Background

The City of Saint John lies along the North shore of the Bay of Fundy at the mouth of St. John River, and has a population of 125,000 including surrounding communities. It is the oldest incorporated city in Canada and its strategic location provides an easy access to major markets in Atlantic Canada, Quebec, Ontario and parts of the North-Eastern US.

The implementation of the Supervisory Control and Data Acquisition System (SCADA) was a major achievement that now allows the Saint John Water Utility to monitor all water and wastewater facilities. This SCADA System is now being used as a standard by other municipalities that operate water and wastewater infrastructure.

Challenge

The City of Saint John wanted to install SCADA and use the Remote Terminal Units (RTU) to control and monitor the water and wastewater systems. They also wanted to provide a high speed wireless backhaul system throughout the city that would be reliable and secure.

Solution

Using Proxim's Tsunami.GX point-to-point IP wireless Ethernet bridges, Shadcomm integrated software and hardware to design and implement two levels of communication system that was Ethernet based:

- the backbone of the wireless system included 13 high speed links connecting all the major locations, that communicated at 50 Mbps;
- the backbone design provided strategic geographic positioning for connection to the other 80+ remote locations.

Why Proxim

By using Proxim Tsunami.GX, Shadcomm was able to offer the city a full-duplex point-to-point IP wireless Ethernet bridge that provided secure and reliable wireless technology to transfer data. Apart from security for data backhaul, the cost-effective Tsunami.GX also provided high bandwidth and ease of deployment.

Tsunami.GX is a high capacity wireless bridge with an innovative split-box design, reducing expense of extending the IP networks, simplifying installation and improving system gain with indoor/outdoor installation. It provides best-in-class system performance with native IP interface and ranges up to 20 miles or 32kms.

Tsunami.GX can be deployed quickly and with a built-in spectrum analyzer facilitates RF planning. The carrier class Tsunami.GX offers a 99.999% reliable RF transmission. Data transmission security is ensured due to proprietary encryption network.

"We are very impressed with the Carrier Grade quality of the GX series hardware, as well as the sales and engineering support we received from Proxim during all stages of the project. We are also amazed at the system performance, ease of installation, and diagnostics characteristics of the product". - ***Jody Gallant CET, Shadcomm Ltd***