Regional Revision: 
A regional approach to managing drinking water

Canadian Rural Revitalization Foundation Conference
Prince George, BC
September 2014

Sarah-Patricia Breen, Simon Fraser University
Sarah Minnes, Grenfell Campus- Memorial University of Newfoundland
Question?

1) What would a (new) regional approach to managing drinking water look like?

2) Could it work?
Answer?

1) It depends

2) Maybe
## Drinking Water Systems

<table>
<thead>
<tr>
<th>Existing Drinking Water Systems</th>
<th>Kootenays</th>
<th>Kittiwake</th>
</tr>
</thead>
<tbody>
<tr>
<td>~53 public systems (regional district or municipality)</td>
<td></td>
<td>34 Public Water Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Snapshot of advisories in September 2013</th>
<th>Kootenays</th>
<th>Kittiwake</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 public (3 boil water notices, 4 water quality advisories)</td>
<td></td>
<td>15 public water supplies on Boil Water Advisory (BWA)</td>
</tr>
</tbody>
</table>
Drinking Water Management at a Regional Scale

1) Sustainable Infrastructure
   - Participants held accountable
   - Ongoing evaluation
   - Learn and adapt

2) Regional Development
   - Shared Concepts
     - Self-identified and appropriate region
     - New multi-level, collaborative governance structures and processes
     - Place based
     - Implementation focus
   - Long term
     - Supportive of resilience
     - Integrated based on holistic understanding

3) Drinking Water Management
   - Operations
     - Serve multiple functions
     - Shares resources and knowledge
     - Develops participant capacity
   - Planning
     - Adaptive and innovative
     - Participatory and inclusive
     - Equitable and transparent
     - Risk tolerant
Key Findings: Enabling Forces

- Potential benefits
- Innovation
- Principles of good governance
- Existing regional approaches
- Policy window
Key Findings: Barriers

Knowledge, understanding, and awareness

Institutional and regulatory structure

Equity
Key Findings:
Feedback on Proposed Approach

Reality

Revised Framework
Key Findings: Transferable Actions

On-site Training Curriculum

The curriculum utilized for on-site training incorporates several sessions that were developed to response to the training needs of municipal operators. The intention of this program is to train new operators and to enhance and upgrade the skills of experienced operators. For more details on training sessions included in the on-site curriculum, click here.


Source: http://maps.gov.nl.ca/water/
Source: http://assetmanagementbc.ca/home/
Key Points

- Rural areas can learn a lot from existing ideas
- Our framework has good ideas - needs work
- Current institutional structures are a barrier
- Context matters
- Getting creative with capacity
- Thinking regional
Exploring Solutions for Sustainable Rural Drinking Water

Canadian Regional Development

NL/BC Comparative Project

Drinking Water Infrastructure

Source Water Protection

Revised Regional Approach
Thank you!

Questions?

Visit our website:
• http://nlwater.ruralresilience.ca/?page_id=289

Contact information:
• Sarah Minnes
  sminnes@grenfell.mun.ca
• Sarah Breen
  swbreen@sfu.ca