McCafferty Brinson consulting

# Holiday Park Lead and Copper Study

## Broward County, Florida

**Client**
Broward County Water and Waste Water Services
MBC Subconsultant to Prime Professional

**Scope of Services**
Collecting and reviewing treated water quality data, laboratory investigation, preparing preliminary and final design documents.

**Contact**
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**Start Date**
04/2016

**Completion Date**
01/2018

**Key MBC Staff**
Frank A. Brinson, P.E.

**Key Features**
Performance of desk-top study, and in-situ coupon testing. Design and installation of a corrosion inhibitor bulk storage and feed system.

## Background

The Broward County Parks and Recreation Division operated a non-community, non-transient water system at Everglades Holiday Park that pumped approximately 5,000 gallons per day. The treatment process consisted of the addition of approximately 5 mg/L of sodium hypochlorite and 0.5 mg/L of ammonia (ammonium sulfate solution) to raw water from surficial aquifer wells. Sampling for lead and copper showed an exceedance of the 90$^{th}$ percentile action levels for lead and copper. The County received a non-compliance letter from the Florida Department of Health – Broward County (FDHBC) regarding the exceedance on January 29, 2016 that set forth certain actions that the County must take as a result of the exceedance. While the results were not automatic violations of the rules, laws, and regulations associated with the system, the County wished to conduct an engineering study to identify an optimal corrosion control treatment as defined in C.F.R. § 141.82 to comply with the required actions set forth in the letter and avoid future exceedances.

## The Project

MBC's scope of services includes collecting and reviewing treated water quality data, laboratory investigation, preparing preliminary and final design documents including drawings and specifications, permitting, and construction administration.

The scope of the project includes the following:

- Performance of a desk-top study to evaluate exisiting water quality and recommend optimal water quality parameters.
- Performance of in-situ coupon testing to determine the recommended corrosion inhibitor dosing rate needed for optimal water quality.
- Design and installation of a corrosion inhibitor bulk storage and feed system.

The contract for construction of the project was completed late 2017 with no change orders. The closure of consent order was issued Janurary 28th, 2018.