



Improving the eel fishery through the incorporation of Indigenous Knowledge Systems into policy level decision making

A case study, Eskasoni First Nation

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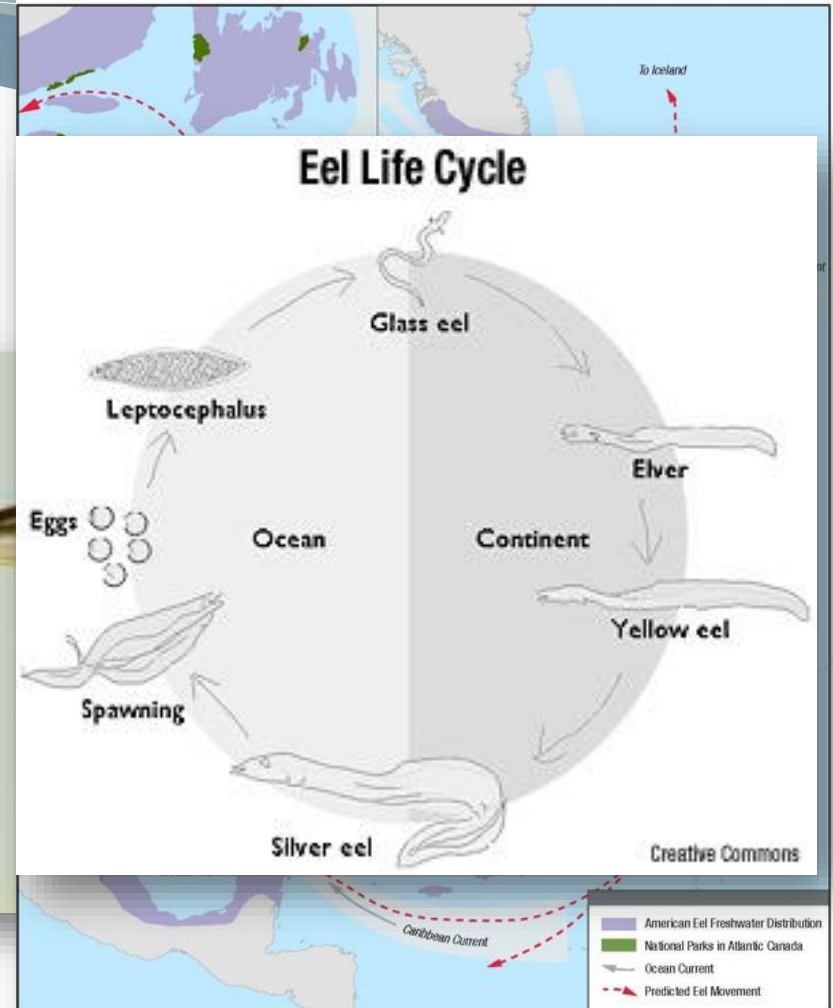
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Unama'ki Institute of Natural Resources, Cape Breton, Nova Scotia, Canada

