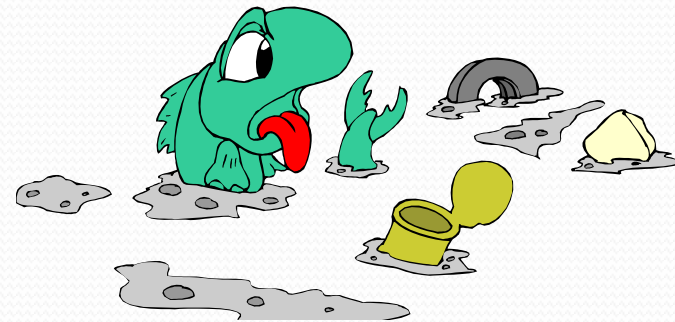


Enhancing Source Water Protection in Rural Regions: Exploring the Role of Governance and Capacity Building

Sarah Minnes, PhD Candidate, Memorial University of Newfoundland
CRRF-RPLC Rural Conference 2016
Friday 14, 2016

Why Protect Drinking Water at the Source?

- “Crisis with water is in fact a management problem, rather than a scarcity problem” (OECD, 2011)



- A lack of SWP can pose both human and environmental risks

Economic Importance

- Walkerton was estimated as costing over \$64.5 million (not including the unquantifiable cost of human life)
- Lessens filtration and treatment costs
- Ratio of benefits of avoiding contamination to the costs of source protection programs ranges from 5:1 to 200:1 (USEPA)



