

Assessing Indigenous Technical Capacity to participate in Marine Spatial Planning Goose Bay – April 16, 2019

What We Heard

"The long-term ecosystem approach is more important than the 2020 goal – that's not our end game. We don't care if you put a boundary on it, but it doesn't work that way."

Technical Interest, Capacity and Expertise in Oceans Management

"There's definitely a need for something like [marine spatial planning] and for us to be engaged...but it will take time and resources."

- Participants included officials from an Indigenous Government and representatives of two Indigenous Nations.¹ All three have experience participating in oceans management initiatives:
 - Two participated in the development of the updated Special Marine Areas Guide in Newfoundland and Labrador by the Canadian Parks and Wilderness Society. The guide identifies and describes these areas through maps and other information.
 - One has developed a broad-reaching marine plan to manage and protect their interest in the coastal and marine areas of Labrador. Another was active in the development of the Gilbert Bay marine protected area, including doing community interviews.
 - All three are strategically involved in environmental assessment activities related to the Canada–Newfoundland and Labrador Offshore Petroleum Board. *"We've delayed their call for bids because we said Indigenous knowledge must be part of it."*
- When assessing their overall capacity levels, participants used a common language to describe it at 'hatchling, infancy or learning' stages. "We're tiptoeing into this process."
- All three have extensive experience collecting and analyzing Indigenous knowledge, and well-established interviewing methodologies. They also have access to a lot of historical knowledge data collected in the past on their occupancy, land and resource uses from which to compare current and ongoing data. This includes community coastal resource inventories and other publications. "We have collected most traditional knowledge data and are beginning to pull together and identify gaps."
 - The interview guide of one is used to reach multiple marine users during different seasons and for different purposes. "We don't focus on specific roles when it comes to marine users. We ask what changes they've noticed and compare that to other observations. ... Every piece people tell us brings up three more things we need to investigate... and there's never been an interview where someone didn't want to come back and continue."
- Participants stress the importance of collecting all data (not just Indigenous knowledge) and talking with women and youth, in addition to Elders. "One of the biggest things that we're hearing...particularly, from the women, is about the changes in meat and the colouration of fish. It's later in the summer before meat gets red." Participants also have a

¹ There are presently no aquatic resource and oceans management groups in Labrador.

holistic view about the role of Indigenous knowledge and western science. *"Traditional knowledge is not there to support or 'prove' science. It's a different system of knowledge so it needs to be used collectively."*

- Participants strongly support the ecosystem-based approach to oceans management and collaborative management. *"We share the same waters; it's a shared resource, so we have shared responsibilities."* There is also interest in more active management, including through potential Indigenous Protected Areas. *"We see value in moving to an Indigenous protected area that we could manage ourselves."* One presently has an annual resource stewardship workshop for its members to discuss self-management of resources.
 - Some communities are concerned about the impact of marine protected areas and marine spatial planning on fishing. "Our communities depend on fish and oceans to get to the small islands off the coast of Labrador [for other food] ... so we have a strong connection to the ocean."

Technical Roles

"There's no solid, consistent funding – it takes three funding proposals each year to fund [staff] so it's a challenge for staff retention. We need permanent funding."

- Participants have some technical capacities to be involved in marine spatial planning, but this capacity is, in most cases, limited and wholly dependent on funded projects. *"I spend all of my time writing proposals: 90% of our staff are project-based funded."*
 - Two have in-house geographic information system (GIS) expertise, while the third has a GIS position that is currently unfilled. *"We have one GIS analyst who is dedicated to many files so we need more staff to work with her."*
 - Two have well-developed guardian programs to do a lot of research, data collection, and community coordination and interviews, but *"we would like to do 'general' data collection not just data collection specific to projects."* The other wants a guardian-like program but *"we're never going to call them guardians we want resource technicians."* All three support building enforcement capacity to ensure marine spatial plans are followed.
 - One has a research manager who reviews all incoming research applications to ensure they include a capacity-building component. *"We will make changes to research funding proposals if they don't respect our goals and objectives."* Another wants to build this capacity. *"Two or three people juggle all the research requests... we have no capacity to do the things we want to do."* The third has aspirations to do more research studies.
 - Only one has an in-house marine biologist. The other two want to build this capacity.
- While participants have well-developed interviewing capacity, they need more people to do interviews. "We have two persons at each one: a mapper and an interviewer. This is ongoing work."
 - Communications and community coordination overall are key roles in communities. Two have active websites and social media presence. The third would like to expand this role with more communications tools, such as infographics, and more social media activity. One also has a cultural guardian who is digitizing their Indigenous knowledge and data.