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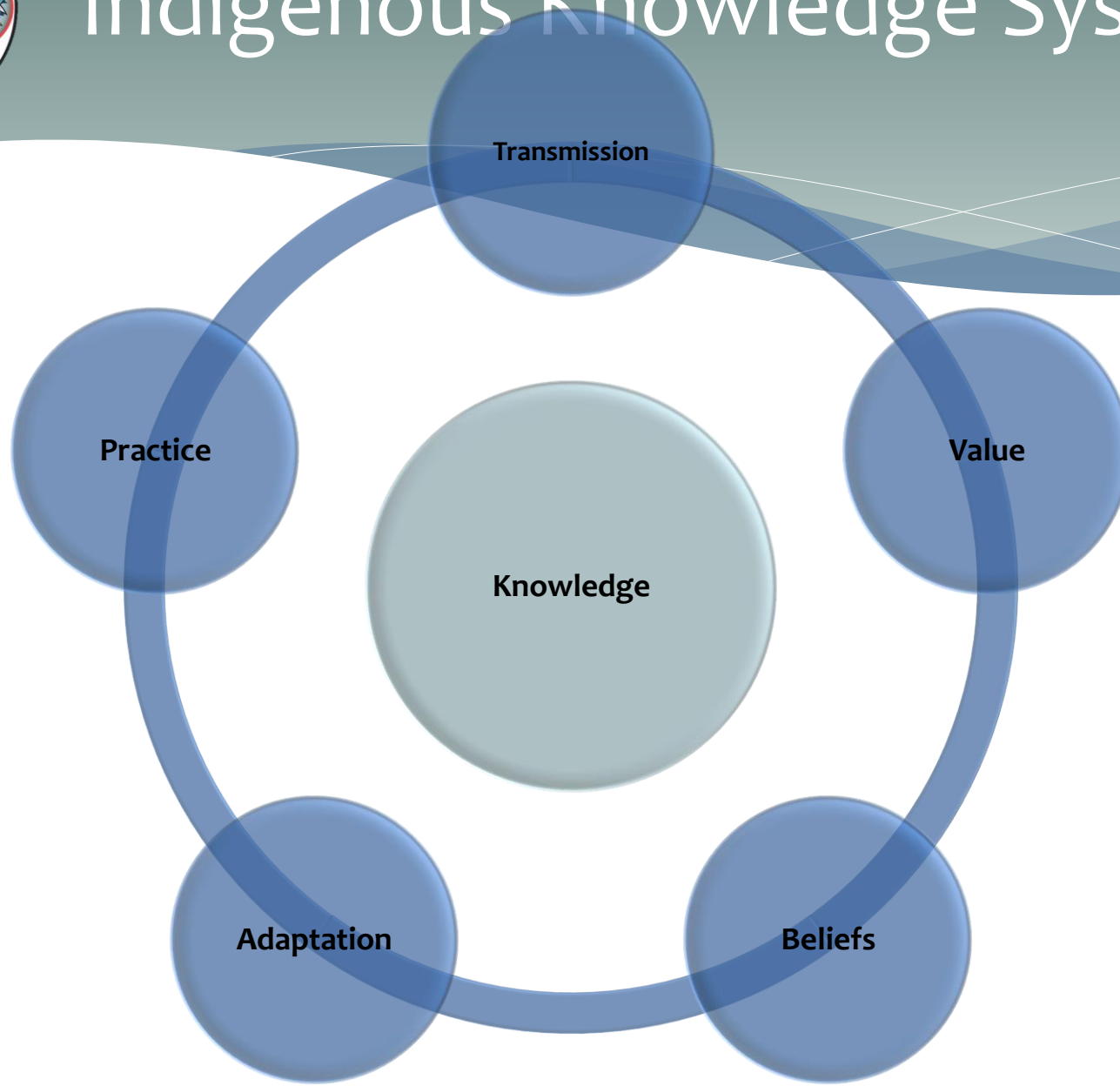
Background

- COSEWIC: Threatened
- SARA: No Status
- Large distribution, crossing international boundaries
- Panmictic population
- Complex life history
- Eels' social, economic, spiritual, medicinal, and cultural importance
- Implications for Aboriginal and Treaty fishing rights





