

October 14, 2015

Kenneth A. Kuhl, Environmental Consultant  
Florida Department of Environmental Protection  
NPDES Stormwater Program, Mail Station 2500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Subject: Total Maximum Daily Load Monitoring and Assessment

Dear Mr. Kuhl:

On January 1, 2014 Sarasota County was issued National Pollutant Discharge Elimination System (NPDES) permit FLS000004-004 for our Municipal Separate Storm Sewer System (MS4). This permit established a schedule of tasks for compliance with the Total Maximum Daily Load (TMDL) Program.

On May 19, 2014, Sarasota County submitted a TMDL Prioritization Report to the Department that ranked Alligator Creek (WBID 2030) as the top priority among non-bacterial TMDLs. The letter did not make the priorities as understandable as intended, and the purpose of this letter is to clarify TMDL priorities and also to provide a Monitoring and Assessment Plan. Table 1 is an improved presentation of the previous prioritization. It is not a new prioritization. Alligator Creek WBID 2030 scored the highest and is ranked first.

Sarasota County TMDL Rank and Schedule							
Priority Rank	Priority Score	Waterbody	WBID	Pollutants of Concern	Monitoring & Assessment Plan	Monitoring Start	Implementation Plan
1	115	Alligator Creek (tidal)	2030	Nitrogen	January 2015	January 2017	January 2018
2	90	Forked Creek	2039	Nitrogen	January 2020	January 2022	January 2023
3	85	Elligraw Bayou	1975	Nitrogen, BOD	January 2025	January 2027	January 2028
4	85	Direct Runoff to Bay (Woodmere Creek)	2042	Nitrogen	January 2030	January 2032	January 2033
5	80	Clark Lake	1971	Nitrogen, Phosphorus	January 2035	January 2037	January 2038
6	75	North Creek (tidal)	1984A	Nitrogen	January 2040	January 2042	January 2043
7	70	Catfish Creek (tidal)	1984	Nitrogen	January 2045	January 2047	January 2048
8	70	Curry Creek	2009A	Nitrogen	January 2050	January 2052	January 2053

9	60	Phillippi Creek	1937	Nitrogen, Phosphorus, BOD	January 2055	January 2057	January 2058
10	60	South Creek	1982A	Nitrogen	January 2060	January 2062	January 2063
11	60	Myakka River	1991C	Nitrogen, Phosphorus	January 2065	January 2067	January 2068
12	50	Gottfried Creek	2049	Nitrogen, BOD	January 2070	January 2072	January 2073
13	40	Myakka River	1981B	Nitrogen, Phosphorus, BOD	January 2075	January 2077	January 2078

Table 1. TMDLs

### ALLIGATOR CREEK

Alligator Creek is a coastal basin south of the City of Venice in the southern part of Sarasota County, and is a tributary to Lemon Bay. In 2006, EPA established a TMDL for Alligator Creek WBID 2030. The waste load allocation is a 28.2 percent reduction in total nitrogen. Monitoring will consist of the following activities.

1. Ambient water quality monitoring
2. Targeted water quality monitoring
3. Monitoring of BMP load reductions
4. Pollutant load assessment

Ambient water quality monitoring will be conducted monthly for total nitrogen, TKN, NO<sub>x</sub>, ammonia, total phosphorus, ortho-phosphorus, chlorophyll a (corrected), turbidity, TSS, BOD, color, conductance, DO and DO Saturation. Sampling locations will include three locations in Alligator Creek (Jacaranda, US41 and Shamrock), three locations in Briarwood Waterway (upstream, middle and downstream) and three locations in Siesta Waterway (upstream, middle and downstream).

Targeted water quality monitoring will be conducted at the load assessment point where the Briarwood Waterway discharges from the MS4 into Alligator Creek. The load assessment point was selected based on existing water quality data, availability of flow data, location downstream of the Briarwood Stormwater Treatment Facility (BSTF) and location upstream of the confounding effects of tides. Continuous flow monitoring is conducted at the upstream end of the Briarwood Waterway. Flow and ambient monitoring data will be combined to evaluate changes in stormwater pollutant loadings and water body health over time.

BMP Monitoring will be conducted of the inflow and the outflow of the Briarwood Stormwater Treatment Facility (BSTF). The Venice Gardens lakes system had been identified as a source of nitrogen to Alligator Creek and Lemon Bay. The BSTF was built to reduce nitrogen loads using an innovative denitrifying system. Inflow and outflow to the BSTF will be monitored for pollutant removal efficiency.

Pollutant Load Assessment was conducted using appropriate event mean concentrations (EMC) and estimates of stormwater volume. The estimated annual loading for total nitrogen at the load assessment point is 5,852 pounds per year based on land use in the contributing sub-basin, EMCs and annual rainfall of 52 inches per year. This loading estimate is for the time period before construction of the BSTF.