- Participants prioritize building their data analysis capacity. One is just starting to analyze data, while another is currently working to identify data gaps.
- Other technical roles of import to participants included proposal funding writers, information technology capacity, financial managers, and writers to handle reporting requirements. *"There are many moving parts and we need more people."*
 - One also recommended a steering committee be created for Indigenous communities to partner in the development of a Labrador Shelves Marine Atlas.

Technical Tools

"Rigour and quality and depth of research has never been harmed by having more knowledge."

- When considering a range of technical tools that may be used to participate in marine spatial planning, participants have similar needs:
 - All three prioritize having upgraded vessels and vehicles for research and monitoring activities and having a data sharing protocol for each other. *"We have the luxury of informality now, but how can we do this later? As we chat together today [we see that] we'll need a sharing protocol."*
 - Indigenous knowledge storage and other data management tools are also of great import. "We're in need of proper storage. Much of our data (audio, video, maps, etc.) are stored elsewhere." One said the Inuit Nunangat is working on a data sovereignty strategy to help communities protect their knowledge and data.
- More environmental or biological monitoring and sampling equipment and sensor technologies are among the other key technical tools needed by participants. One also wants web mapping to communicate with members and the public, *"We'd like to show the public what we're doing and why everything is connected."*
- Two are willing to share web mapping or web features services, the sharing protocol for Indigenous knowledge and/or spatial data, environmental or biological monitoring and sampling equipment, and sensor technologies. The other is willing to share language translation and interpretation.
- Participants added 'marine atlas' to the tools listed on the worksheet. "We need to bring that atlas from BC over here an ocean atlas of human uses. It's a great way for the three groups to go forward."

Technical Training

- Participants have taken some of the training listed on the worksheets, but there is a need for much more training in communities.
 - Two prioritize training on marine spatial planning and ice monitoring. *"The ice is so unpredictable now. The speed of the surface water changes the time of year when it can freeze downstream."* The third prioritizes training in scientific data collection and analysis, as well as data management and storage.
 - All three also support more guardian training, including Eco-Canada BEAHR training and all safety-related training courses.

- One successfully partnered with a university in the past to develop training modules for their guardians. *"The guardians could get credits from the program to put towards other diplomas."* They also certified their guardians through the Eco-Canada BEAHR training program. *"We could tailor it for what we needed."* Another put their guardians through four, four-week training modules at the College of the North Atlantic.
- One worked with the Marine Institute at Memorial University to cater a summer course on GIS for those with an ArcMap licence. They also worked over three years to get an internship in the Integrated Coastal and Oceans Management initiative.
- Participants prefer using local universities and training facilities, such as the College of the North Atlantic and the Marine Institute at Memorial University. *"Memorial University has an Indigenous liaison person on staff. We don't see that with every university."*

Partnerships

"We realized others had done work before us...We looked at what they were doing – what were successes and what weren't – and we built a lot from that."

- Participants work together to address shared species concerns, such as for capelin, and other issues. "We share information with [each other] when there are appropriate opportunities." More than one noted the benefits of their technical collaborations. "We are very fortunate to have informal relationships at the technical level, so it's not complicated." At least one also sees value in potentially collaborating in overlapping territorial areas.
- Participants support partnerships with:
 - science and other sectors of Fisheries and Oceans Canada
 - inter-governmental initiatives, such as Integrated Coastal and Oceans Management
 - universities and other academic institutions, such as St. Mary's, Memorial, and Dalhousie universities
 - non-governmental organizations and local activities, such as the Capelin Observers Network, Oceans Advance², and Oceans North
 - local Indigenous businesses, such as Bird's Eye Inc., for GIS analysis, and drone and mapping activities. "He worked in [our community], then he started his own company. Now, [other Indigenous communities] hire him."
- One uses partnerships to gain access to the skills they need or funding to get training. "We're challenging academics to put an equal amount of funding toward building the capacities of our beneficiaries... more funding for the long-term, rather than consultants."

Lessons Learned from the Workshop

• Participants pointed out that the marine spatial planning video, infographics, and other materials only featured open water scenarios – and that they needed to show and address ice-covered times of the year.

² Oceans Advance is the connection point to the ocean technology innovation system in Newfoundland and Labrador.