

**COASTAL CURA:
COMMUNITIES MANAGING COASTS TOGETHER**

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(on behalf of the Coastal CURA)

Introduction

The Coastal CURA is a five-year project – a Community University Research Alliance funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) –that is building knowledge and capacity across the Maritime Provinces to support community involvement in managing our coasts and oceans. It is a partnership of First Nations communities, fishery-related organizations and university participants that supports coastal communities facing challenges from a range of environmental, economic and social impacts. The project is designed to address community needs in three key ways – through participatory community-based research that builds knowledge and understanding, through improving our analytical, evaluative and communication tools, and through development of organizational and institutional capacity for better natural resource management. In this way, we are doing work that develops better and more sustainable coastal policy.

This paper reports on lessons we have collectively learned about the ways that communities can work together with academics in defining problems, designing research and communicating results to other stakeholders and the government.

Why we came together:

cross the country, coastal communities and coastal resource users are facing a range of environmental, economic and social challenges (Kearney et al., 2007). In the Maritimes, the response to these challenges has sometimes included innovative fisheries

management arrangements, including several examples of community based management (CBM) for specific gear sectors or fish stocks. In recent years, however, the challenges have mounted with new industrial development (liquid natural gas plants, oil refineries, aggregate and sand mining, aquaculture, tidal power) as well as expansion of traditional ocean uses (shipping, oil and gas exploration and fishing). In response, coastal communities have turned to academics and civil society organizations to facilitate improved coastal and ocean planning – planning that can effectively coordinate management of multiple and often competing coastal uses (fishing, aquaculture, shipping, tourism, industry). Their objective is to promote healthy, viable environments and sustainable coastal communities.

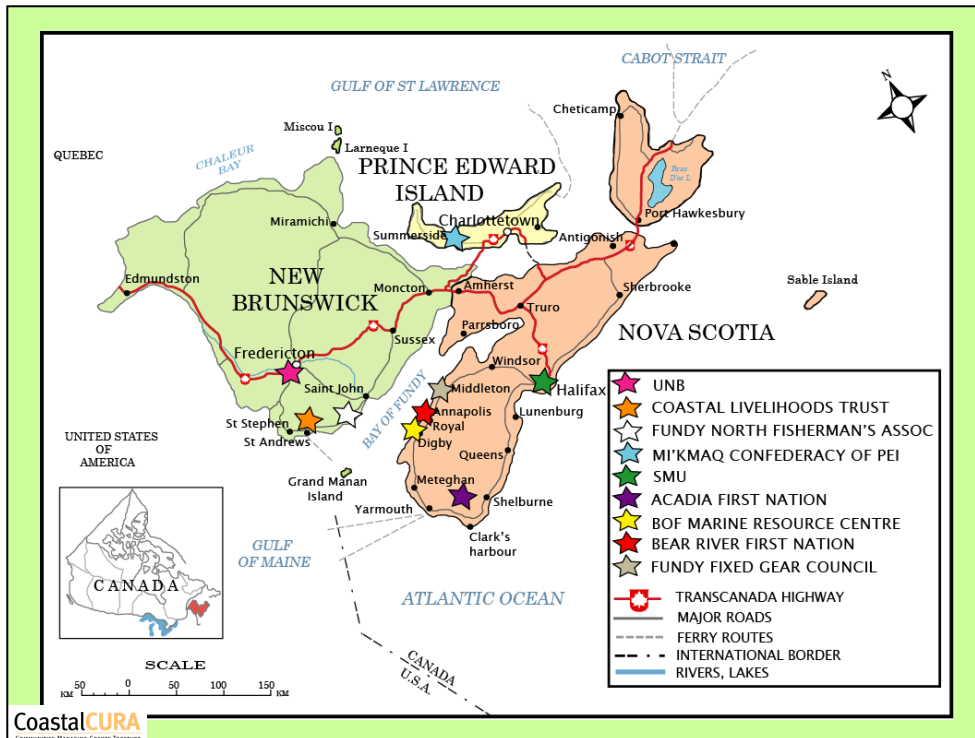
The Coastal CURA is building on the local tradition of CBM and also has the advantage of a set of academic and community partners who have a successful record of working together. Under an earlier SSHRC Research Development Initiative, we (the partners) explored alternative participatory research approaches that strengthened the role and capacity of community partners in social science research. These same partners also benefited from the Turning the Tide project, which was supported by the Pew Foundation and focused on building bridges between native and non-native coastal communities. In developing our approach under the Coastal CURA, then, we were able to bring together a team that shared knowledge and understanding of the problems, analytical and evaluative tools, and strengthened organizational and institutional capacity, in order to achieve sustainable management of coastal resources in the Maritimes and beyond. In this paper, we will focus on those processes that we have found effective in working together, rather than on our research topics and accomplishments (Wiber, et al. 2007; Wiber, et al. 2004).