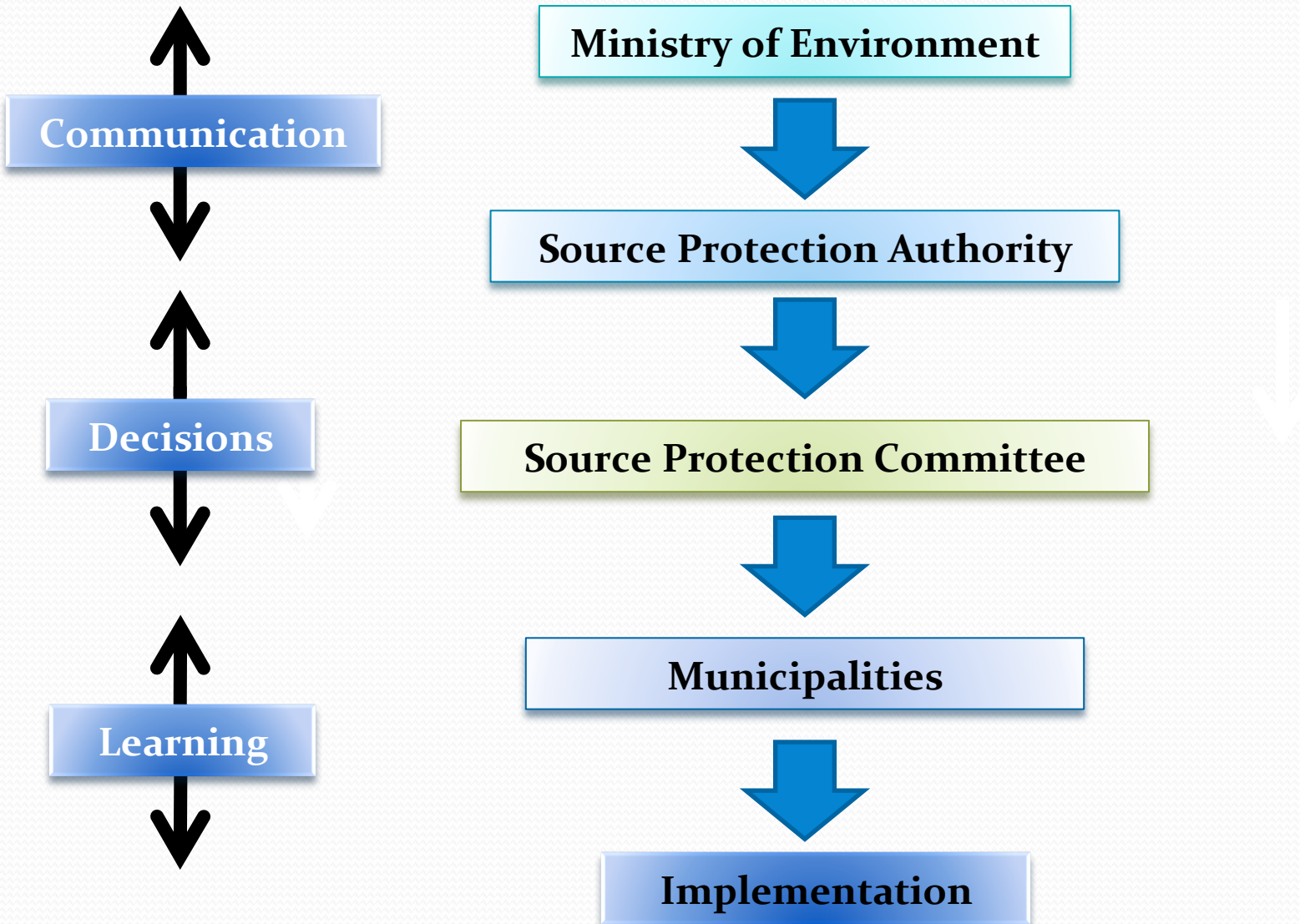
Clean Water Act, 2006

Related Provincial and Municipal Legislation

- Municipal Official Plans and By Laws
- Planning Act
- Provincial Policy Statement
- Oak Ridges Moraine Conservation Act
- The Niagara Escarpment Plan
- Greenbelt Act
- Places to Grow Act
- Nutrient Management Act
- Building Code Act



ON Approach

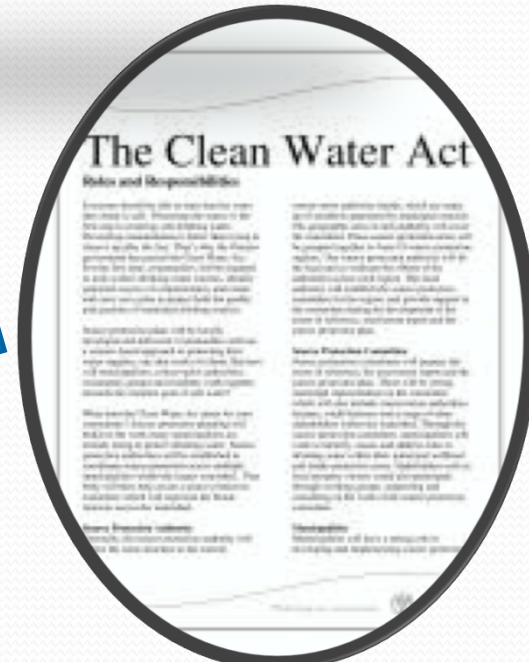
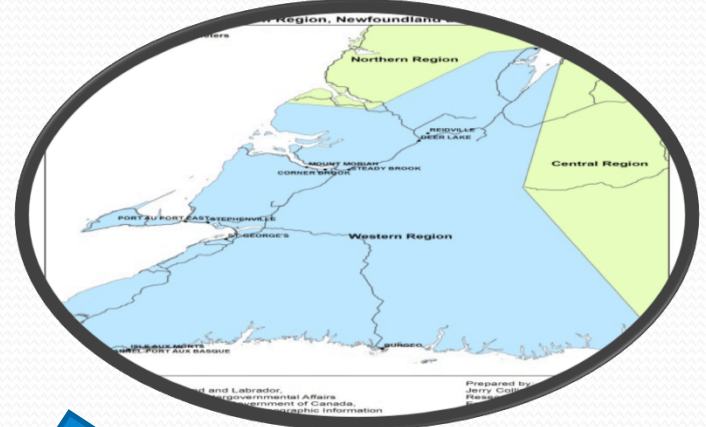


(MOE, 2007)

