Sustainable Infrastructure Society
An Introduction

Presentation to the

"Meeting of the Minds"

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Contents

- Formation and Mandate of SIS
- SIS projects
  - Liability Insurance
  - SCADA Networks
- Cooperation with Others

Sustainable Infrastructure Society

- Incorporated in 2005 as a non-profit society.
- Support from the BC Ministry of Health
- Cooperating with Community Services & Environment.
- Office (IDC), is on the campus of UVIC Victoria.

Mandate:

*To assist in the **development and application of technology and resources** for building the managerial, financial, and operational capacity … **community infrastructure**….in BC.*

Advisory Board

Sustainable Infrastructure Society (SIS) has advisory board:

- BC Groundwater Association
- BC Water and Waste Association
- Coastal Water Suppliers Association
- Small Water Users Association of BC
- Water Supply Association of BC.
- Health Representatives.

Providing Tools & Resources:

The process:

- Build understanding of i/s needs
- Set priorities with advice from BOA
- Work with existing specialists & suppliers
- Work cooperatively with existing organizations.
- Introduce through pilot projects.

SIS Current Projects

- Integrated water treatment technology
- Management resources (e.g. Business Planning Tools, Guidebook)
- Directory of Resources: WWW.GreenBC.Org

Examples> 1)Resource 2)Technology

1. **Accessible and affordable insurance for SWS**
2. **System Control & Data Acquisition (SCADA)**

Benefits for Sustainable Communities

- Access to advanced technologies
- Increased commonality of resources
- Innovative financing options
- Improved system monitoring & management.
- Opportunities for resource sharing & **economies of scale**

Liability Insurance:

Objective: Accessible & Affordable Liability Insurance for CWS

Work with Agents and Specialists in the Water Industry

- Confirm markets
- Develop a superior insurance product
- Develop an online support system
- Negotiate with Underwriter

Model> used to develop **other resources to support sustainable communities**.

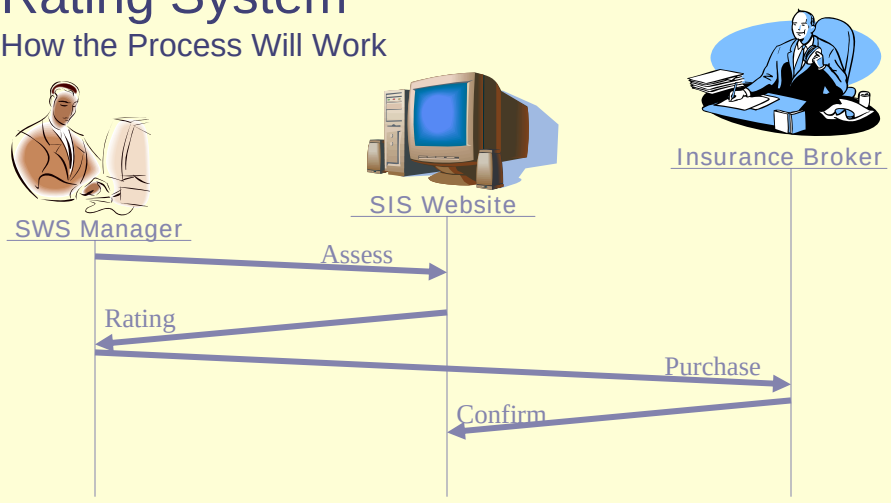
Role of the SIS

How the SIS is enabling access to liability insurance

- Define market needs: assemble contributors
- Develop and Administer Rating System
  - Collect assessments
  - Generate ratings
- Promote through water association newsletters
- Online feedback through website.

Rating System

How the Process Will Work



Linked SCADA

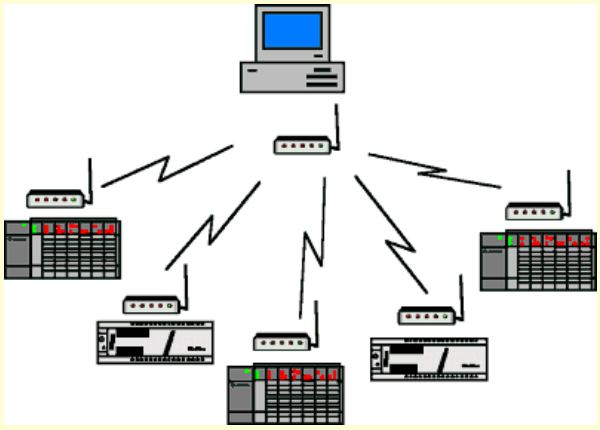
(Supervisory Control and Data Acquisition)