Who We Are:

The eight partners involved with the Coastal CURA are spread across the Maritimes (see map), including two universities – Saint Mary's University and the University of New Brunswick – and six community partners. Two of the community partners are fishing organizations (Fundy Fixed Gear Council, and Fundy North Fishermen's Association) both leaders in developing fishery-community networks and establishing research links with natural and social scientists. Another four of the community partners are First Nations (Acadia and Bear River of Nova Scotia, and

Lennox Island and Abegweit which together form the Mi'kmaq Confederacy of PEI). These First Nations face challenges in their use and management of coastal resources and share an interest in applying community-based approaches to a range of coastal resources. The sixth community partner, a regional organization, the Bay of Fundy Marine Resource Centre, brings expertise in community facilitation and research related to fisheries and coastal management.

We represent at least three distinct cultural communities – academia, First Nations, and coastal fishing communities of European descent. Although the lines between our three cultures sometimes overlap, we have had to find ways to work together that accommodate some significant differences. One way we have done this is to respect the needs and priorities of each of our partners; each partner has brought quite distinct research problems to the Coastal CURA. Bear River, for example, has been involved in stream restoration, and in supporting local integrated management initiatives in the Annapolis Basin watershed. They link with Acadia First Nation and the Mi'kmaq Confederacy of Prince Edward Island on evaluating the impact of the Supreme Court of Canada Marshall Decision, which recognized the right of Maritime First Nations to participate in commercial level fishing. In addition, MCPEI is involved in developing an integrated management plan for Malpeque Bay. The Bay of Fundy Marine Resource Center is involved in a number of these initiatives, as well as several others linked to the privatization of public resources, such as the leasing of clam flats to a corporate owner, the improvement of the groundfish community based management boards and the development of local integrated management initiatives for the Annapolis Basin and St. Mary's Bay. Fundy North Fishermen's Association, in Southwest New Brunswick, has been involved in negotiations over the squeezing out of traditional fisheries from Saint John harbor, in the face of petrochemical industrial expansion. They are also working with the provincial government on an improved aquaculture site licensing process. Together, all the community partners are involved in community mapping and other projects that involve media production.



Map 1: the Canadian Maritime Provinces, showing location of Coastal CURA Partner Organizations

Our Shared CURA Goals and Objectives

The partners of the Coastal CURA developed the original funding proposal together – in that sense it was truly participatory and grass roots. In the process of exploring our common interests and concerns, we developed four key goals:

- Improved effectiveness of governance of coastal resources
- Enhanced community research capacity to further local management
- A wider Maritimes network to support integrated coastal management
- Research innovations and knowledge generation.

To further these goals, we collectively decided to focus on three key themes or approaches:

1. Reflection on past developments;
2. Iterative learning through place-based initiatives and policy studies; and,
3. Capacity building among our partners.

