Two-Eyed Seeing in Practice: Western and Indigenous Knowledge Systems to Enhance Fisheries Governance in Canada

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Fish-WIKS

A Research Partnership Co-Chaired by the Assembly of First Nations and Dalhousie University, Halifax, Nova Scotia, Canada









fishwiks.ca

engage • collaborate • strengthen

Improving the sustainability of Canadian fisheries through meaningful partnerships















Community Partners:

- Eskasoni, NS
 - Nipissing, ON
- Tla-o-qui-aht, BC
- Naujaat, NU







Purpose:

Through mutual respect, engagement and collaboration, strengthen opportunities for governing fisheries on Canada's 3 coasts and inland region

Sharing our findings on:

- Understanding knowledge systems;
- 2. Exploring the diversity of Two-Eyed;
- 3. Demonstrating how Indigenous research priority were address in Two-Eyed Seeing.

Improving eel fishery management through the incorporation of Indigenous knowledge into policy level decision making - A case study in Eskasoni, Cape Breton

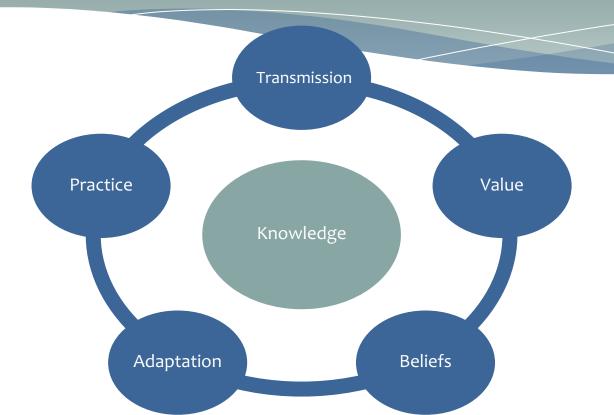
Amber Giles







Indigenous Knowledge Systems



Sharing eels with elders, family, and community members	Share with those who can not eel for themselvesShowing respect for Elders	KinshipReciprocityGenerosity
Undertaking a period of observation before eelers begin to eel	 Proper skills are needed so eels will not get harmed Learning how to identify habitat Patience 	Respect for the eelOral traditionM`sit No'kamaq
Deciding to leave the commercial eel fishery	Commercial fishery is hurting eel populations	7 GenerationsNetukulimk
Using spears over nets	Nets catch too many eelsOnly take what you need	Respect for the eelNetukulimk
Keeping all eels caught during winter spearing	Eels will die if you put them back, it is wasteful	Respect for the eelM`sit No'kamaq
Not fishing or only taking enough for the elders during years of low populations	Not right to eel when population are lowStill want to respect elders	• 7 Generations

Avoid overexploitation

grow and reproduce

Avoid too much pressure on the eels

Leave the smaller eels to have a chance to

Community Beliefs

Values Expressed

Netukulimk

Netukulimk

Respect for place

Respect for the eel

Relationship with territory

Eeling Practice

Visiting eeling sites only once in a cycle

Being extremely selective during summer fishing,

only taking the "good sized ones"

Eeling Practice	Management Recommendations	
Sharing eels with elders, family, and community members	Minimum FSC level ensured	
Undertaking a period of observation before eelers begin to eel	 Courses for fishers which include Mi'kmaq cultural awareness 	
Deciding to leave the commercial eel fishery	Conservation efforts	
Using spears over nets	Gear restrictions	
Keeping all eels caught during winter spearing	Change to seasonal management for fisheryVarying Size Limitation of seasonal periods	
Not fishing or only taking enough for the elders during years of low populations	Adaptive managementMonitoring programs	
Visiting eeling sites only once in a cycle, rotational fishing	Conservation efforts	
Being extremely selective during summer fishing, only taking the "good sized	Size limits for summer eeling	

ones"

