

Getting Involved in MARINE SPATIAL PLANNING

Assessing Current Technical Capacity and Technical Capacity Needs

Vancouver – February 28, 2019 (pilot)
Moncton – March 19, 2019, Halifax – March 20, 2019
Goose Bay – April 16, 2019, Nanaimo – April 25, 2019

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Workshop Purpose

- Marine spatial planning
 - Assessing technical roles, tools and training involved
 - Learning from Indigenous experiences
 - Discussing potential partnerships/collaborations
- Responds to what we've heard from groups/communities
 - May need technical capacity to participate in activities
 - Want opportunity to assess technical capacity, and technical capacity needs, BEFORE groups and communities get involved
- Acting on Indigenous Program Review recommendations
 - Build co-management capacity by investing in Indigenous knowledge systems

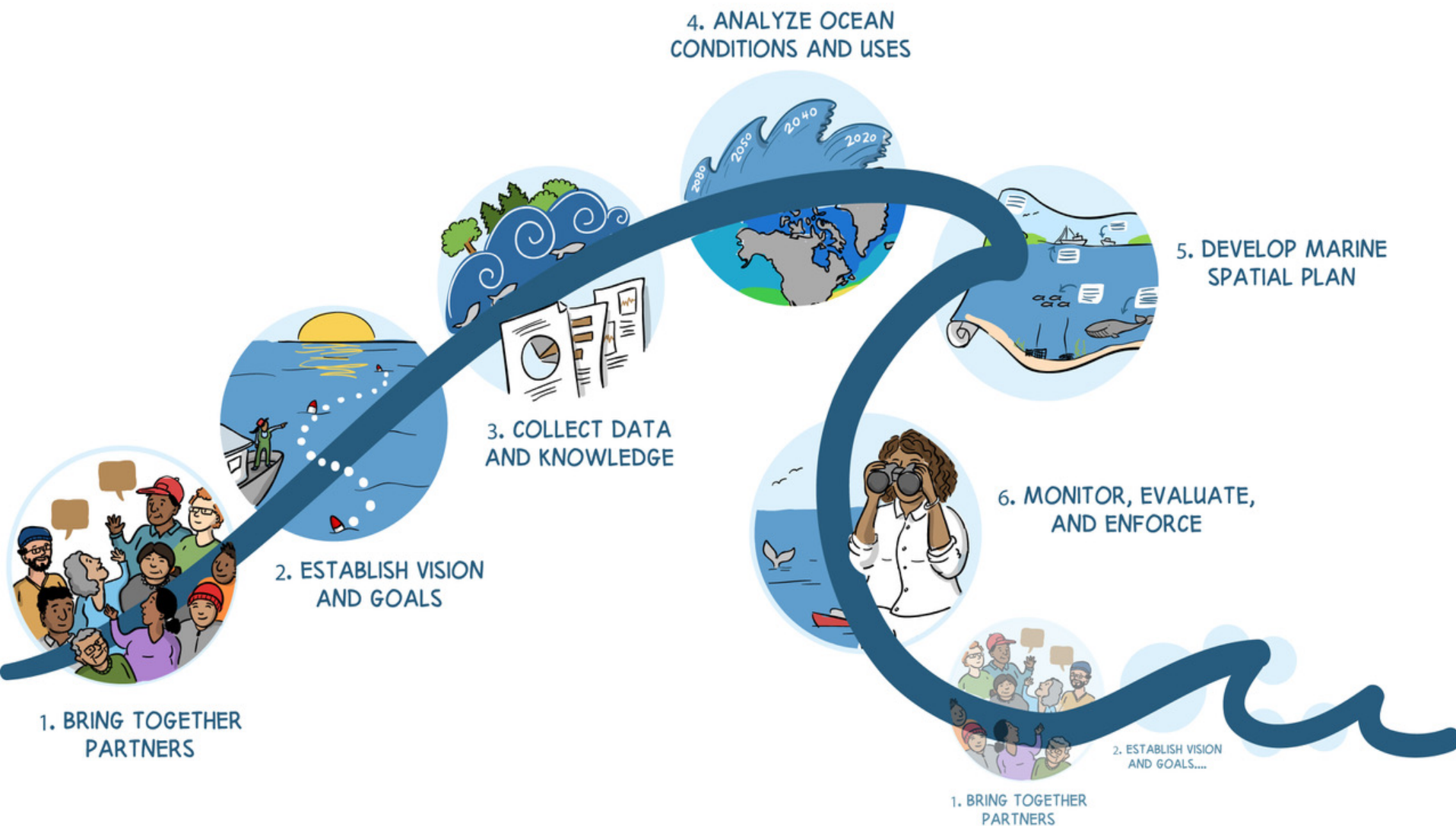


Marine Spatial Planning

- What is it and why is it important?
 - Video, discussion paper, and infographic
- Where will it take place?
 - Across Canada
 - Pacific ocean/coastal areas (Salish Sea, North/Central Coast)
 - Newfoundland–Labrador Shelves, Gulf of St. Lawrence, and Bay of Fundy–Scotian Shelf
- How will Indigenous groups/communities be involved?
 - Two tables: Workshop relates to technical only
 - Infographic: Technical Roles, Tools and Training



