

## RELATED EXPERIENCE

### OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER MACOMB COUNTY MANAGEMENT REPORTING SYSTEM (MCMARS)

<b>Location:</b>	Macomb County
<b>Project:</b>	MCMARS Development and Operation
<b>Fiscal Year:</b>	2013
<b>Client:</b>	MACOMB COUNTY PUBLIC WORKS COMMISSIONER
<b>Contact:</b>	Jason Matteo, P.E. MCPWC

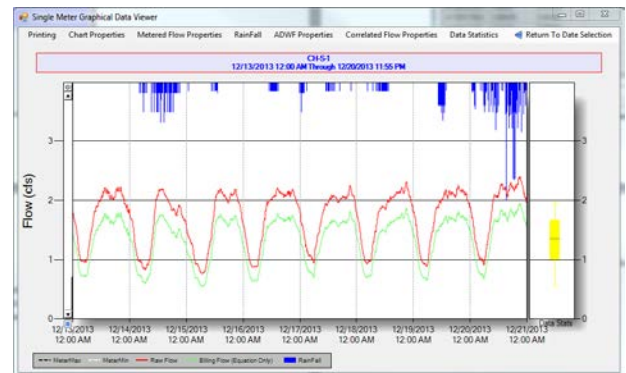
It is a flexible system designed to enable future enhancements and growth.

The system seamlessly fulfilled the needs of the transfer of responsibilities to the MCPWC. The system is being converted to a web-based application for the ongoing use of the MCWDD member communities.

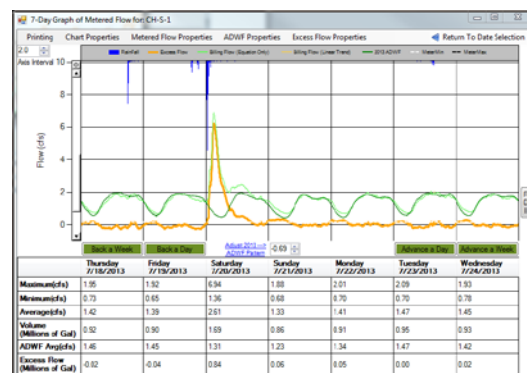
Johnson & Anderson, Inc. programmed, implemented, and assisted operation of the Macomb County Management and Reporting System (MCMARS) for the Office of the Macomb County Public Works Commissioner (MCPWC).

The Macomb County Wastewater Disposal District (MCWDD) encompasses the central part of Macomb County, and is operated by the MCPWC. The service area currently includes all or parts of the Cities of Fraser, Sterling Heights, Utica, the Townships of Chesterfield, Harrison, Lenox, Macomb, Shelby, and Washington and the Village of New Haven.

The primary sanitary sewer system is the Macomb Interceptor Drain (MID). The MID includes a series of master flow meters that determine community flows. The Detroit Water and Sewerage Department has directly measured flows from these communities and directly billed for sewerage services since the inception of the facilities until 2013. In 2011, the MCPWC agreed to assume all ownership, operations, maintenance, revenue, and expense responsibilities of the system on July 1, 2013. The Commissioner's Office had to develop a data management system that could fulfill the agreed responsibilities. The meter data management system was developed exclusively for the MCPWC for the analyses of flow data from the MCWDD. MCMARS collects, displays, compiles, and computes flow data for specific purposes such as excess flow data, wet/dry weather replacement flow data, and billing flow data management.



Single Meter Data viewer and comparison to ADF



7-Day Graph and RDII calculations