

Working  
Paper

Local Government Knowledge Partnership



University  
of Victoria

School of  
Public Administration

Water Management and Local **Government Institutions:**  
A Comparative **Perspective**

By: **Scott Mathers (P.Eng), MPA Candidate, School of Public  
Administration, University of Victoria**

Local Government Institute  
School of Public Administration  
University of Victoria

Phone: (250) 721-8055  
Fax: (250) 721-8849  
E-Mail: [padm@uvic.ca](mailto:padm@uvic.ca)

Web: [http://publicadmin.uvic.ca/  
lgi/index.htm](http://publicadmin.uvic.ca/lgi/index.htm)

Presented at:

**Regional Economic Performance in British Columbia  
Workshop**

**November 17, 2006  
Laurel Point Inn - Victoria, BC**

## Outline

- Introduction
- Regional Water Systems
- Regional Water Systems Of British Columbia
- Comparative Analysis
- Recommendations
- Questions

Local Government Knowledge Partnership



University  
of Victoria

School of  
Public Administration



BRITISH  
COLUMBIA  
The Best Place on Earth

Ministry of  
Community Services

## Introduction

- LGKP, Improving Regional Performance.
- A series of four papers.
- Broad to Narrow perspective.
- Purpose:
  - Consider regional drinking water systems in British Columbia from a comparative perspective and attempt to make recommendations to improve regional performance.

Local Government Knowledge Partnership



University  
of Victoria

School of  
Public Administration



Ministry of  
Community Services

## Regional Water Systems

- Safe and reliable water supply to support residential, commercial, and industrial growth.
- Water systems are often multi-million dollar utilities.
- Studies have found that higher economies of scale exist in capital, outside, and materials costs.
- Labor and energy costs exhibit lower but positive economies of scale.
- Studies suggest that larger systems are better than smaller systems and can obtain lower unit costs.

Local Government Knowledge Partnership



University  
of Victoria

School of  
Public Administration



Ministry of  
Community Services

## Regional Water Systems Of BC

- Currently 4,797 licensed distribution systems.
- British Columbia has been broken down into 5 functional water regions.
- Each has their own physical, economic, political and logistical constraints.

Local Government Knowledge Partnership



University of Victoria

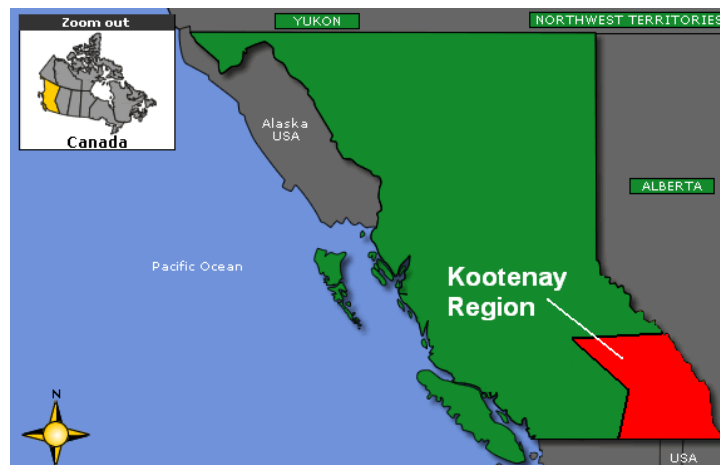
School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

## Functional Water Regions



Local Government Knowledge Partnership



University of Victoria

School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

## Comparative Analysis

Region	Comparators	Similarity Criteria	Difference Criteria
Island Areas	<ul style="list-style-type: none"> <li>• Vancouver Island</li> <li>• New Zealand</li> </ul>	<ul style="list-style-type: none"> <li>• Island geography</li> <li>• Level of economic and social development</li> </ul>	<ul style="list-style-type: none"> <li>• Contrasting Regional Planning Approach</li> </ul>
Urban West Coast	<ul style="list-style-type: none"> <li>• Greater Vancouver</li> <li>• Seattle and King County</li> </ul>	<ul style="list-style-type: none"> <li>• Major urban center</li> <li>• Located adjacent to the Ocean</li> </ul>	<ul style="list-style-type: none"> <li>• Different Regional Servicing Administration Models</li> </ul>
BC Interior	<ul style="list-style-type: none"> <li>• Kelowna, BC</li> <li>• London, Ontario</li> </ul>	<ul style="list-style-type: none"> <li>• Large urban center</li> <li>• Adjacent to many small communities</li> </ul>	<ul style="list-style-type: none"> <li>• Dissimilar regional servicing bodies</li> </ul>
Northern BC and the Kootenays	<ul style="list-style-type: none"> <li>• Skeena Region</li> <li>• Township of Black River – Matheson</li> </ul>	<ul style="list-style-type: none"> <li>• Isolated rural community</li> <li>• Minimal human and economic resources</li> </ul>	<ul style="list-style-type: none"> <li>• Different provincial incentive programs.</li> </ul>

Local Government Knowledge Partnership



University of Victoria

School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

## The Islands: Vancouver Island and New Zealand

- Comprehensive Water quantity and quality inventory system
- Island Wide Approach



Goldstream Reservoir, Victoria.



Karori Water Reservoir Wellington, New Zealand

Local Government Knowledge Partnership



University of Victoria

School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

## The Urban West Coast: Vancouver and Seattle

- Wholesaling Utility
- Customer focus
- Independence vs. Partnerships



Seymour Falls Dam and Capilano Watershed



Seattle Public Utilities' Tolt Treatment Facility

Local Government Knowledge Partnership



University of Victoria

School of Public Administration



Ministry of Community Services

## Isolated populations: Skeena Region and the Township of Black River - Matheson

- Strategic infrastructure funding for Northern Communities
- Small Water Users Association



Local Government Knowledge Partnership



University of Victoria

School of Public Administration



Ministry of Community Services

## The Interior: Kelowna and London

- Joint Water Committees
- Watershed approach
- Administering municipalities



Water Reservoir Kelowna, BC



Lake Huron and Elgin Water Treatment Plants.

Local Government Knowledge Partnership



University of Victoria

School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

## Recommendations

- Provide funding for island communities to consider island-wide water servicing strategies.
- Provide provincial funding for regional water organizations to study new management models.
- Develop a Northern Drinking Water Protection Program that helps isolated northern areas.
- Provide additional funding to the Small Water Users Association of British Columbia or develop similar groups.
- Provide funding for municipalities to study creating joint servicing boards.

Local Government Knowledge Partnership



University of Victoria

School of Public Administration



BRITISH COLUMBIA  
The Best Place on Earth

Ministry of Community Services

# Questions?

Local Government Knowledge Partnership



University  
of Victoria

School of  
Public Administration



Ministry of  
Community Services