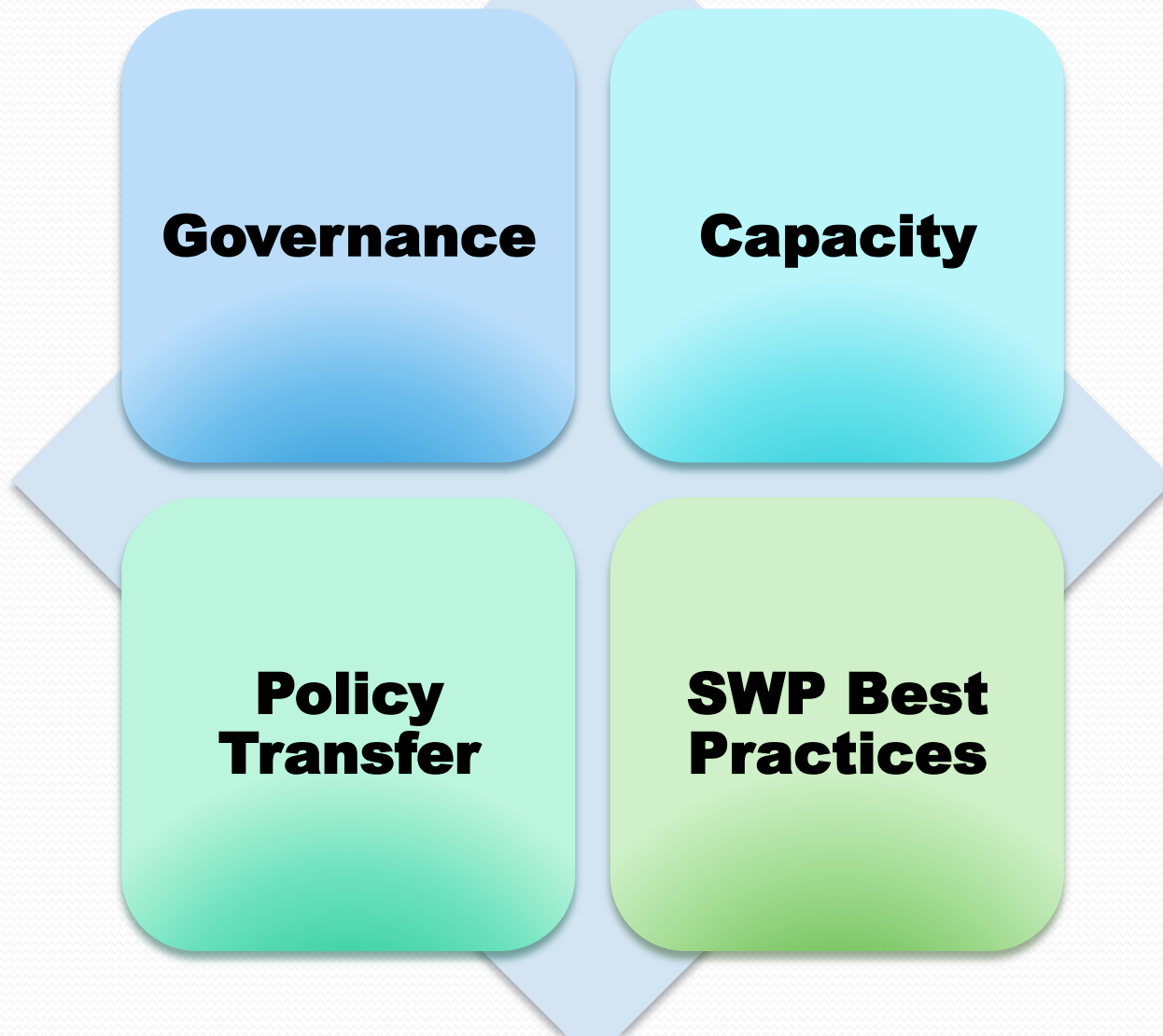
Research Questions

- What have been the successes and challenges with source water protection planning and implementation of source protection plans in ON?
- Did the source water protection planning process in ON build capacity for water and watershed governance, particularly in rural areas?
- What would be the potential benefits and challenges for rural regions in other provinces in Canada if they were to adopt a similar planning and implementation process?