MARINE SPATIAL PLANNING PROCESS

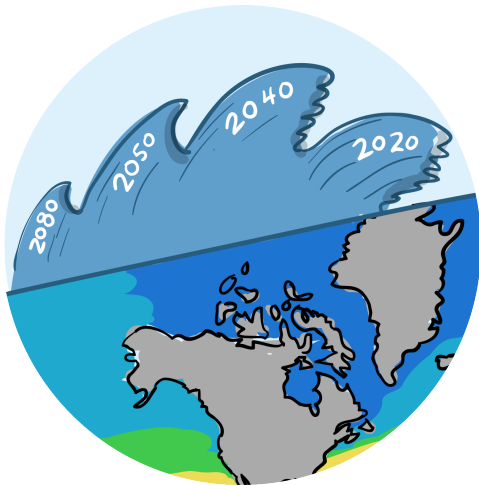


Marine Spatial Planning: Technical Aspects

Collect data and knowledge



Analyze ocean conditions
and uses



Monitor, evaluate and
enforce



Indigenous Experience: MSP Technical Roles Vancouver (pilot)

- Metlakatla First Nation Stewardship
 - Marine use planning and stewardship
- Coastal First Nations – Northern Shelf region
 - Marine Protected Area Technical Team
 - develops communications materials, including website content, organizes stakeholder meetings
 - Interprets spatial analysis, leads discussion items and provides guidance to the planning process
 - Coastal Guardian Watchmen monitoring and protection
- Other Indigenous examples



Indigenous Experience: MSP Technical Roles Moncton and Halifax

- Wolastoqey Nation in New Brunswick
 - Fisheries biologist, GIS technician, environmental technician, ecologist, communications manager, ethno-historian, team of resource development consultation coordinators
- Kopit Lodge (Elsipogtog)
 - Project coordinator & researcher, ARC/GIS mapping director, website coordinator, proposal writer, environmental technicians
- Unama'ki Institute of Natural Resources
 - Executive director, Elder advisor, director of aquatic research & stewardship, research assistants, guardian liaison & coordinator, manager of communications & outreach



Indigenous Experience: MSP Technical Roles

Goose Bay

- Nunatsiavut Government
 - Community coordinators for Imappivut, Torngat Wildlife & Plants Co-Management Board
- Innu Nation
 - Environment office: fishery guardians, community knowledge coordinators
- NunatuKavut
 - Environment & Natural Resources department
 - Research, Education & Culture department
- Aquatic resource and oceans management groups
 - Elder advisor, GIS technicians, communications & outreach



Indigenous Experience: MSP Technical Roles

Nanaimo

- Some aquatic resource and oceans management groups
 - Elder advisor, GIS technicians, communications & outreach, community coordinators, project managers, guardians, data collection technicians, analysts, Indigenous knowledge experts
- IMAWG: Island Marine Aquatic Technical Working Group
- Pacific North Coast Nations
 - Marine use planning coordinators and community marine planning committees
- Coastal First Nations – Northern Shelf region
 - Marine Protected Area Technical Team
 - Coastal Guardian Watchmen monitoring and protection



Marine Spatial Planning: Technical Roles

- How do you want to be involved? Which roles?
- Do you see other technical roles in marine spatial planning that you want to be involved in?
- Do you have capacity to fill these roles at present?
 - If so, how are they funded or supported (e.g., own source revenues, AAROM project funding, Aboriginal Fisheries Strategy, Provincial program, contracts, etc.)
- Could any of these roles be shared by neighbouring Nations and/or other partners?



