

Capacity-building Needs In Alberta's Water Governance Structure

Amber Zary, Wei Xu and Henning Bjornlund
University of Lethbridge



Research Objective

The purpose of the study is to assess the current capacity and capacity-building needs for water governance in Alberta as perceived by the stakeholders within the water governance structure.

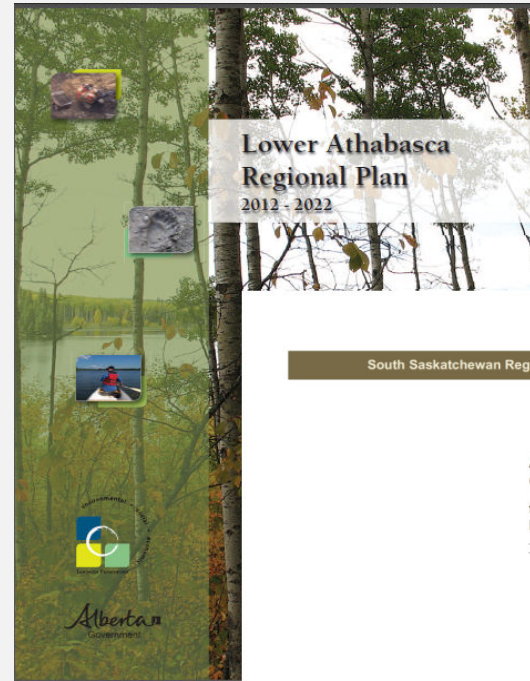
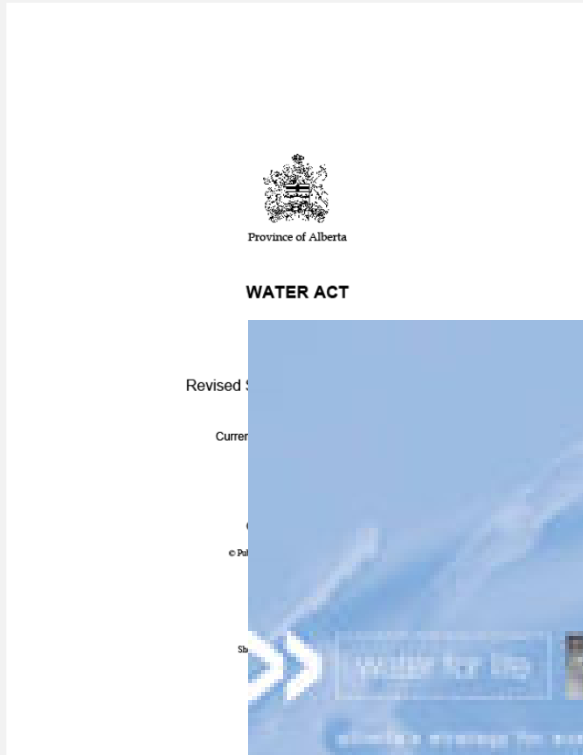
Capacity

- A function – the capability to accomplish something (Morgan, 2006)
- A structure – the grouping of elements and attributes that come together to facilitate capacity (Franks, 1999, Chaskin, 2001, Teohareva, 2011)
 - natural, economic, human, social, and institutional capital (Moore et al., 2006; Pres, 2008; Robins, 2008; Taylor, 2010; van de Meene, Brown, & Farrelly, 2010; Leys & Vanclay, 2011).

Proposed Elements of Capacity

Natural Capital	Economic Capital	Human Capital	Social Capital	Institutional Capital
Ecosystem Services	Public Infrastructure	Education	Trust & Reciprocity	Human Resources Development
Extractable Natural Resources	Government Budget & Cash Flows	Job Experience	Values, Attitudes, & Behaviours	Inter-Organizational Relationships
Income/ Jobs from Resource Extraction	Diversity to Community Cash Streams	Life Experience & Acquired Skills	Commitment	Communication & Information Sharing
Appreciation of / Access to Nature	Access to Markets	Individual Health	Norms & Sanctions	Rules & Incentives
	Resilience to Market Fluctuation	Entrepreneurship	Networks & Information Flows	Technical
	Grassroots Access to Grants	Leadership	Collective Action & Participation	Institutional Culture
	Transparency & Accounting	Indigenous & Local Knowledge	Collective Representation & Association	Representation & Public Involvement
	Harvested Resources	Willingness to Participate	Motivation	Political Influence
		Diversity	Sense of Place	Management Practices and Procedures