All three key approaches have been employed simultaneously in the first two years of the project. In our first year, projects were focused on reflective analysis of the

situation in the regions of each partner (place-based projects), followed by a Reflections Workshop where common themes and issues were identified. This workshop resulted in several publications that are currently being developed under the co-authorship of community and academic partners. Year two focused on identifying common themes and designing further place-based case study work that feeds into a collective analysis process led by our graduate students. Meanwhile, capacity building has been moving forward, both focused (such as GIS workshop and tele-learning circles) and inherent (relationship building). Basically, community partners fully participate in setting the research agenda and in developing research methods and analysis of results. In addition, given the variety of community-based management initiatives that have moved forward in the Maritimes over the past ten years (Charles et al., 2007), we have been involved in collective evaluation, reflection and documentation of existing policy and of alternative approaches.

Challenges

We have adapted to several key challenges as our work has progressed, including refining our governance structure, working out ownership agreements, dealing with the complexity of the issues we are researching and finding a balance between academic and community needs and interests.

We recognized early on in the CURA planning, that success would require both developing research skills among the community partners and building the capability of the academic participants to carry out participatory research within and for the coastal communities. Building the capabilities of all CURA partners has required the development of an innovative governance structure for the CURA. We have gone through an iterative process of refining this governance structure, although the basic framework has proven very successful. We began with a strong commitment to collaborative and democratic processes and were careful to structure all governance bodies (councils, committees and boards) with equal representation from community and academic partners. One drawback has been the high level of investment of time and effort required of partners; but so far we have been able to sustain a high level of participation in the governance of the CURA. One important ingredient has been flexibility – for example, when we discovered that having committees for research,

outreach, and capacity building resulted in too many meetings with the same participants, we streamlined the governance structure to include frequent conference call meetings by a management committee that is also able to meet quickly on a face-to-face basis when needed. This management committee has two representatives from both community and academe, and is co-chaired by an academic and community partner representative. These positions are rotated annually among the partners. Our governing council includes representatives from all partner organizations as well as our graduate students, and holds monthly conference calls and semi-annual face-to-face meetings that include the entire council.

Participatory Research

The CURA supports participation by its community partners in developing and implementing coastal management – in a way that incorporates local knowledge, takes into account local coastal uses, and considers appropriate socio-economic and cultural factors, including Aboriginal approaches to resource management. The handling of knowledge is crucial, and the Coastal CURA has worked to support community partners' ability to take stewardship over information (including collection, access, storage, and management) related to traditional knowledge, coastal resources and social science research. For example, we collectively developed a “boilerplate” agreement that all researchers have to sign and that specifies ownership of data, secure storage of data, and co-authorship arrangement for publications.

Research and capacity-building innovations in the Coastal CURA are connected to the training of students, who are given the unique opportunity to learn participatory community research approaches and engage in coastal management research with partner communities. The Coastal CURA promotes student research through thesis work (including support for several interdisciplinary doctoral and master students), volunteer opportunities and internships. For example, over the summer of 2007, the Coastal CURA supported a team of eight graduate students, some based at Saint Mary's University in Halifax and others residing in CURA community partner locations. Internships provide invaluable “hands-on” experience in topics of real concern to coastal communities. Students delve into many aspects of community-based research, such as the synthesis of

traditional ecological knowledge and academic research, community-based coastal zone management and co-management, and ownership of community-based research.

Complexity

As we came to appreciate the complexity of the research we had undertaken, we collectively developed a “matrix” of approaches and themes to address that complexity – a process of adaptive learning from which we have all gained enormously. The CURA has helped partners maintain a Maritimes-wide collaboration, so as to analyse, problem solve, collaborate with government and mobilize knowledge around innovative approaches. Our bi-annual council meetings, for example, always include a group learning experience (working with media, reflecting on past management approaches, critical examination of policy language) that in turn, facilitates brainstorming sessions. Often this process requires lead-up individual consultation with partner organizations (as before the Reflection Workshop) to collect and collate experiences.

