



## Stormwater

MS4 PERMIT; PART III. A. 3. *Roadways*  
Standard Operating Procedures  
Street Sweeping Program

These Standard Operating Procedures are for the Town of Lake Park's use in complying with the MS4 NPDES permit requirements of the maintenance along public streets, roadways, and rights-of-way within our jurisdiction. The Town of Lake Park conducts a street sweeping program that consists of approximately 69 miles of streets, roadways, and rights-of-way. A map of streets, roadways, and right-of-ways within our jurisdiction and maintained by the Town of Lake Park are on the attached map. Roadways with curb and gutter are swept at least once a month and every effort is made to sweep all paved travel ways throughout the Town at least six times a year. Documentation of the volume of debris collected is kept in a log book by date and is summarized for reporting each year. All collected debris is properly disposed of at the Palm Beach County Solid Waste Authority land fill. An estimate of the total phosphorus and total nitrogen collected by the street sweeping is performed based on the Florida Stormwater Association's determinations of street sweeping removal rates project.

### **Documentation:**

See attached Town of Lake Park, Street Sweeping and Disposal Log that is used to document street sweeping activity and the associated volume and weight of the collected debris.

### **Exhibit:**

**Florida Stormwater Association  
Street Sweeping Nutrient Removal Rates**

Based on the May 31, 2011 Final Report "Quantifying Nutrient Loads Associated with Urban Particulate Matter (PM), and Biogenic/Litter Recovery Through Current MS4 Source Control and Maintenance Practices" and Table 8 in the report (pg.41), the following values may be used to estimate nutrient removal values from street sweeping activity:



## Stormwater

<b>Median Value of Nutrient Removal per Unit of Material Collected</b>	
<b>Total Phosphorus</b>	<b>Total Nitrogen</b>
0.000361	0.000563

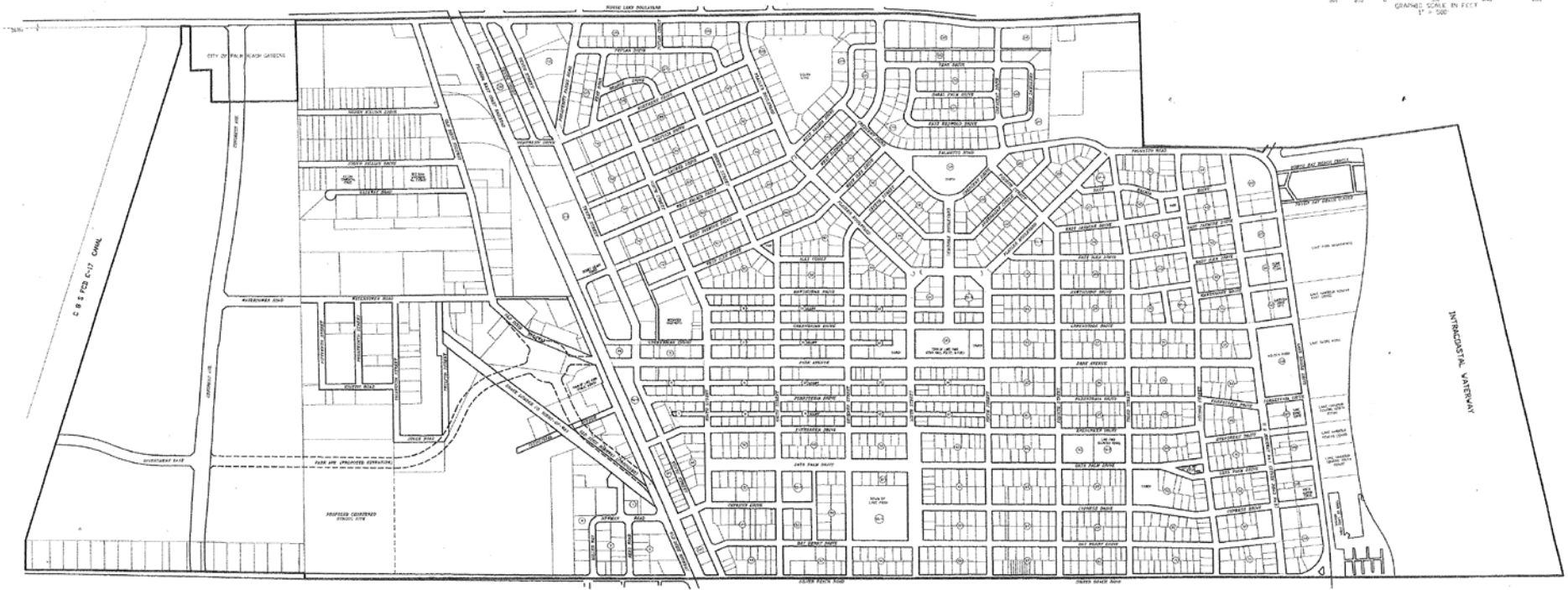
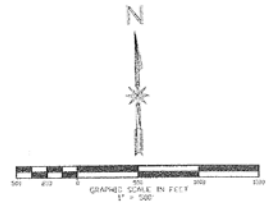
### Example Calculations:

In fiscal year 2010, Palm Beach County collected 1,915 cubic yards of material with the street sweeping program. Assuming the average density of the street sweeping material is 2,295 pounds per cubic yard,\* then 4,394,925 pounds were collected. Using the table above, the total phosphorus removed would be estimated at  $(4,394,925)(0.000361) = 1,587$  pounds. The total nitrogen removed would be estimated at  $(4,394,925)(0.000563) = 2,474$  pounds.

Last year the Town of Jupiter collected 35.8 dry tons (71,600 pounds) of street sweeping material from residential areas. The estimated nutrient removal rates for total phosphorous and total nitrogen would be  $(71,600 \text{ pounds})(0.000361) = 26$  pounds, and  $(71,600)(0.000563) = 40$  pounds, respectively.

Alternatively, the State has provided a spreadsheet tool, wherein the user has only to enter the cubic feet OR wet or dry pounds of street sweepings collected, in order to determine the pounds of TP and TN removed by the activity. This spreadsheet is available on the Palm Beach County MS4 NPDES website.

# The Town of LAKE PARK STREET MAP



**Town of Lake Park  
Public Works Department  
Stormwater Division  
Street Sweeping and Disposal Log**



Operator:		Hours, <b>Start</b>	→	
Date:		Hours, <b>End</b>	→	
Truck No. (circle one)	<b>15 (sweeper) / 59 (tandem dump)</b>	Hours, <b>Total</b>	→	0
Cubic Yards Collected:		Miles, <b>Start</b>	→	
		Miles, <b>End</b>	→	
SWA Ticket # & Tot. Wgt.		Miles, <b>Total</b>	→	0

Document Streets Swept; Enter Street Name with Start & Stop Cross Street:

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