Legislation and Strategy



Study Location

- Athabasca River Basin,
- North Saskatchewan River Basin,
- South Saskatchewan River Basin

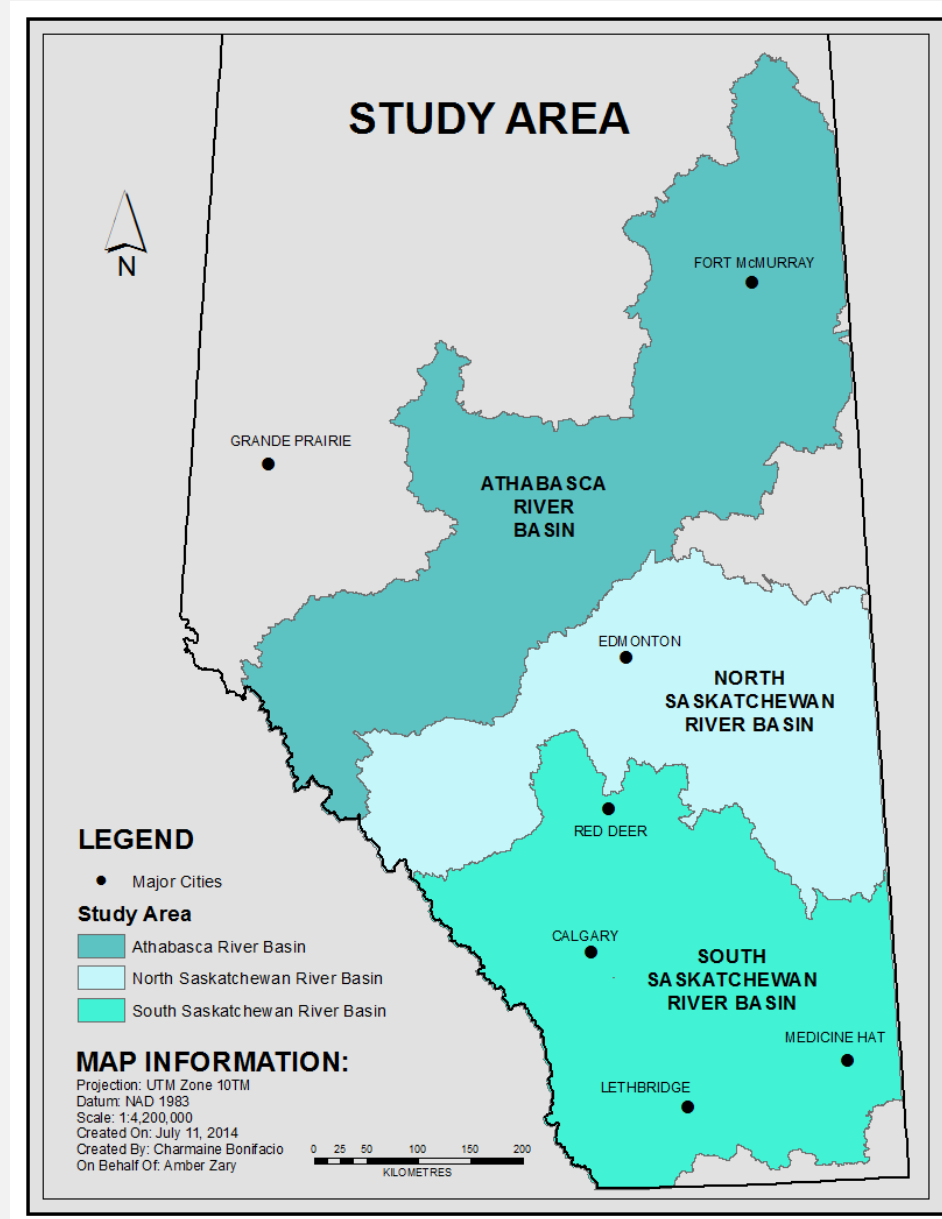


Figure 1.2: Study Area

Source: Bonifacio, C. (2014) Based on GeoGratis atlas of Canada 1, 000, 000 national frameworks data, hydrology-drainage areas for Alberta.