Communicating results is a key objective of the Coastal CURA. For example, the outcome of our media learning circle was to identify mechanisms by which to get our message out – including film production, exploring on-line resources, and other forms of “cultural production”. The project distributes its research findings and insights to communities, governments and international audiences through a newsletter, a website (www.coastalcura.ca), networks, conferences and with a variety of documents and videos (i.e., a film on fisheries in Saint John, New Brunswick, released in August 2007). The outcome of our Reflections Workshop was a research matrix (see Chart 1), which ultimately went through various iterations before becoming a research web (see Chart 2 and 3).

	MCPEI	Acadia/ Bear R.	SWNB	Annapolis Area	Common Deliverables	Working Groups	Timeline
<i>Common themes</i>							
Transformational learning/ empowerment	Louie’s research	Film; Stream restoration	Sharing the Waters film	Critical studies group	1) Convening on Industrial Development 2) workshop on transformational learning	Maria, Arthur, Sherry, Carolea	
Cultural Production		Cultural mapping, transfer of GIS skills?		Local learning circle on film and mapping	1) Database on Community Mapping 2) Citizen mapping 3) Film festival 4) Film workshop	Bill, Norma, Randy	
Engaging with power	DFO-aquaculture Malpeque Bay	Triparty negotiations	LNG planning	Clam leases; quarry	1) Pod cast, 2) Paper on consultation incl. First Nations	Melanie, Arthur, Kate, (Liz), Randy	
Claiming language	Integrated management	TEK	Dialogue	resilience	1a) Define Integrated Mgmt. with case studies 1b) Workshop with gov., etc. 2) Database	Tony, Melissa, students	

Chart 1: First Research Matrix

How do we fit together? The Matrix was our first attempt to elucidate this and it makes clear that there are threads that bind our work together; we are collectively focused on many different aspects of integrated coastal management in many different geographic, cultural, social, political and economic situations. The matrix helped us collectively see the big picture. It served as a great starting point but it wasn't long before some of us started to feel 'boxed in' and wanted to do work that cut across at different angles. That led to conceptualizing our work as a web, which gave us more freedom to recognize common interests, make new alliances and build research connections. However, this process took a number of iterations to make the conceptual relationships clear (see Chart 2 and 3).

Our present configuration, thanks to Liz Wilson, one of the Coastal CURA PhD students, is complex (Chart 3). Most likely this too will undergo revisions as our work together develops, but it does show clearly how complex our work and our relationships are. One reason that we have such a strong need for complexity is to allow for flexibility to accommodate the different situations and perspectives we come from. By embracing complexity, we are accepting the realities of community work where research cannot be done in a controlled, isolated environment apart from politics, neighboring communities, corporate interests, etc. Community work, and action research is as dynamic as the tides of the Bay of Fundy, and that can only be displayed accurately through complex graphics.