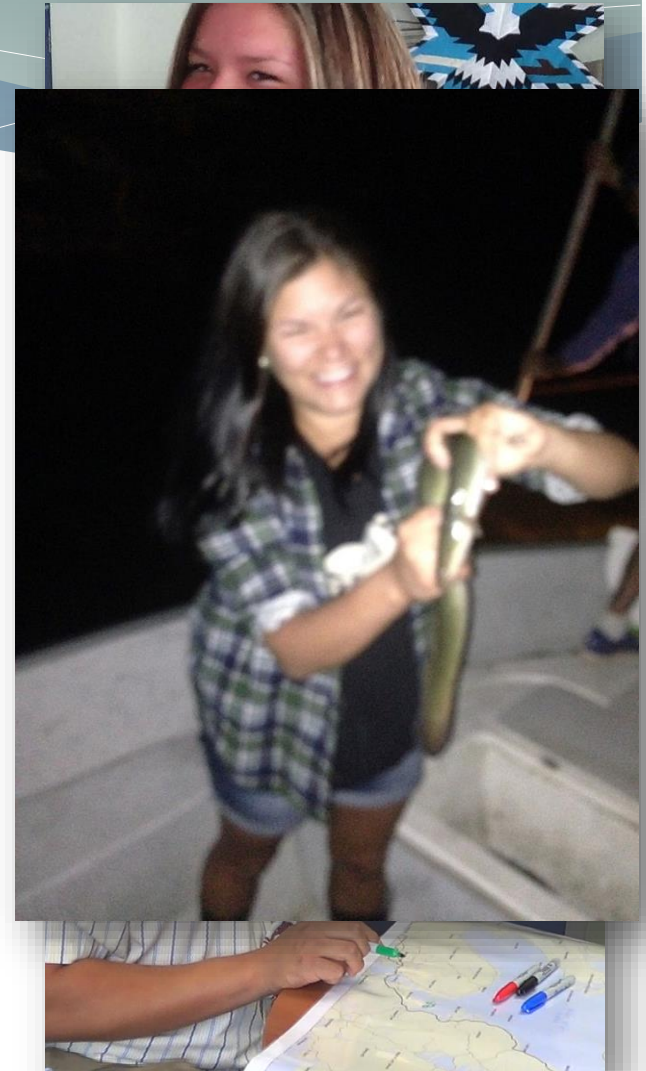
Indigenous Knowledge Systems





Methods

- Took place in Eskasoni First Nation
- Semi-structured in person interviews with eelers in Eskasoni
- Mapping with eelers in Eskasoni
- Semi-structured in person and over the phone, interviews with those involved in COSEWIC and SARA





SARA
General
Status
Report

COSEWIC

Status
Recommendation

Competent
Minister

Response
Statement:
Extended

Co-Chairs

ATK Sub-Committee

Fresh Water Fish
Sub-Committee

Source
Report

Assessment
Report

Status
Report

Listing
Recommendation

DFO: Aquatic
Species at Risk

Lead Region: Gulf

Management
Scenarios

Recovery
Potential
Assessment

Consultation

Socio-
Economic
Analysis

Eeling Practice	Community Beliefs	Values Expressed
Sharing eels with elders, family, and community members	<ul style="list-style-type: none"> Share with those who can not eel for themselves Showing respect for Elders 	<ul style="list-style-type: none"> Kinship Reciprocity Generosity
Undertaking a period of observation before eelers begin to eel	<ul style="list-style-type: none"> Proper skills are needed so eels will not get harmed Learning how to identify habitat Patience 	<ul style="list-style-type: none"> Respect for the eel Oral tradition M'sit No'kamaq
Deciding to leave the commercial eel fishery	<ul style="list-style-type: none"> Commercial fishery is hurting eel populations 	<ul style="list-style-type: none"> 7 Generations Netukulimk
Using spears over nets	<ul style="list-style-type: none"> Nets catch too many eels Only take what you need 	<ul style="list-style-type: none"> Respect for the eel Netukulimk
Keeping all eels caught during winter spearing	<ul style="list-style-type: none"> Eels will die if you put them back, it is wasteful 	<ul style="list-style-type: none"> Respect for the eel M'sit No'kamaq
Not fishing or only taking enough for the elders during years of low populations	<ul style="list-style-type: none"> Not right to eel when population are low Still want to respect elders 	<ul style="list-style-type: none"> 7 Generations
Visiting eeling sites only once in a cycle	<ul style="list-style-type: none"> Avoid overexploitation Avoid too much pressure on the eels 	<ul style="list-style-type: none"> Netukulimk Relationship with territory Respect for place
Being extremely selective during summer fishing, only taking the “good sized ones”	<ul style="list-style-type: none"> Leave the smaller eels to have a chance to grow and reproduce 	<ul style="list-style-type: none"> Netukulimk Respect for the eel



