

PROJECT: NPDES- NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

<p>1. DESCRIPTION: NPDES permit for Municipal Separate Storm Sewer (MS4) includes the monitoring of 2 freshwater and 3 estuarine sites.</p>
<p>2. PURPOSE/GOALS: To provide water quality information of the Broward County's Canal System for the Broward County National Pollutant Discharge Elimination System Municipal Separate Storm Water Sewer System (NPDES MS4) permit.</p>
<p>4. USE OF DATA: The final report goes to the Environmental and Engineering Division for Broward County to submit to the Florida Department of Environmental Protection.</p>
<p>5. RELEVANCE: The goal of the monitoring is to find if the implementation of the permit requirements helps to improve water quality in Broward County. Data is used internally by the Environmental and Engineering Division, NPDES section to understand ambient quality of major surface water and potential influence of storm water discharges on surface water quality.</p>
<p>6. EFFECTIVENESS: The data produced by this project will satisfy the requirements of the NPDES MS4 permit.</p>
<p>7. SAMPLE SITES: A total of 5 sampling sites which are site #5 C-14 canal, site #8 C-14 canal, site #10 Middle River, site #12 C-13 canal, site #15 New River.</p> <p>PARAMETERS: Turbidity (EPA 180.1), Chlorophyll A(SM 10200H), Chloro A / Pheo A ratio (SM 10200H NC), Pheophytin-A (SM 10200H NC), Dissolved Solids (SM 2540 C), Suspended Solids (SM 2540 D). Field Parameters utilizing the YSI 6600: pH, temperature, dissolved oxygen, specific conductivity, chlorophyll, and turbidity will be collected at 15-minute intervals. YSI's will be deployed for unattended sampling and will be changed biweekly.</p>
<p>8. FREQUENCY/DURATION/SCHEDULE: Monthly; Grab samples every Wednesday morning unless a short week for the holidays. Grab sampling is conducted approximately 10 weeks per quarter. The sondes are deployed weekly and maintenance is performed quarterly. On the off weeks, the YSI PVCs are pulled from the sites utilizing the H₂O LOGGER as a platform.</p>
<p>9. DELIVERABLES: EML will provide a standard analytical report for all samples analyzed to the Environmental and Engineering Division, Licensed Engineer Project Manager.</p>
<p>10. SPECIAL EQUIPMENT/SUPPLIES CONSIDERATIONS: EML will support this project through the provision of sampling equipment to collect the grab samples, maintenance and troubleshooting of the YSIs, use of the H₂O Logger (boat) and personnel (as needed) to complete the field work.</p>
<p>11. UNIQUE QA/QC REQUIREMENTS: Duplicates, Field Clean Equipment Blanks on every sampling event.</p>
<p>12.FUNDING/REVENUE: Broward County General Fund</p>