Indigenous Experience: MSP Technical Tools Vancouver (pilot)

- Metlakatla First Nation Stewardship
 - Marine use zoning maps
- Coastal First Nations – Northern Shelf region
 - Coastal Guardian Watchmen “Coast Tracker”
 - Marine Protected Area Technical Team
- Beaufort Sea Partnership
 - Inuvialuit traditional and local knowledge catalogue
- Other Indigenous examples



Indigenous Experience: MSP Technical Tools

Moncton and Halifax

- Mi'gmawe'l Tpl'taqnn
 - NB Mi'gmaq Indigenous Knowledge Study Guide, re: initiation, timing and execution of Indigenous Knowledge studies
- Maliseet Nation Conservation Council
 - Traditional Knowledge Program
- Agence Mamu Innu Kaikusseht
 - Atlas of Indigenous sites and uses of the Saint Lawrence River
- Confederacy of Mainland Mi'kmaq
 - Online interactive map, re: barriers to migration, which allows partners to view data on culverts/determine if sites are barriers



Indigenous Experience: MSP Technical Tools

Goose Bay

- Nunatsiavut Government
 - Imappivut Marine Plan
 - Torngat Joint Fisheries Board: Labrador Inuit Knowledge
- Innu Nation
 - Special Marine Areas in NL (CPAWs activity)
 - *Nametau innu*: Memory and knowledge of Nitassinan
- NunatuKavut
 - Gilbert Bay Marine Protected Area
 - *Re-storying NunatuKavut*: Making connections through multi-generational digital storytelling



Indigenous Experience: MSP Technical Tools

Nanaimo

- Quatsino Sound Coastal Plan
 - Identifies marine ecological attributes, marine habitat types, biological features, areas of ecological significance
 - Helps governments manage BC foreshore/nearshore tenures
- Coastal Strategy for West Coast Vancouver Island
 - Describes shared vision and values for the area
 - Guides action priorities and plans, shared knowledge base and decision-support tools and models
- Project-specific Traditional Marine Resource Knowledge and Use Studies (T'sou-ke First Nation)
 - Describing and contextualizing knowledge, use, occupancy and interests of the Nation in relation to a proposed project
 - Using multi-generation Indigenous knowledge and experiences



Marine Spatial Planning: Technical Tools

- What tools do you have and what do you need?
 - Are there other tools that you have or need?
 - Are there tools that you do not want?
- What are the top three tools needed and why?
- Could any of these tools be shared with neighbouring Nations and/or other partners?



Indigenous Experience: Technical Training Vancouver (pilot)

- Certification:
 - First Nations Stewardship Technical Training certificate
 - Traditional Ecological Knowledge certificate
 - Professional Specialization in Collections Management
 - Environmental Technician Certificate program
 - Canadian Aquatic Biomonitoring Network (CABIN)
- Other training:
 - Innu Nation Environmental Guardian Program training
 - Eco-Canada: BEAHR Indigenous training programs
- Other Indigenous examples?



Indigenous Experience: Technical Training Moncton and Halifax

- Certification/Diplomas:
 - Resource Stewardship Technical Training
 - Learning from Knowledge Keepers
 - Professional Specialization in Collections Management
 - Environmental Technology diploma (NBCC)
 - Canadian Aquatic Biomonitoring Network (CABIN)
- Other training:
 - Innu Nation Environmental Guardian Program training
 - Eco-Canada: BEAHR Indigenous training programs
- Other examples in Atlantic Canada?



Indigenous Experience: Technical Training Goose Bay

- Certification/Diplomas:
 - Environmental and Regulatory Compliance Project Mgt. (NEIA)
 - Marine Spatial Planning & Ocean Mapping (Marine Institute)
 - Geomatics/Surveying (College of the North Atlantic)
- Other training:
 - Innu Nation Environmental Guardian Program training
 - Eco-Canada: BEAHR Indigenous training programs
- Other examples in Labrador or Nunatsiavut?
 - Komatik Training Solutions?



Indigenous Experience: Technical Training Nanaimo

- Certification/Diplomas:
 - First Nations Stewardship Technical Training certificate (VIU)
 - Traditional Ecological Knowledge certificate (UNBC)
 - Professional Specialization in Collections Management (UVic)
 - Environmental Technician Certificate program (VIU)
 - Advanced Diploma in GIS (BCIT, VIU, Okanagan/Selkirk Colleges)
 - Certificate in Spatial Information Systems (SFU)
- Other training:
 - Eco-Canada: BEAHR Indigenous training programs
 - Coastal Stewardship training
 - Canadian Aquatic Biomonitoring Network (CABIN)



Marine Spatial Planning: Technical Training

- What training has already been taken by your staff?
 - Data collection, water quality testing, etc.
 - Indigenous knowledge / Working with Elders
 - Using geographic spatial information systems
 - Vessel safety, fishery guardian training
- What are the top five courses needed and why?
- Are there opportunities for Nation-to-Nation training and mentoring?