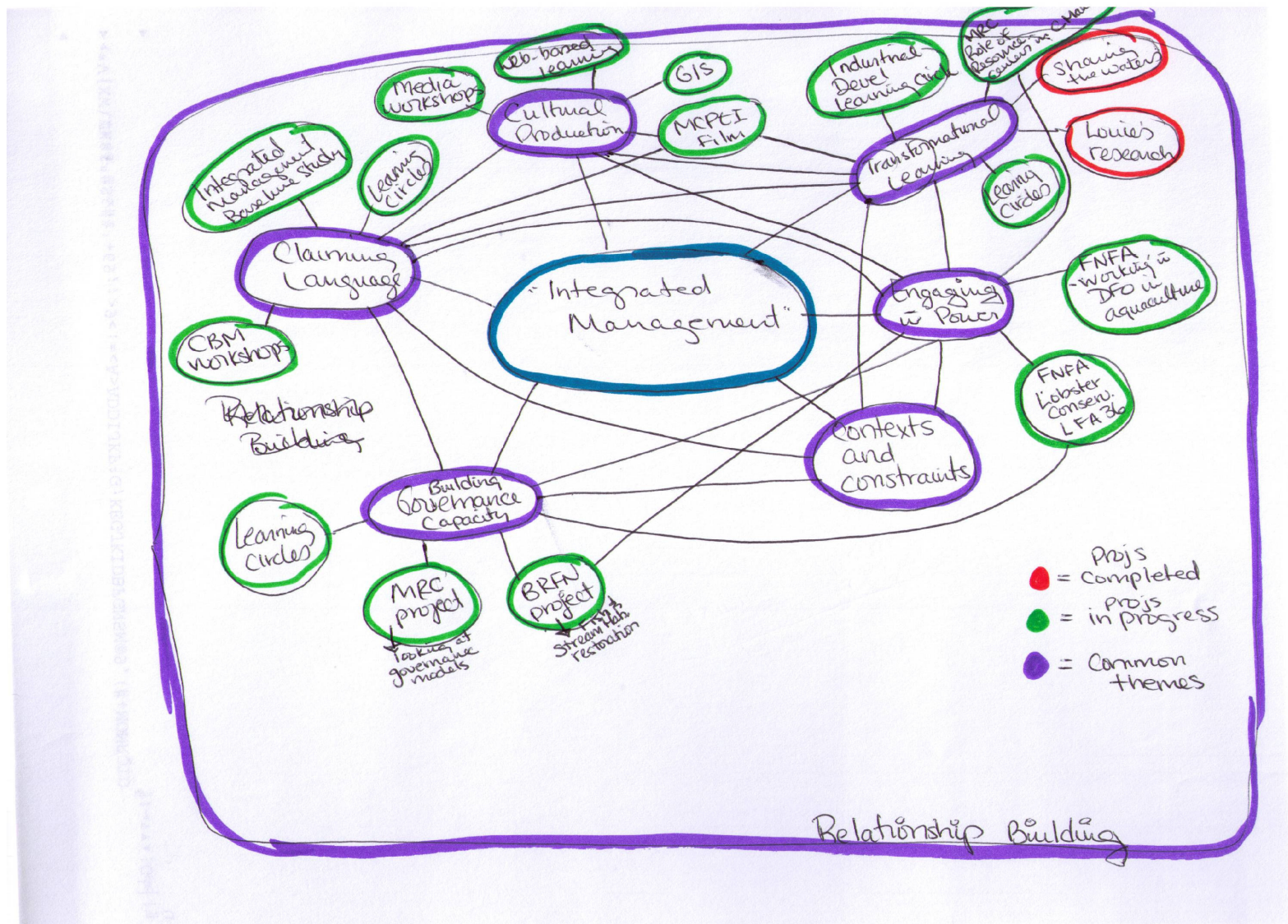


Chart 2: First Coastal CURA Web

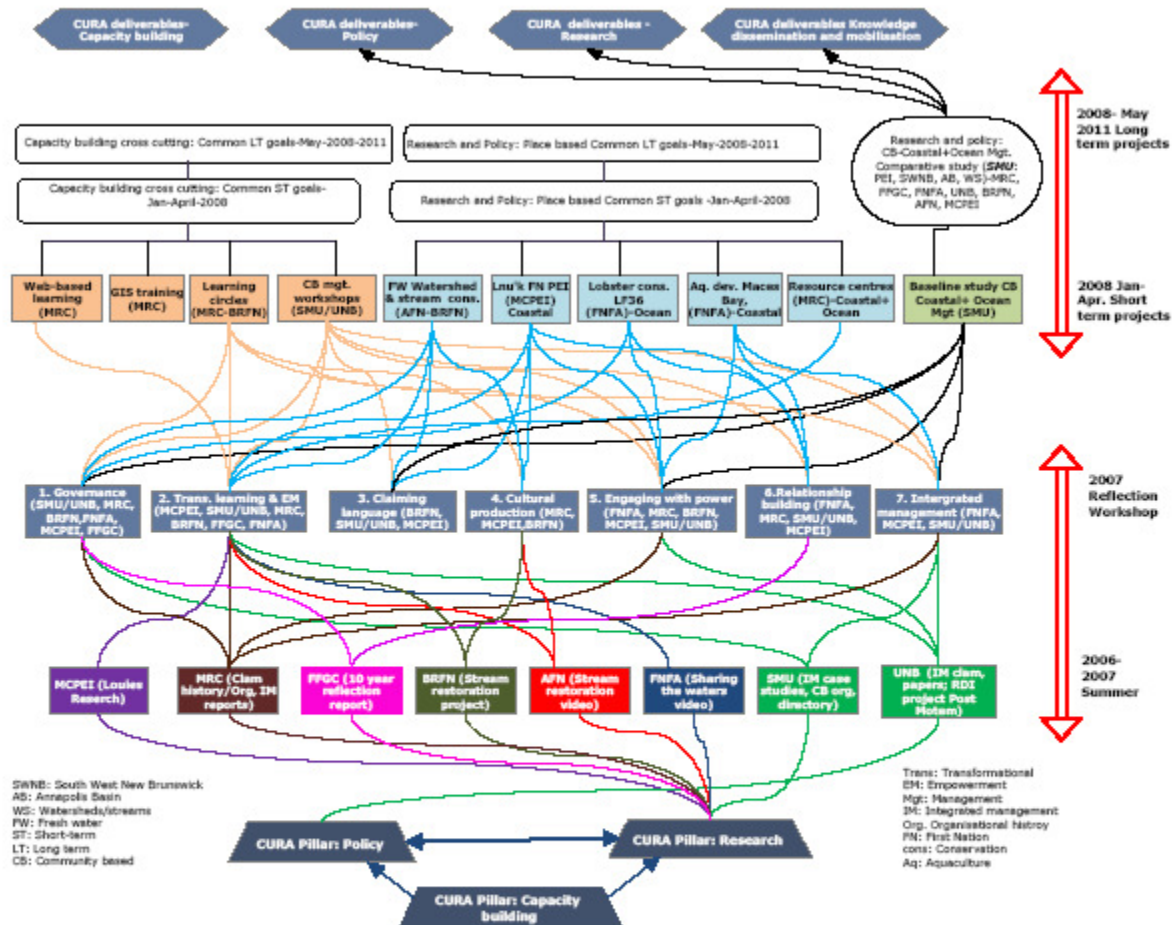


Chart 3: Complex Research Web

Innovation

Developing our research based on grassroots interests and real complexity has led, as you can see from the matrix, to several different approaches to our work. Many of these have been innovative for both the academics and the community partners. We have hosted workshops, for example, on basic GIS and mapping techniques, as a spring board for community work on counter mapping, or spatial analysis and ecological relationships based on local knowledge. We have also adapted methods to increase the geographical range of our learning circles, by employing recent teleconferencing facilities that allow us to get both verbal recordings and written transcripts of the learning circles we have held on clam aquaculture, subsistence fishing and the ten-year history of the Fundy Fixed Gear Management Board. We have facilitated case studies on the impact of clam beach privatization on clam harvesters, the public consultation process for approving quarries and aquaculture sites, the negotiations over transport lanes in industrial harbor development, and the political struggle over integrated management of specific sites in the Maritimes. We have also been innovative in making media productions and in collaborating on others to get some of these case studies out into the public eye.

Government Capacity Building

Given the range of research topics we are exploring, we expect significant policy interest in the research outcomes. But policy study can only lead to positive change if we are able to effectively capacity build within government departments. We are using our local contacts with various federal and provincial government offices to increase networking and intend to host workshops with government departments engaged in marine management to share our experiences in integrative management and to give insight on how processes can be improved. We are very focused on making real change happen. We believe that significant change can only come about where there is positive relationship building (both within communities and with government), grounded knowledge generation, public education, and network building to enhance coalitions and political action.

We encourage you to visit our website (www.coastalcure.ca) for more information on our partners and on our research.

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