

Town of Jupiter Inlet Colony
NPDES Stormwater Permitting Program

***'Monitoring Requirements/
Assessment Plan'***

(MS4 Permit No. FLS000018-004, Part V, Sub-Part A)

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TOWN OF JUPITER INLET COLONY
MS4 Permit No. FLS000018-004
Part V. – Monitoring Requirements
Sub-part A. –Assessment Plan

Assessment Program Objective

The purpose of this assessment program is to provide information for the Town of Jupiter Inlet Colony 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 water quality monitoring plan is intended to identify local sources where urban stormwater is adversely affecting surface water resources
- B. **A Pollutant Loading Estimate Plan** – The pollutant loading exercise is to estimate the Pollutant Loading from the MS4 contributing area, based on land uses and BMPs
- 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
 - 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 Jupiter Inlet Colony uses the ambient water quality data obtained through the Loxahatchee River District (LRD) for the Loxahatchee River.

Monitoring Locations

Based on the location of the outfalls of our MS4, two monitoring stations have been established. The following table identifies this monitoring station, along with relevant information about the location.

MS4 Monitoring Stations Table

Monitoring Station Number	Location Description	Latitude/ Longitude	Type	Watershed WBID
10	Jupiter Inlet	26.945343 -80.073821	Marine	Lox
20	ICW – S.R. 707	26.953161 -80.079006	Marine	ICWW

[Sampling Method and Monitoring Parameters](#)

Information on sampling and monitoring parameters is contained in the LRD Water Quality Reports (refer to loxahatcheeriver.org)- River Keepers reports.

The Town will review the water quality data in the Marine Basin (EPA 1301) Monitoring Station sites 10 and 20 contained in the Loxahatchee River Water Quality Reports to identify notable nutrient water quality for total nitrogen and total phosphorous and perform an assessment comparison with applicable water quality standards. Attached is a sample of the information available from Loxahatchee River District including a location map.

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 Jupiter Inlet Colony will participate in this effort by reviewing its MS4 contributing areas to each 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 Jupiter Inlet Colony 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 Jupiter Inlet Colony will utilize data based on the sample results performed by the PBC ERM and compiled in the Joint Annual Reports. 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 the Loxahatchee River sampling points. A summary of the water quality monitoring data trend graphs, with respect to the LRD’s monitoring stations 10 and 20.

The pollutant loading estimates developed during Year 3 of the permit cycle will be reviewed and adjusted based on the Town’s Stormwater Management Programs (litter control, public education, Fertilizer Ordinance, septic tank conversion, exfiltration trenches as appropriate). Based on the two assessments and Jupiter Inlet upgrades to the stormwater management system, a determination of the effectiveness of the Town’s program will be made.

Recent Supplement Stormwater Management Improvements

The Town of Jupiter Inlet Colony, in conjunction with the Loxahatchee River District (LRD), through an Interlocal Agreement, is concurrently implementing two (2) BMPs to improve water quality treatment, reduce nutrient loads and discharges into the Indian River Lagoon (South Section of the Intracoastal Waterway) at the confluence with the Jupiter Inlet and Loxahatchee River, and achieve water quality standards. This major undertaking is identified as the 'Jupiter Inlet Colony Neighborhood Rehabilitation Project'. The first BMP is to convert all existing septic tank systems (239 single family residential lots, 1 Town hall site and 1 Beach Club site for a total 241 connections) to a central sanitary sewer system. This BMP will address the conversion of all existing septic tank systems to a central sanitary sewer system operated by the Loxahatchee River District. BMP 2 consists of significant stormwater drainage improvements including roadway profile adjustments, new valley gutter installation (31,200 LF) throughout the Colony, approximately 5,500 linear feet of exfiltration trenches, and new stormwater drainage structures (95 catch basins and 1 outfall) and piping which will significantly reduce stormwater outfalls to adjacent impaired waters.

The 'Jupiter Inlet Colony Neighborhood Rehabilitation Project' is currently under construction and is expected to be completed in 2018.