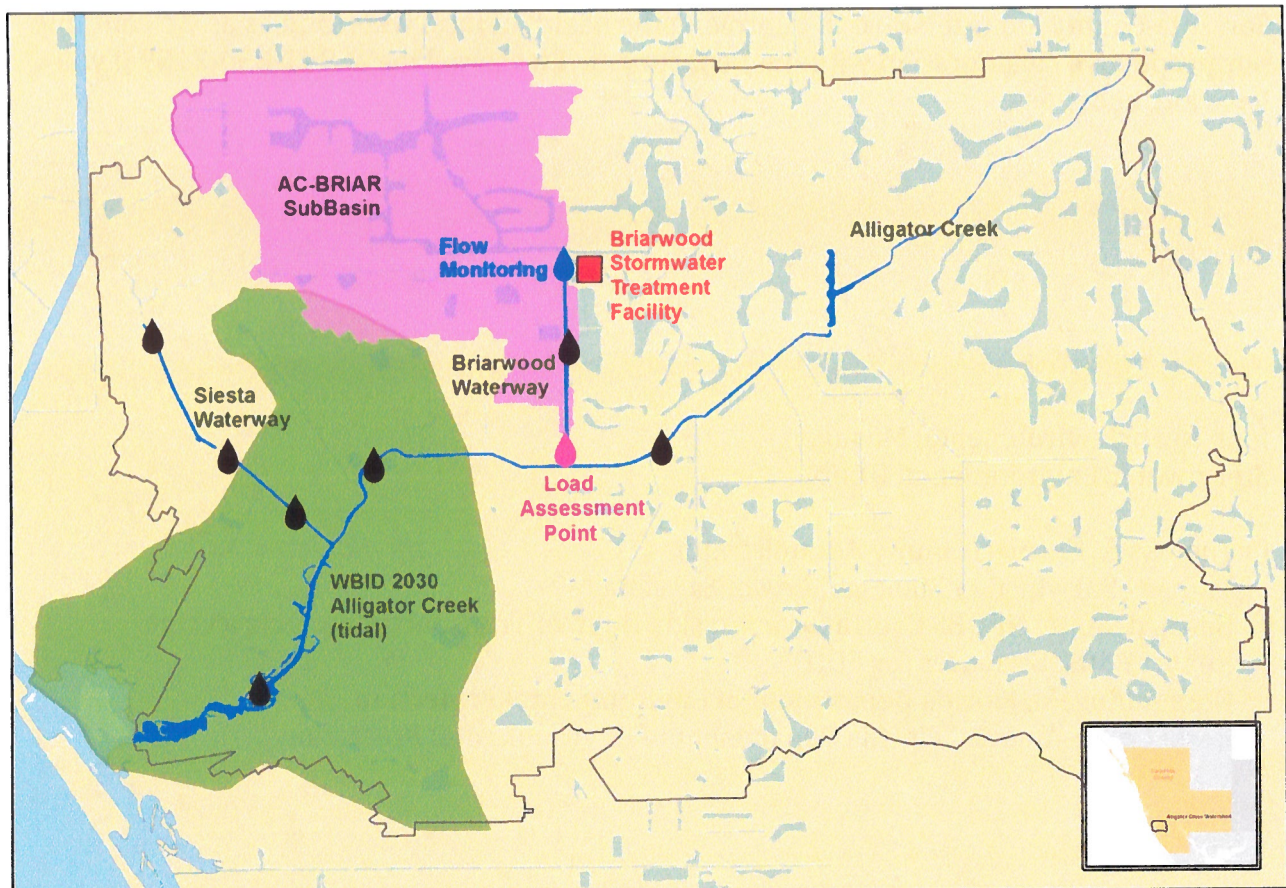


Figure 1. Alligator Creek

**PHILLIPPI CREEK**

Phillippi Creek is the top priority for bacterial TMDLs and will be assessed according to FDEP protocols.

<b>Sarasota County Bacteria TMDL Rank and Schedule</b>					
<b>Priority Rank</b>	<b>Priority Score</b>	<b>Waterbody</b>	<b>WBID</b>	<b>Pollutant of Concern</b>	<b>Bacteria Pollution Control Plan</b>
1	105	Phillippi Creek	1937	Fecal Coliform Bacteria	June 2016
2	95	Clowers Creek Estuary	1975A	Fecal Coliform Bacteria	June 2021
3	60	Gottfried Creek	2049	Fecal Coliform Bacteria	June 2026
4	60	Elligraw Bayou	1975	Fecal Coliform Bacteria	June 2031
5	45	Mud Lake Slough	1958	Fecal Coliform Bacteria	June 2036
6	30	Big Slough Canal	1976	Fecal Coliform Bacteria	June 2041

Table 2. Bacteria TMDLs

Sarasota County looks forward to improving the health of local waterbodies as we continue our productive collaboration with the Department. Please call me at 941-650-2159 if you have any questions.

Sincerely,



John Ryan, Environmental Manager  
Stormwater Environmental Utility

- C: Thomas A. Harmer, County Administrator
- Thomas Barwin, City Manager, City of Sarasota
- Edward Smith, NPDES Coordinator, Florida Dept. of Transportation, District One
- Robert Potts, Esciences for FDOT
- Greg DeAngelo, Florida Department of Environmental Protection
- Borja Crane-Amores, Florida Department of Environmental Protection