Methods

- In-depth interviews with 26 key informants
 - Purposeful and snowball sampling
 - Data saturation by the 13th interview
- Thematic analysis of interviews
- Context analysis of policy documents
- NVivo

"Everything that we achieve, every success that we enjoy is work that simply would not have occurred had not we done it. And we have obviously the right capacity because we did it."

- Max L., WPAC participant

Factors Influencing Capacity

- Distance from a large centre
- Community and/or organization size
- Community affluence

Natural Capital Capacity

Capacity Status			
Element	Have Capacity	Needs Building	Undetermined or Not Mentioned
Ecosystem Services	X		
Extractable Natural Resources			X
Income/ Jobs from Resource Extraction			X
Appreciation of / Access to Nature		X	

Implications & Capacity-Building

- Implications
 - Degradation or destruction of ecosystem services
 - Individual well-being vs. cost to environment
- Build Capacity
 - Develop valuation system
 - Expand evidence-based education programs

Economic Capital Capacity

Capacity Status			
Element	Have Capacity	Needs Building	Undetermined or Not Mentioned
Public Infrastructure		X	
Government Budget & Cash Flows		X	
Diversity to Community Cash Streams		X	
Access to Markets			X
Resilience to Market Fluctuation		X	
Grassroots Access to Grants		X	
Transparency & Accounting		X	
Harvested Resources		X	

Implications & Capacity-Building

- Implications
 - Reduced focus on governance
 - Inadequate and possibly unsafe infrastructure
- Build Capacity
 - Secure funding
 - Collaborative work across Canada to solve infrastructure issues

Human Capital Capacity

Capacity Status			
Element	Have Capacity	Needs Building	Undetermined or Not Mentioned
Education	X		
Job Experience	X		
Life Experience & Acquired Skills		X	
Individual Health		X	
Entrepreneurship			X
Leadership		X	
Human Resources Development			X
Willingness to Participate			X
Diversity			X

Implications & Capacity-Building

- Implications
 - Reduced work capacity
 - Reduced board function
 - Burnout
- Build Capacity
 - Develop benchmark programs for training
 - Collaborative work across Canada to solve infrastructure issues

Social Capital Capacity

Capacity Status			
Element	Have Capacity	Needs Building	Undetermined or Not Mentioned
Trust & Reciprocity		X	
Values, Attitudes, & Behaviours		X	
Commitment			X
Norms & Sanctions			X
Networks & Information Flows	X		
Collective Action & Participation	X		
Collective Representation & Association			X
Motivation		X	
Knowledge Building and Dissemination	X		
Sense of Place			X

Implications & Capacity-Building

- Implications
 - Lack of motivation
 - Process not seen as legitimate
- Build Capacity
 - Communication
 - Expand educational programs

Institutional Capital Capacity

Capacity Status			
Element	Have Capacity	Needs Building	Undetermined or Not Mentioned
Human Resources Development	X		
Inter-Organizational Relationships		X	
Communication & Information Sharing	X		
Rules & Incentives		X	
Technical	X		
Institutional Culture		X	
Representation & Public Involvement		X	
Political Influence	X		
Management Practices and Procedures		X	

Implications & Capacity-Building

- Implications
 - Broken partnerships
 - Inefficient operation of organizations
 - Lack of respect for regulatory process
- Build Capacity
 - Build internal capacity of government and partners
 - Enforcement of rules and regulations

Suggested Elements of Capacity

Natural Capital	Economic Capital	Human Capital	Social Capital	Institutional Capital
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	Grassroots Access to Grants	Entrepreneurship	Networks & Information Flows	Technical
	Transparency & Accounting	Leadership	Collective Action & Participation	Institutional Culture
	Harvested Resources	Indigenous & Local Knowledge	Motivation	Representation & Public Involvement
	Access to Markets	Willingness to Participate	Collective Representation & Association	Political Influence
		Diversity	Sense of Place	Management Practices and Procedures
		Human Resource Development	Indigenous & Local Knowledge	

Acknowledgments



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Prairie Water News