS4 is almost all single family residential with some Town facilities. There is commercial along Forest Hill Boulevard, however these facilities are private and drain into the Palm Beach County system. As the Town was developed over 50 years ago, the drainage system is comprised of many drainage outfalls into the LWDD canals that run through the Town or into Lake Clarke both of which discharge to the SFWMD C-51 Canal that borders the Town on the east. Of these Town outfalls only 4 are NPDES outfalls. As the LWDD, private, and Town systems interconnect through Lake Clarke and the LWDD canals; any water quality monitoring would have to be at the storm drain outfalls during a storm event. As these MS4 discharges are serving single family residential and Town facilities, low pollutant loading rates are typical. Due to the aforementioned facts, the Town of Lake Clarke Shores is relying on the group data and report.
- C. **An Evaluation and Response Plan** – The response plan is the plan of action to be taken based on the results from A. and B. and will be used to:
 1. evaluate trends in pollutants loading from the MS4 — see Group Report.
 2. evaluate trends in water quality (of discharge from the MS4) — see Group Report.
 3. identify portions of the MS4 to be targeted for loading reduction/corrective action — Group Report to date does not indicate any areas need to be targeted.

Part A – Water Quality Monitoring Plan

The Town of Lake Clarke Shores will rely on the Group Report and use the water quality data therein.

Monitoring Locations

The Town of Lake Clarke Shores will rely on the Group Report. There are several LWDD canals that flow through Lake Clarke Shores. Lake Clark is a "Water of the State" just to the west of SFWMD's major outfall (S-155) from the C-51 Basin. C-51 discharges to the central section of the LWL and flow can be either to the north to the Palm Beach Inlet or south to Boynton Inlet, although Boynton inlet is closer.

The upstream station is in the C-51 Canal at SR7 and is 37B. There are numerous downstream stations, the closest being 18C. These two stations will be used although there are numerous downstream data points that may be helpful.

Sampling Method

Not Applicable.

Monitoring Parameters

See Group Report

Part B – Pollutant Loading Estimate Plan

The Town of Lake Clarke Shores will rely on the Group Report. The 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, Lake Clarke Shores has participated in this effort by updating its MS4 contributing areas to the receiving water, and will provide updated information on the area extents and the land uses located therein if needed. In addition, any water quality best management practices (BMPs) will be updated as applicable.

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.

The EMC values to be used in the Cycle 4 pollutant loading estimates will be the same as those used in Cycle 3. This will provide consistency in comparing data. Trends in these data will be tracked per permit cycle. Cycle 3 is the base and trends can be established thereafter in pollutant loadings based on the new Group loading estimates "by MS4". New pollutant load estimates by MS4 will be tracked starting with Cycle 4 (Cycle 3 is the base so trends can't be established with one point).

Part C – Evaluation and Response Plan

The Town of Lake Clarke Shores will review the sites cited above, i.e. at least sites 37A, and 18C will be reviewed at the sample collection site as well as upstream to downstream to see if trends exist. As stated above Lake Clarke Shores may also look at the adjacent Lake Worth Lagoon locations should these cited locations prove to be indeterminate or have insufficient data. Lake Clarke Shores will generate its own MS4 assessments to determine the effectiveness of the Town's program and whether there is a need to implement additional pollutant reduction measures.