VILLAGE OF PALM SPRINGS
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 Village of Palm Springs 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 Village of Palm Springs uses the ambient water quality data obtained through the Palm Beach County NPDES program, where the Northern Palm Beach County Improvement District is the Lead Permittee.

Monitoring Locations

Based on the location of the outfalls of our MS4, nine (9) monitoring stations have been established. The following table identifies these monitoring stations, along with relevant information about each location. A map showing the locations of the sample points is at the end of the monitoring assessment plan on the final page.

Table 1 - MS4 Monitoring Stations Table

Monitoring Station Number	Location Description	Latitude/ Longitude	Receiving Water Body	Verified Impaired?	Adopted TMDL?
C51S155	UPSTREAM OF S155 ON C-51 NEAR LAKE WORTH	26.6448725 -80.0547761	Lake Worth Lagoon	Yes (nutrients)	No
SP #1	LWDD Canal L8 and Kirk Road	26°38'52.03"N 80° 6'15.63"W	Lake Clarke	No	No
SP #2	Intersection of LWDD Canal L9 and Kirk Road	26°38'24.99"N 80° 6'15.77"W	Lake Clarke	No	No
SP #3	Intersection of LWDD Canal L10 and Kirk Road	26°37'58.31"N 80° 6'16.90"W	Lake Clarke	No	No
SP #4	Intersection of LWDD Canal L11 and Kirk	26°37'31.52"N 80° 6'17.63"W	Lake Clarke	No	No

SP #5	Intersection of LWDD Canal L8 and Prairie Road	26°38'49.29"N 80° 5'2.22"W	Lake Clarke	No	No
SP #6	Intersection of LWDD Canal L9 and Prairie Road	26°38'22.39"N 80° 5'3.26"W	Lake Clarke	No	No
SP #7	Intersection of LWDD Canal L10 and Congress Avenue	26°37'56.31"N 80° 5'19.54"W	Lake Clarke	No	No
SP #8	Intersection of LWDD Canal L11 and Congress Avenue	26°37'29.65"N 80° 5'20.68"W	Lake Clarke	No	No

Sampling Method

Monitoring Station C51S155

Sampling methods for Monitoring Station C51S155 are detailed in the most recent Joint Annual Report.

More information on monitoring station C51S155 and Palm Beach County Program is available in the Palm Beach County MS4 Joint Annual Reports. A copy is included on the MS4 website (www.pbco-npdes.org under Annual Reporting).

Monitoring Stations SP #1 – SP #8

Village of Palm Springs staff and staff from the South Florida Water Management District (SFWMD) will collect samples in-situ. Collected samples will be transferred to and analyzed by an independent laboratory under contract with the Village. Samples will be collected, preserved and stored according to the Florida Department of Environmental Protection Standard Operating Procedures.

Monitoring Parameters

The parameters to be sampled for the monitoring stations SP #1 – SP #9, and that will be used as part of the Village of Palm Spring's Assessment Program, include those shown in the table below.

Table 2 - Monitoring Station C51S155 Sample Parameters

Monitoring Parameters	Type of Monitoring	Collection Method	Sampling Frequency
Chlorophyll-a (corrected)	Routine	Grab	Biannually
Nitrogen, Total	Routine	Grab	Biannually
Phosphorus, Total	Routine	Grab	Biannually

The locations of the monitoring stations to be used in this Assessment Program, are shown below in Figure 1.

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).

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 Village of Palm Springs 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.