ATK Study - Eeling
Bras d'Or Lakes, NS

N

Legend

Eel_Summer

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Legend

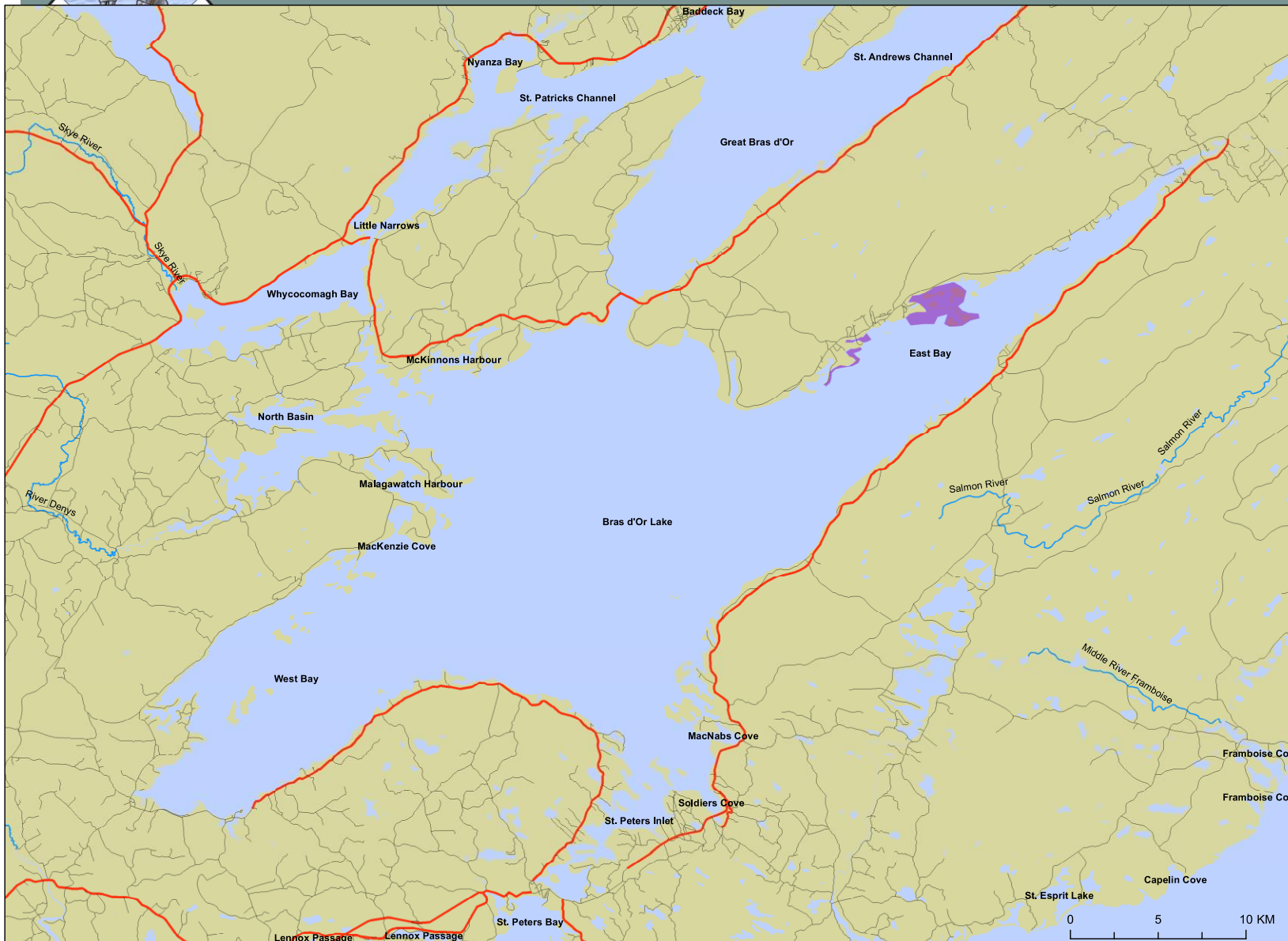
Eel_Winter

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Bras d'Or Lakes, NS



Legend



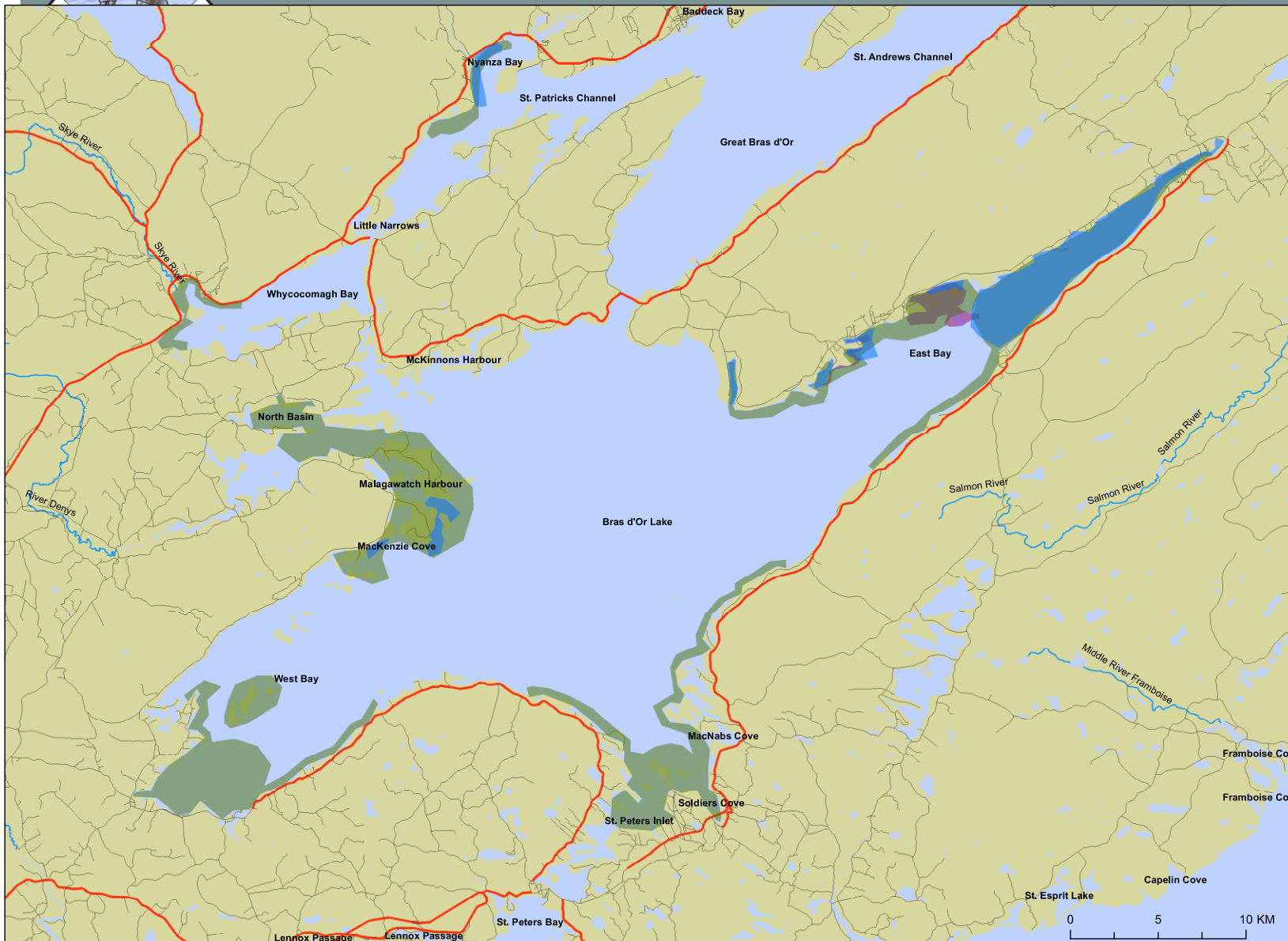
Eel_First

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Bras d'Or Lakes, NS



Legend

-  Eel_Winter
-  Eel_Summer
-  Eel_First

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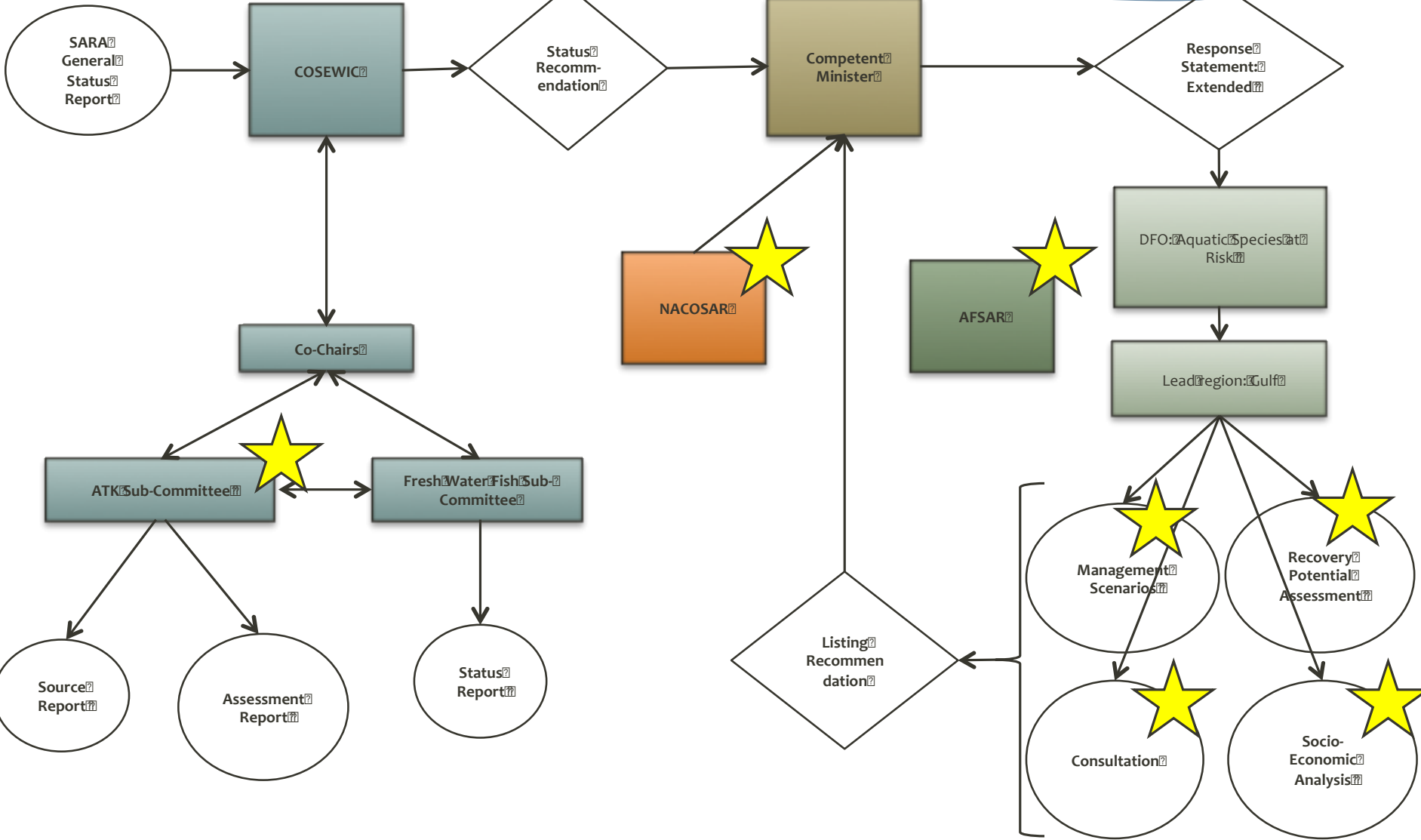
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Recommendations

- Increase meaningful communication between DFO and Aboriginal groups and communities
- Long term relationships between organizations and Aboriginal groups and communities
- Cross-cultural understanding
- People into the process
- Broaden definition and understanding of TEK to IKS

