Regional Cooperative Networks
Proposals by the Sustainable Infrastructure Society in support of Safe & Sustainable Water for BC
SIS Programs

- SIS creates programs for community water suppliers
- Work has been greatly supported by the BC Ministries of:
  - Health
  - Community Services
  - Environment.
- We seek cooperation with others
Purpose of Presentation

- Note CWS challenges
- Present practical solutions
- Outline Regional Cooperative Networks
- Describe operation
- Link with SIS programs
- Suggest role of regional districts & UBCM
Walkerton: “..after 8 years and millions of dollars, systemic problems persist”.

Many smaller … communities cannot cope with all the technical and managerial challenges:

An inherent structural flaw remains: we need well-resourced treatment systems and highly trained personnel

We need regional pooling of operational and managerial expertise, combined with modern remote monitoring technology.

Billing should reflect the actual cost of assuring safe water.

Sensible investments needed in both drinking-water systems and region wide resources are needed.

Safe community drinking water is one of our best public health investments. **We do not need another Walkerton disaster to help us appreciate the true value of our community water supply.**
Sustainable Infrastructure Society

- Incorporated: 2005 as a non-profit society.
- Support: BC Ministry of Health & MCS
- Office: on the campus of UVIC Victoria
- Linked: Innovation & Development Corporation at UVIC

Mandate:

To assist in the development and application of programs for building the managerial, financial, and operational capacity of water suppliers...in BC.
Advice & Approach

Sustainable Infrastructure Society (SIS) has an 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.

Approach:
- Creates programs that become financially self-sustaining
- Needs seed capital to develop & implement.
Example: Liability Insurance:

Objective: Accessible & Affordable Liability Insurance for CWS

- Development
- Confirmed markets
- Created partnerships with Industry
- Developed a superior insurance product
- Created an online support system

Operation:
- Communicate via water supplier associations
- Deliver the product.

Results:
- Over 80 systems now insured
- Over $200,000 saved in premiums
Rating System

How the Process Works

SWS Manager

SIS Website

Assess

Feedback

Purchase

Confirm

Insurance Broker
SIS Programs

Programs underway
- Liability Insurance
- POE / POU

Programs in development
- Operational Assistance Program
- Benefits program
- Modular Water Treatment
- Access to Funding Program
- Scaled SCADA Program
- Watershed Management Program
Benefits to BC

Improved:
- $$ revenues
- Access to resources
- Capacity & water quality
- Assimilation or sustainable autonomy

Reduced:
- Boil Water Orders
- Risk of catastrophic outbreak

Time
Paths Towards **Safe Water**

Two paths

- **Existing Community water supplier**
- **Sustainable interdependence**
- **Regional assimilation**
Closing the Sustainability Gap

Standards

Current Conditions

Community Water Systems: Currently

Phase 1

Phase 2

Phase 3

Time

Safe & Sustainable Operations

GAP

Regional Cooperative Networks
Bridging the Gap: With RCN’s

RCN’s can help to:

- Improve SWS managerial capacity
- Make services & products affordable
- Link SWS with regional government
- Provide improved access to funds
- Communicate the true value of water
- Facilitate rate reviews
- Establish benchmarks
- Upgrade infrastructure
What is a Regional Cooperative Network?

A RCN is:

Levels of government, community water suppliers and other organizations, all working together in a coordinated fashion to build the safety and sustainability of water resources and supplies in BC.
SIS: A Key Role in RCN

SIS has a key role to play because we:

- Create the practical tools
- Provide convenient access
- Bring groups together
- Talk with government
- Work cooperatively with regulators
- Know Community Water Suppliers (CWS): our “Registered Users”
SIS: A Unique Position

- Support the regulatory process: not a regulator
- Assist policy development: not a branch of government
- Embody business disciplines: not a for-profit corporation
- Formulate services & products: not part of industry
- Consolidate markets: not business organization
- Reflect interests of water suppliers: not a water association.
RCN: Integrated Structures

UBCM & MOH, MCS, MOE:

- Regional Districts
- Community Water Suppliers
- Water Organizations

• Recognition
• Credibility
• Networking

• Engages Industry
• Regulatory support
• Proven value

Ready to delivery effective & affordable services

Advice

Direct beneficiaries

RCN Platform

SIS Programs

Services, products, technology

Regional Cooperative Networks

www.SustainIS.Org
POE / POU Systems

From Distribution System → POE installation that treats all water prior to entering the house → To Irrigation System

From Distribution System → POU device under kitchen sink with its own separate tap.
Operational Assistance Program

Assist water supply systems to employ the services of a qualified operator under contract to:

- Provide all operator services, or
- Support work of existing operator, or
- Provide relief services when existing operator:
  - Is sick
  - On vacation
  - Needs experienced assistance.
Operational Assistance Program
How the Process Works

SWS Manager

Assess

Clarify, Propose, Cost

Deliver Service

SIS Website

Service Provider

SWS Purchases
Linked SCADA

(Supervisory Control and Data Acquisition)

Supports delivery of safe supplies:
• Monitor
• Control
• Data Acquisition & Display
  Supports customer communication.

Supports shared resources & expertise:
• “Circuit rider” serves several CWS
• Provides off-site overview of operations.
Linked SCADA network

Network Troubleshooting

CWS 1

CWS 2

Regional On-Site Support to CWS.

CWS 3

CWS 4

CWS 5

Central Monitoring
Tools to help assimilation

SIS can create tools to:

- Assess the capacity of SWS
- Calculate the costs of upgrading
- Analyse the consequences of assimilation
- Involve stakeholders
- Communicate with customers
- Manage governance & administration
SIS Programs: Summary

- Liability insurance
- POE / POU
- Operational Assistance Program
- Modular Water Treatment
- Access to Funding
- Scaled SCADA
- Benefits program
- Watershed protection
- Assimilation assistance
Subject: Re: WaterBC Winter 2008 Newsletter

From: Larry Adams
[mailto:ladams@bowenislandproperties.bc.ca]

Sent: Friday, February 01, 2008 9:21 AM

To: Renee O'Leary

Renee, **thanks for the work you and SIS are doing** to arrange for programs to help with financial issues facing small water systems (i.e. liability insurance, access to funding, staff benefits package). **You're right that with economies of scale, things become possible which are not possible when each small system tries to solve these problems on its own.** Thanks for your coordinating efforts!

Larry Adams
Cowan Point Utility Company Ltd.
RCN: Role of R. Districts, UBCM, Ministries

Suggestions:
- Form advisory groups
- Help identify needs
- Examine options to meet needs
- Participate in design of tools
- Provide opportunities for pilot projects
- Provide funding
- Provide feedback.