Methodology

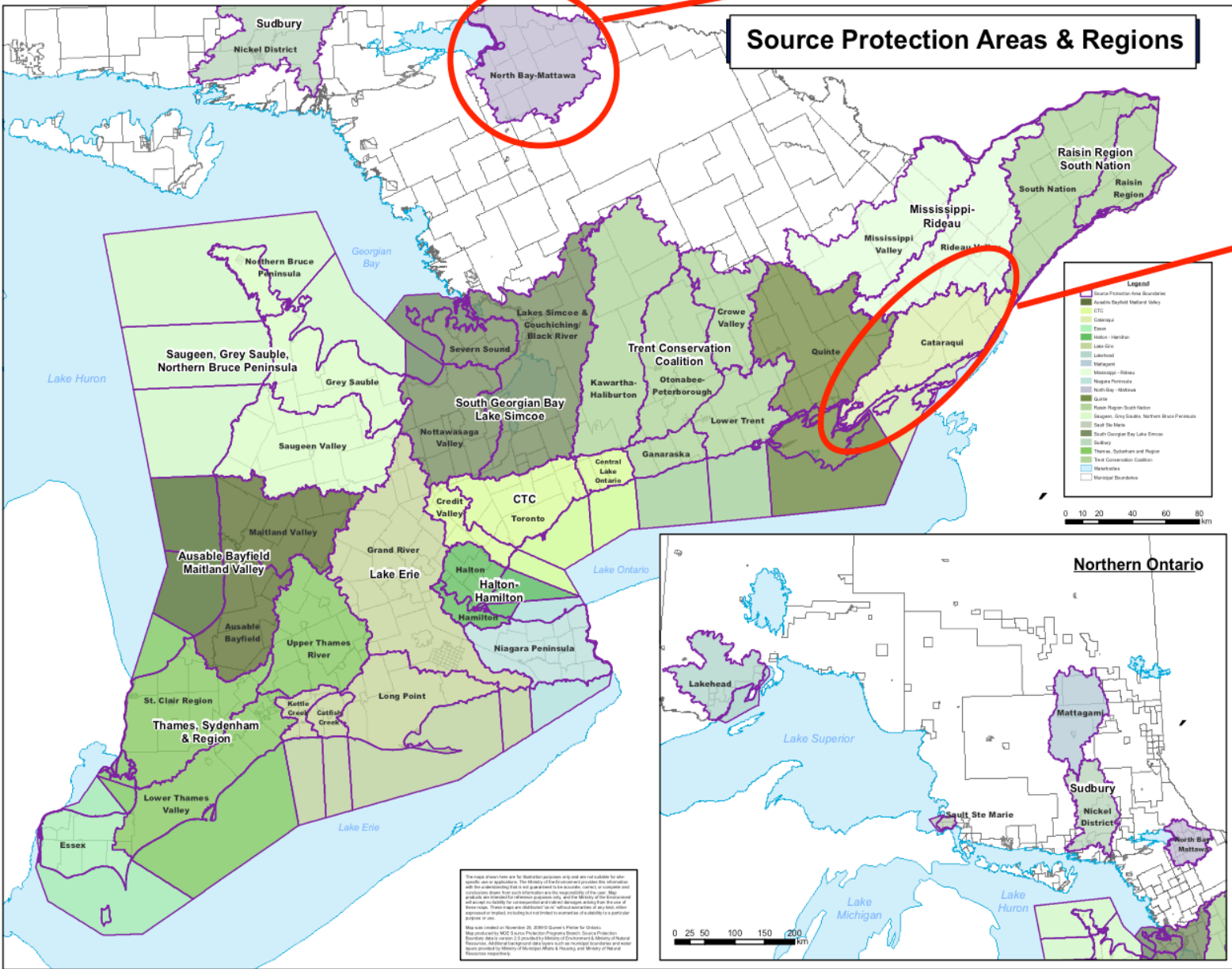


Theoretical Underpinnings



**North Bay-Mattawa
Source
Protection
Area**

**Cataraqi
Source
Protection
Area**



Preliminary Findings

- Great for baseline information gathering and data sharing
- Great for communication
- Legislation provides needed teeth
- Conservation Authorities the “honest brokers”



Planning for the Future

- Annual reporting
- Keeping science updated is imperative
- Emerging issues not under prescribed threat list (e.g. pharmaceuticals)
- Watershed management versus source water protection

Rural?

- Current process excludes:
 - Private wells
 - Public systems outside Conservation Authority boundaries
 - First Nations- included as representatives on committees, but communities not protected under CWA
- Need for the rural to be considered in the next phase
 - Rural hamlet clusters, vulnerable sectors, etc
- Uncertainty of implementation funding has municipalities “hand cuffed”



Next Steps

- Completion of field work
 - Analysis
- Paper 1- ON findings
- Secondary literature review of SWP models in Canada
- National focus group discussions in Canada and potentials for policy transfer
- Paper 2- Findings
- Follow up field work and creation of recommendations
- Paper 3- Final findings on ON SWP for rural regions in Canada
- Final dissertation/defense





Questions??



References

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