Eeling Practice	Management Recommendations
Sharing eels with elders, family, and community members	<ul style="list-style-type: none"> Minimum FSC level ensured
Undertaking a period of observation before eelers begin to eel	<ul style="list-style-type: none"> Courses for fishers which include Mi'kmaq cultural awareness
Deciding to leave the commercial eel fishery	<ul style="list-style-type: none"> Conservation efforts
Using spears over nets	<ul style="list-style-type: none"> Gear restrictions
Keeping all eels caught during winter spearing	<ul style="list-style-type: none"> Change to seasonal management for fishery Varying Size Limitation of seasonal periods
Not fishing or only taking enough for the elders during years of low populations	<ul style="list-style-type: none"> Adaptive management Monitoring programs
Visiting eeling sites only once in a cycle, rotational fishing	<ul style="list-style-type: none"> Conservation efforts
Being extremely selective during summer fishing, only taking the "good sized ones"	<ul style="list-style-type: none"> Size limits for summer eeling





Community Recommendations

- Three areas of high importance for retention of language, and transmission of culture and knowledge were identified in Eskasoni
 - John Paul's Lane
 - Beaches
 - Goat Island and surrounding Island
- Special attention to the preservation of these habitats would work to preserve habitat for eels, as well as protect important habitats for cultural and language retention and transmission
- Establish monitoring program in collaborations with AAROMS to ensure the habitats remain good eeling areas, culture and language retention, and to facilitate the teaching of younger generations about honouring the environment and relationships with relations



Thank you!
Wela'liog!
Woliwon!

www.fishwiks.ca