

Creek Level & Rain

Product	Communication	Location
<ul style="list-style-type: none"> • Ru-33 RTU • Ultrasonic Level Sensor 	<ul style="list-style-type: none"> • Cellular Wireless 	<ul style="list-style-type: none"> • Fishers, New York

History

Irondequoit Creek runs through northwest New York State and empties into Irondequoit Bay which then flows into Lake Ontario. 20 flood prone areas in the Irondequoit Creek Watershed were identified by the Corps of Engineers in a 1968 survey. There is more than 100 years of recorded history regarding the creek's flooding.

In the 1960s, Irondequoit Creek frequently became toxic, turning gray and killing fish living in it's waters. The primary cause of this condition was the effluent from a large sewage treatment plant which emptied into the creek. Most of the organic material was removed by the treatment plant, however, detergents passed through the plant unaltered, frequently covering the creek with detergent foam.

In the 1970s a regional sewage treatment and conveyance system was constructed with the sewage effluent discharging directly into Lake Ontario. This eliminated the stress put on Irondequoit creek as well as other creeks and streams in the region.

Application

Although the sewage issues have been abated, few structural changes to address the creek's periodic flooding have been implemented. Because of the potential for flooding and because expanding populations continue to encroach on the creek's flood planes, continuous monitoring is necessary.

Solution

At this site there is an Ru-33 with an ultrasonic level sensor and cellular wireless communication. Powering the system is a Telog extended life battery pack. The Telog hardware is hidden inside a wooden box attached to a local bridge which crosses the creek. Rain data for this site comes from the Rain and Temperature demo site located about a mile away.