Supports delivery of safe supplies:

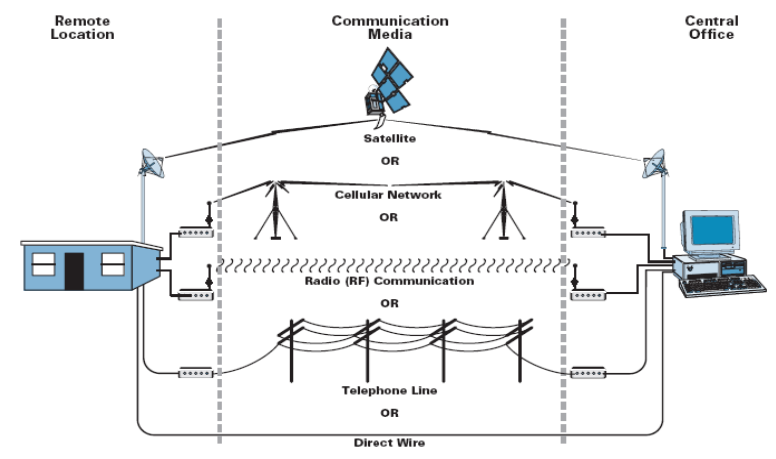
- Control
- Monitor
- Data Acquisition.

Acknowledgements to MPC Controls

SCADA Network



Possible Layouts for Remote Telemetry

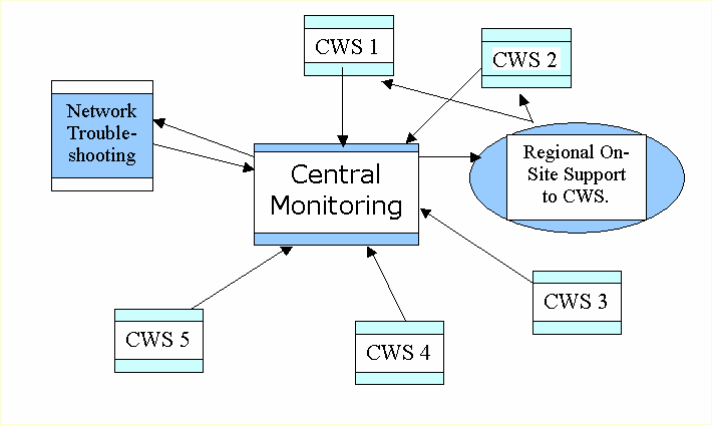


Linked SCADA Benefits

Monitor From Any Location using Computers, Phones, or PDA's.

- Provides overview of facilities
- Coherent & systematic system upgrading
- Fewer visits to pump stations
- Reduced transportation costs
- Opportunities for skill enhancement
- Services of experienced operators
- Fewer emergency turn-outs
- Continuous monitoring & data acquisition.

BC Water/SCADA network



Monitor Parameters

- Tank Levels
- Treatment Levels
- Electrical Conditions (Amps or Volts)
- Water Parameters
  (Flow, Residual Chlorine, Turbidity, Pressure, pH, and D.O.)
- Atmospheric Conditions:
  (Temperature, Precipitation, etc.)
- Security Cameras.

Control & Alarm

- Control and adjust systems settings from computers, phones, and PDA's.
- Use internet, landlines or wireless (spread spectrum radio) transmissions.
- Receive notification of alarm situations in real time.

Archive & View

- Detailed Reports
- Flow Activity
- Alarm Histories
- View Entire Network or Specific Areas in Real Time.
- Use Graphs, simulations or printouts.

Point of Entry

Characteristics may be:

- Sealed unit leased to homeowner
- Owned by community water supplier
- Maintained by specialist contractor
- Connected to central monitoring via ‘phone / cable etc
- Integrated with SCADA network.

Financing & Ownership

SIS may provide access to financing / leasing:

- Affordable
- Reduces need for capital expenditures
- Off-loads some maintenance needs
- Technology remains current

Cooperation!

SIS Open for Business:

- Mandate > Sustainable infrastructure
- Advised by key BC associations
- Support from BC Government
- Pilot projects underway: Vancouver Island
- Creating industry partnerships
- Advancing BC technology
- Supporting sustainable communities.

Your ideas are welcomed!

Summary

- Formation and Mandate of SIS
- SIS projects
  - Liability Insurance package
  - SCADA
- Cooperation.

Thanks!!