Size limits for summer eeling

Belonging to Lake Nipissing: Knowledge, Governance, and Human-Fish Relations

Nicole Latulippe

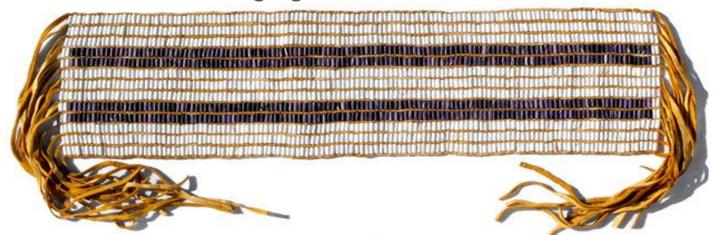






Ethical cross-cultural/mixed methodology

- Relational accountability
- Respect for difference
- Bridging work



Research and policy questions

- 1) How and to what extent are different knowledge systems incorporated into fisheries governance and processes by indigenous nations in Canada at national, regional and local scales?
- 2) Can varied IKSs be used to improve the effectiveness of fisheries governance at national, regional, and local scales in Canada and internationally?
- 3) Can various IKSs be used to inform and enhance an ecosystem-based approach to fisheries management in Canada and internationally, given the complexities of ecosystems and additional uncertainties posed by climate-induced changes?

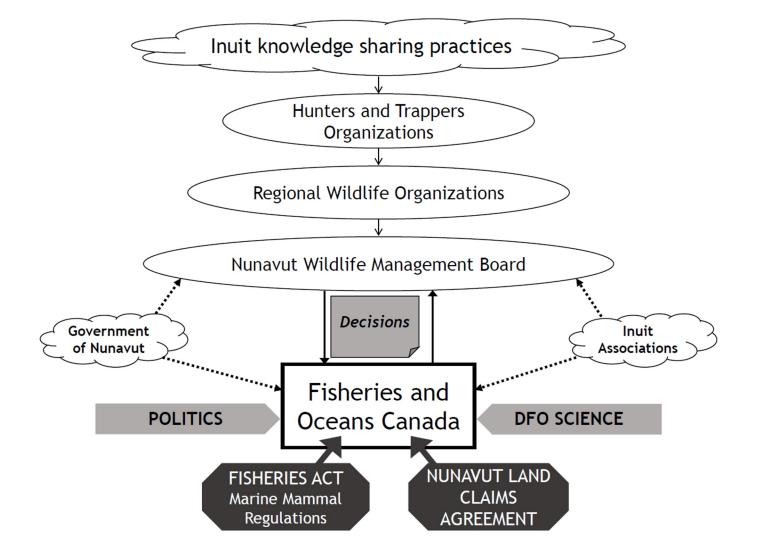
For more information, please see Fish-WIKS > "Publications" > "Brief Research Summaries" > Nicole Latulippe

Mobilizing Inuit Qaujimajatuqangit in narwhal management through community empowerment: A case study in Naujaat, Nunavut.

Erin Keenan







Ḥaaḥuupa and fisheries: an indigenous methodological approach to *Tla-o-qui-aht* knowledge systems in support of community renewal

Saul Milne & Seitcha (Terry Dorward)







Purpose

• The qualitative research led by *Tla-o-qui-aht* First Nations documents formal and informal *Ḥaaḥuupa* alongside archival and ethnographic records related to nature, regeneration, and life, like salmon.

The aim of the research is to explore ontologies of knowledge systems, and how *Tla-o-qui-aht* knowledge systems can find expression in fisheries governance regimes.

- Blended methodologies mirror existing community governance
- Animated by reciprocity and the desire to contribute to regeneration
- Traditional Resource Committee guides researchers
- Ćiinuł (totem poles) and visual methods
- *čimčima* (rhythm)

Witnessing and Researching

Feminist auto-methods tracked my positionality as multiple, partial, and situated

Upholding values and responsibilities of the shared *Nuučaańuł?* and *Salish* worlds

Tell others what I saw felt and heard

Four Films

- · Centre *Tla-o-qui-aht* co-participants active on the *ḥaḥuułi*
- To tell stories together
- To provide an opening to explore the visual, auditory, and relational rhythms of the Haḥuułi and:
- To hear how
 Ciiqciqasa illuminates
 the Nuučaańuł?
 world

