

TRCA FLOOD FORECASTING & WARNING SYSTEM



SCALEABLE FLOOD WARNING SYSTEM INCLUDING WEB-BASED DATA & VIDEO FOR THE TORONTO & REGION CONSERVATION AUTHORITY'S NINE WATERSHEDS



SUMMARY

Sutron designed, manufactured, and integrated into an existing system a web-based, scalable, 100% reliable Flood Warning System for TRCA to deliver data using a cellular communication-based network (where service is available) from five Pilot Locations to a Base Station computer at TRCA headquarters.

The System includes the following:

- State-of-the-art automated remote water level measuring equipment
- Integrate existing TRCA rain gauges and submersible pressure sensors at the five sites into the new Real-Time Monitoring and Warning System.
- Datalogging and real-time communications using cellular IP-based modems
- Real-time data collection and data-processing software to access real-time and logged data
- Remote and direct access to the datalogger
- A real-time, web-based decision support system and dynamic real-time web-reports using graphical and tabular formats
- A warning or call-out system based on sensor and station attributes
- A real-time live video camera system
- Comprehensive system documentation
- Hands-on and class-room training in the operation and maintenance of the entire system as well as each station and its components.

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HIGHLIGHTS

- Direct Access via PC or PDA and Full Remote Access over the Internet as if connected directly
- Complete Remote Diagnostics and Configuration Capabilities
- Datalogging available to multiple LOG files so data can be shared by different agencies
- Alarm Call-Out facility
- Windows™-based Real-Time Central Data Processing Software – Sutron's XConnect
- Data Transfer Speeds of up to 115kpbs
- Central Software that supports RDBMs, such as MS Access, SQL or ORACLE
- Automated Dial-Out or Notification via Pagers, Email, Printer, etc – XConnect's XCALARM
- Dynamic Real-time WEB Output using XML reports – XConnect's XCWEB OUTPUT
- Provide Base Station Software with a RDBMS Interface that automatically collects and processes rainfall and water level data at pre-defined intervals, generates reports and, when appropriate, produces alarms.
- Provide 100% reliable Call-Out or Alarm Notification System.
- Provide Dynamic Real-Time Web Reports detailing a range of real-time rainfall/water level data, trends, alarm status, datalogger health, etc. (see specifications).

XConnect supports a variety of relational databases:

- Access - Microsoft Access database.
- Oracle - Oracle 8i and higher databases.
- SQL Server - Microsoft SQL Server.
- HDB (CADSWES) - Special database schema created by CADSWES Corporation.
- INSQL (Wonderware) - Special implementation of XConnect tables and Wonderwares INSQL database.

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