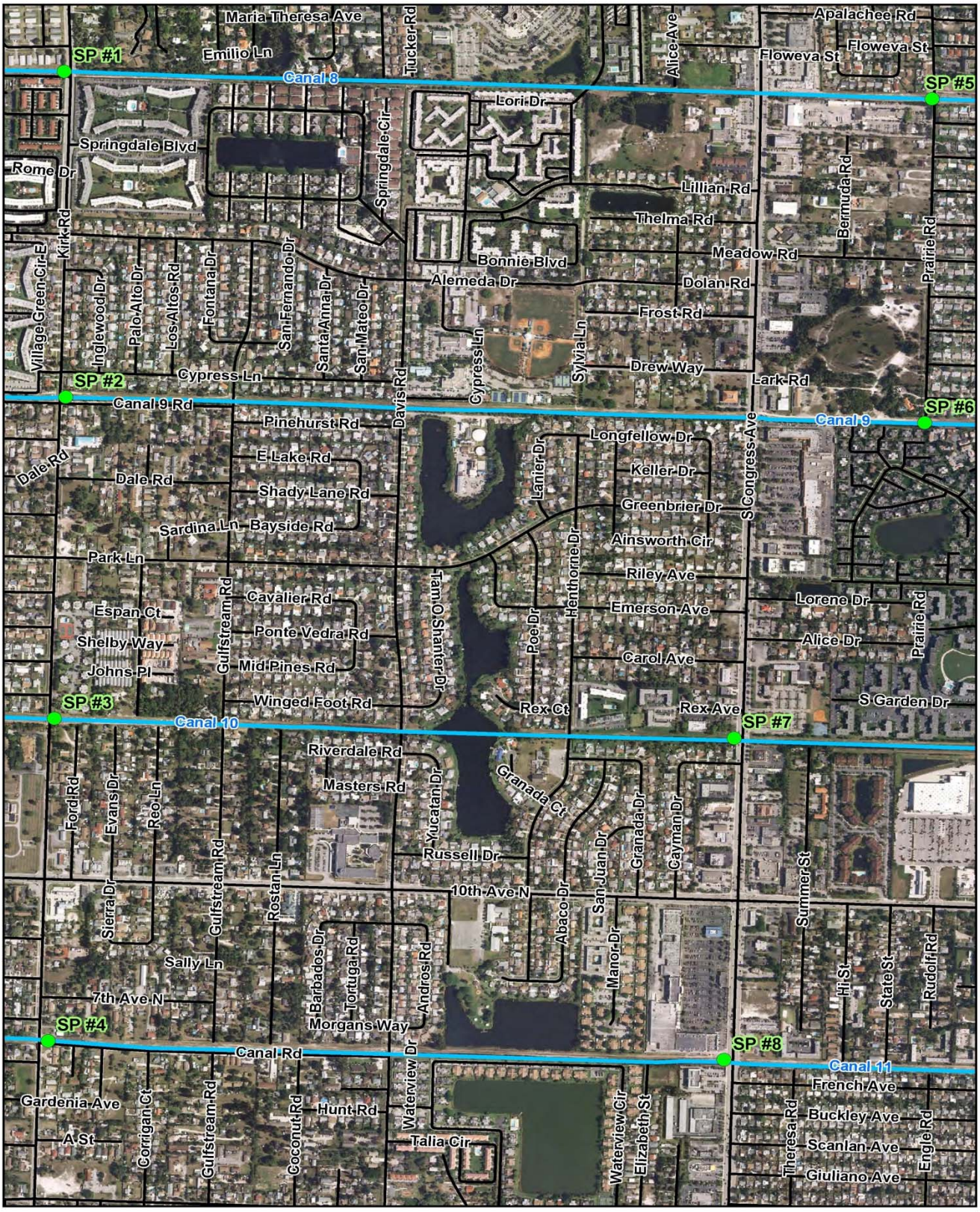
Part C – Evaluation and Response Plan

Once the Assessment Program is approved by the Florida Department of Environmental Protection, presumably sometime during Year 2 of the permit cycle, the Village of Palm Springs will use data from the sampling performed by the Village as well as the SFWMD. 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 Intracoastal sample point. A summary of the water quality monitoring data trend graphs, with respect to our MS4 and the group's monitoring station, C51S155, will be contained in the group's Joint Annual Report.

The pollutant loading estimates developed during Year 3 of the permit cycle will be reviewed and adjusted based on the Village's Stormwater Management Programs (litter control, public education, etc.) as appropriate. The effectiveness of the Village's program will be determined based on the two assessments.

VILLAGE OF PALM SPRINGS
Sample Points



Sample Points

0 500 1,000 2,000 Feet

N W E S

DATE: 8/29/2017