

# Brunswick County, North Carolina

A rapidly growing county integrates control and optimizes operations



Cape Fear River Basin

With the Cape Fear River Basin and beautiful barrier islands off the Atlantic coast, it is not surprising that Brunswick County, North Carolina, is growing at a tremendous rate. Such growth often creates shortages and serious problems for water and wastewater treatment facilities. Fortunately, Brunswick County has very forward-thinking county management.

## The Challenge

In 1996, Robert Falor, I&E Supervisor for Brunswick County, saw the county was spending over \$6,000 a month on phone bills to cover the data collection from numerous sites in a county nearly 100 miles long. The State of North Carolina requires daily visits to sewage lift stations if they are not in communication with the control plant 24 hours a day. "In a county as widespread as Brunswick," states Robert Falor, "it would take two and a half days to visit every site." Brunswick, therefore, needed another solution: It

became one of the first counties in the nation to install an Ethernet radio network. The high phone bills disappeared and the control center had instant access to the county's more than 200 sites with a click of a button.

## The Solution

With the Ethernet radio network installed, Brunswick County then needed a SCADA system to access and monitor the vast amounts of data collected every minute from the multiple sites throughout the county. Brunswick County recognized that installing a standardized SCADA system throughout the country was crucial to ensuring smooth growth. A flexible solution with a secure upgrade path was one of the key factors in identifying the right solution.

Ultimately, they decided that CitectSCADA had the most robust remote terminal unit (RTU) package and



## The Challenge

To remotely connect approximately 300 sites in an area that covers 880 square miles, thereby eliminating the need for costly and time-consuming daily site visits.

## The Solution

Create an Ethernet radio network backbone using spread radios to collect data and transmit it to the network. Then, implement a single, integrated system using CitectSCADA to control and monitor the entire network from any location with a simple mouse click.

## The Benefits

By using CitectSCADA for its water and wastewater monitoring and control system, Brunswick County can oversee a large network area with only a handful of staff. It has saved half a million US dollars a year in chemical usage and assured its residents of a water and wastewater system that is reliable, even in the face of natural disasters.