Indigenous Experience: MSP Partnerships Vancouver (pilot)

- Coastal First Nations – Northern Shelf region
- Beaufort Sea Partnership
 - Inuvialuit Council and other land claim councils and committees
 - Federal, territorial and municipal governments
 - Industries with interests in the area
- Other Indigenous examples:
 - Centre for Indigenous Environmental Resources (Water Governance Projects) – Polis Project on Ecological Governance



Indigenous Experience: MSP Partnerships Moncton and Halifax

- Anqotum partnership with Homarus and DFO
 - \$1.7M Coastal Restoration Fund project for artificial reefs (2019)
- Confederacy of Mainland Mi'kmaq with Restore America's Estuaries and DFO
 - \$1.2M Coastal Restoration Fund project for artificial reefs (2019)
- Mi'kmaq Alsumk Mowimsikik Koqoey Association
 - \$400K Coastal Restoration Fund + \$235K from Miawpukek First Nation to help protect the marine ecosystem in Conne River
- Other Indigenous examples: Beaufort Sea Partnership



Indigenous Experience: MSP Partnerships

Goose Bay

- Coastal and offshore components of the Akami-Uapishk^U-KakKasuak-Mealy Mountains National Park
- Imappivut Marine Plan
 - Academic institutions, Bird's Eye Inc., Oceans North Canada
- Innu Nation
 - MOU with St. Mary's University to collaborate on research
- NunatuKavut
 - *OceansAdvance*: NL Ocean Technology Innovation Cluster
- Integrated Coastal and Oceans Management NL
 - Canada-NL Committee on Oceans Management



Indigenous Experience: MSP Partnerships

Nanaimo

- Coastal First Nations – Northern Shelf region
 - Pacific North Coast Integrated Management Area
- Marine Plan Partnership (MaPP)
 - North Vancouver Island, Haida Gwaii, North Coast, Central Coast
- Coast-wide co-management framework (MOU)
 - Nuu-chah-nulth, Haida, Pacheedaht
- Aboriginal Mapping Network
 - EcoTrust Canada



Marine Spatial Planning: Partnerships

- Are there partnerships or collaborations that could help build Indigenous technical capacity?
- Are there partnerships or collaborations that could help with unique Indigenous matters?
 - Develop a protocol for gathering, storing and using Indigenous knowledge
 - Develop and share guidelines/ best practices for technical staff in terms of informing leadership decision-making and participation at marine spatial planning governance tables?
- Open Government / Cdn. Geospatial Data Infrastructure
 - Inventory of geospatial maps



MARINE SPATIAL PLANNING: TECHNICAL ROLES, TOOLS AND TRAINING

★ DATA AND KNOWLEDGE MANAGEMENT AND POLICY

ROLES: PROGRAM MANAGERS, PLANNERS, COMMUNICATION SPECIALISTS

TOOLS: SHAREPOINT PLATFORM, SOCIAL AND DIGITAL MEDIA, GRAPHIC DESIGN SOFTWARE

TRAINING: RESOURCE MANAGEMENT, COMPLIANCE AND ENFORCEMENT, WEB AND CONTENT MANAGEMENT, OCEAN LITERACY, SCIENCE COMMUNICATIONS

★ DATA AND KNOWLEDGE COLLECTION

ROLES: GUARDIANS, STEWARDS, INDIGENOUS KNOWLEDGE COORDINATORS, TECHNICIANS, CARTOGRAPHERS

TOOLS: VESSELS, ENVIRONMENTAL AND BIOLOGICAL MONITORING EQUIPMENT, MOBILE TRACKING DEVICES, DATA AND KNOWLEDGE STORAGE DEVICES

TRAINING: PCOC AND VESSEL OPERATION SAFETY TRAINING, CATALOGUING, MAPPING TECHNOLOGIES, KNOWLEDGE COLLECTION

★ SCIENTIFIC RESEARCH AND ANALYSIS

ROLES: ECOLOGISTS, MARINE BIOLOGISTS, GIS SPECIALISTS, DATA SCIENTISTS

TOOLS: SENSOR TECHNOLOGIES, DATA STORAGE DEVICES, MAPPING AND DATABASE SOFTWARE

TRAINING: ENVIRONMENTAL MANAGEMENT, GIS TRAINING, DATABASE NETWORKING

Assessing Technical Capacity: Next Steps

- Multi-year funding to help Indigenous groups, gov'ts, communities build oceans management – marine spatial planning technical skills and capacities
- Engaging communities and groups in five general areas to gauge technical capacities and technical capacity needs
 - Discussion paper
 - Workshops between February and April 2019
 - Technical capacity report and *What we Heard* reports
- Website and social media presence: indigenousoceans.ca
 - *Facebook*: @indigenousoceans, *Twitter*: @indigenousocean

