

Community Governance Perspectives Support Social-Ecological Systems and Resilience

Lisette Wilson

Dalhousie University, Halifax, NS

Anthony Charles

Saint Mary's University, Halifax, NS



Coastal Zone Canada 2010
University of Prince Edward Island; 23-25 July, 2010

Social-Ecological Systems

• Definitions:

- Integrated system of nature and society with reciprocal feedbacks (Berkes & Folk, 1998)
- Relationship between social and ecological systems using knowledge systems to respond to environmental feedback (Berkes et al., 2003)
- Holling (1973) and others –adaptive renewable cycle, panarchy, resilience and transformability

Resilience

1 Social

The ability of groups or communities to cope with external stresses and disturbances resulting from social, political and environmental changes (Adger, 2000);

2 Social-Ecological

- (a) the magnitude of shock that the system can absorb and remain within a given state;
- (b) the degree to which the system is capable of self-organization, and
- (c) the degree to which the system can build capacity for learning and adaptation (Folke et al., 2002)

Research Questions and Frameworks

• Framework for this study:

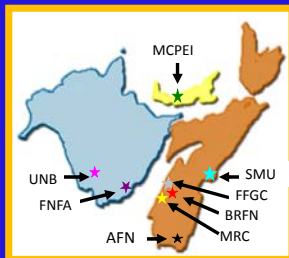
- MEA (2005): Ecosystem Services (provisioning, regulating, cultural and supporting)
- Governance Initiatives: Community-based

• Research Questions

- What are the social-ecological linkages between ecosystems and communities within and around the Annapolis Basin
- How do coastal communities identify and/or understand resilience within and across these systems?

Coastal CURA

- Community-University Research Alliance of First Nations communities, fishery-related groups and university participants

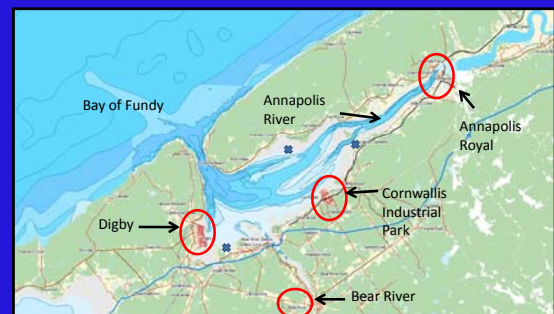


Four goals:

- ❖ Increased community engagement in coastal management
- ❖ Sharing knowledge for improved governance of coastal resources
- ❖ Innovative research initiatives and effective capacity building
- ❖ Improved networking between communities involved in coastal governance

<http://www.coastalcura.ca>

Annapolis Basin



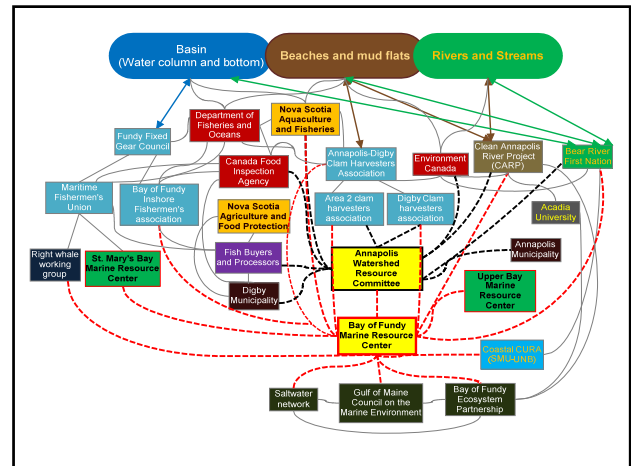
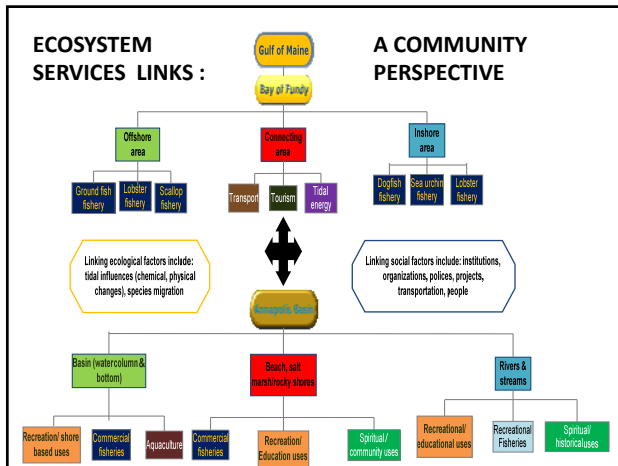
Participants

- ❖ Bear River First Nation (BRFN)
- ❖ Clam Diggers Association (DCHA)
- ❖ Harvesters Association (Area II)
- ❖ Fundy Fixed Gear Council (FFGC)
- ❖ Annapolis Watershed Resource Committee (AWRC)
- ❖ Clean Annapolis River Project
- ❖ Bay of Fundy Marine Resource Centre (MRC)
- ❖ Saint Mary's Bay Marine Resource Centre (BRC)
- ❖ Upper Bay Marine Resource Center (UBMRC)
- ❖ Bay of Fundy Ecosystem Partnership



Issues

- Water Pollution (land based sources)
- Habitat destruction (stream and river banks)
- Depleted fish stocks, risks to habitats, prices
- Access to beaches (aquaculture leases)
- Safe spaces for information access & dialogue
- Political and financial support for community based organizations and groups



Resilience: From a Community Perspective



Despite the difficulties faced by you or your organization how were you able to continue with your day to day activities?

Insights on SES and resilience from a local perspective:

- Reciprocal relationship between ecosystem services & stewardship
- Different scale and implications for information exchange –local early warning system
- Key links e.g. MRC, AWRC, bringing different organizations, habitats, interests together
- Resilience - gaps in terms of how resilience factors combine under different situations and how to work with this concept

Policy Implications and Next Steps

- Reciprocal paths (ecosystem services/stewardship)
 - Support existing groups and associations to build stronger networks across different habitats and issues (early warning and response systems)
- Recognition of different knowledge sources and skills
- Question
 - How can government and academic institutions empower communities to continue being responsible stewards of their environment?

Acknowledgements

- Coastal CURA
- Marine Affairs Program, Dalhousie University
- SSHRC
- Killam Trust Fund
- PEO Peace Fund

Arthur Bull, Sherry Pictou, Bill Whitman, Carolea White, Melanie Wiber, Terry Farnsworth, John Kearney, Hubert Saulnier, Ken Weir, Denise Sullivan, Andy Sharpe, Jon Percy, Ken Wilson



Thank You 😊