

Watershed Management: Building and Supporting Institutions for Positive Change

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The Question:

What can we learn from existing models of collaborative governance that are working towards sustainable development and restoration of Canada's coastal social- ecological systems?

Methodology:

- Three case study areas
- Minimum four fields visits to each site
- Multiple collection and analysis methods

Research sites



Watershed Management in Canada

Indian Bay, Newfoundland

- 1,000 square kilometers
- 10,000 - 20,000 people

Fraser Basin, British Columbia

- 240,000 sq. km
- 2.4 million people
- 13 main watersheds



Multi-level Policy Framework

Local authorities	Municipal government, Regional Districts
First Nations	Band Councils, Tribal Councils, hereditary systems (Aboriginal rights and title, self-governance)
Provincial	Sustainable Communities Initiative (NS) Community Watershed Management (NL) Watershed Restoration Program (BC)
Federal	Stewardship and Community Involvement Program (70s), Green Plan (1990), ACAP (1991), NPA (2000), Oceans Strategy (2002) * No national policy for watershed management
Federal-provincial	Canada Water Act, CASEC (Atlantic), Watershed-Fish Sustainability Planning (BC)
Regional/ International	U.S. Canada Boundary Waters Treaty, Commission for Environmental Co-operation, Agenda 21, GPA, Ramsar/NA Waterfowl Management Plan

Research Framework

- 1. Actors and actor relationships/networks**
- 2. Principles:** Good governance, sustainable development, collaboration
- 3. Scale issues**
- 4. Tools, structures and processes (mechanisms)**
- 5. Outcomes**
- 6. Barriers**

Bras d'Or Lakes watershed, Cape Breton

Unique

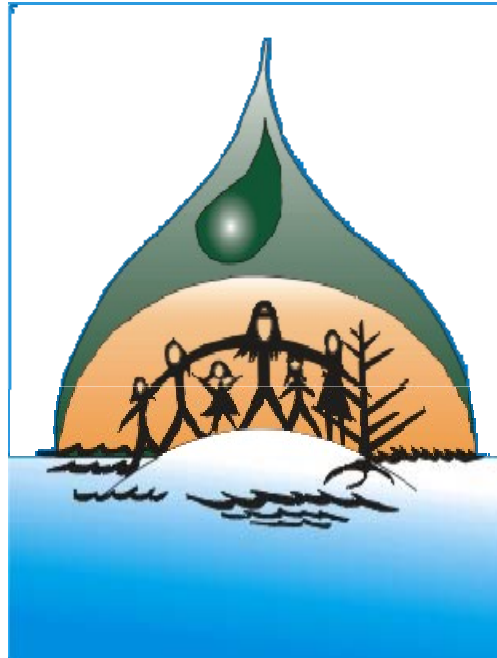
Vulnerable

Endangered

Highly significant



Actors – The Cast of Characters



Not one but many – networked/process approach

Primary actors (drivers), quiet supporters and facilitators (enablers)

Organizations and individuals



Agents of Change

Actor Networks

Formal structures and processes:

- Sustainable Communities Initiative
- Nova Scotia Shellfish Growers Association
- Ocean Management Research Network
- Canadian Water Management Association
- First Nations Environmental Network

And informal/personal relationships

Mechanisms

- Integrative science partnerships
- Capacity building
- Cross-cultural sharing
- Elder and youth engagement
- From court action and lobbying to policy dialogue/ meetings/negotiation
- Restoration and improvement projects
- Collaborative environmental planning
- Public education/media outreach
- Enforcement

Outcomes

Social * Cultural * Economic * Ecological

Information
Knowledge
Understanding

Capacity building
Social and human capital

Infrastructure

Public awareness and education

Policy change

Early indicators of positive ecosystem change



Observations

- Local level watershed management initiatives can enhance knowledge and create positive change
- Examples of collaborative coastal governance - opportunities for learning and adaptive management
- Integration of “western” science and LK/TK systems
- Continuity and commitment of communities of place
- Values and culture must be discussed/incorporated
- Formal and informal mechanisms
- Balancing study, planning, policy and action
- Networking across scales

Thank you!!

- LOICZ
- Communities and research participants
- Funding agencies
- My Committee



Collaborative Governance

- Multiple actors within a complex planning and decision-making structure made up of formal and informal relationships
- Integrates issues, objectives and values – seeks balance and sustainability
- Multi-scale but emphasizing the importance of the “local”
- An ongoing process of dialogue, struggle, learning and adaptation