Drone Training at Chu-is

Seit-cha provides examples of how to incorporate contemporary technologies in support of the project of renewal

How cultural sites are being expanded by *Tla-o-qui-aht* leadership,

How *Ciiqciqasa* has a multiplicative effect for the project of renewal -

Externally changing the understanding of place and identity – and

Internally, the expectations of what it means to be human



Ankukamkua'tu, 'Doing Treaty': An Alternative Fisheries Governance Model for Mi'kmaq Aboriginal and Treaty Rights to Fish in Nova Scotia

Shelley Denny





EQUALITY

PROCESS- BASED

CO-LEARNING

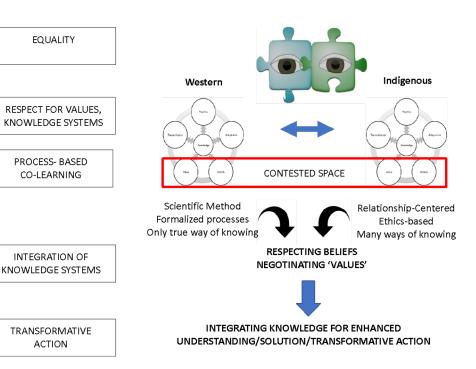
INTEGRATION OF

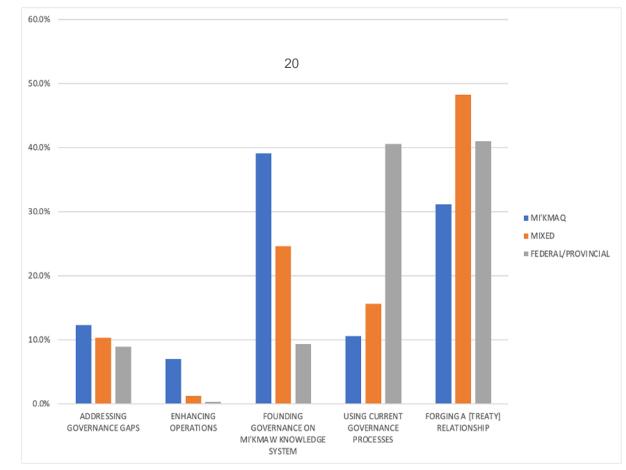
TRANSFORMATIVE

ACTION

Theoretical Framework: Two-**Eyed Seeing**

- Use of the strengths of knowledge systems for the benefit of all
- Tensions leads to understanding of differences
- Shared values and beliefs can bridge knowledge systems
- Underpinned by social justice

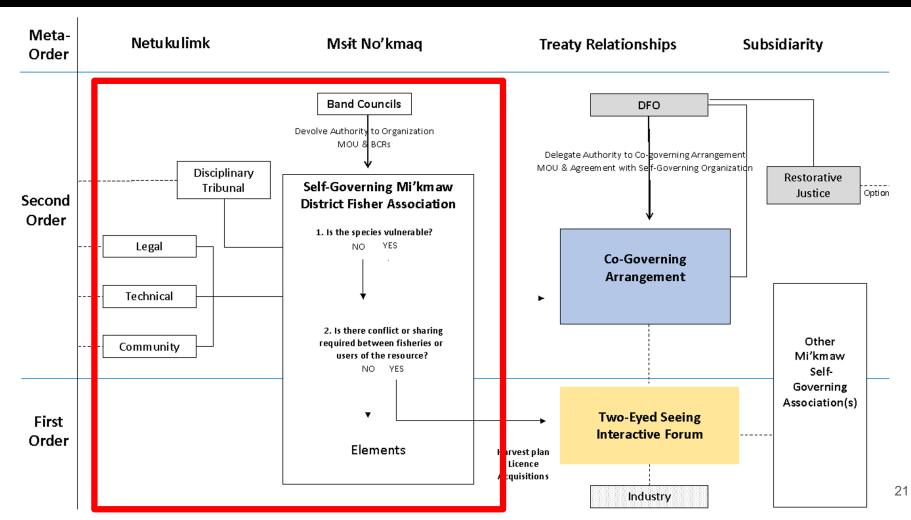




Percent of Codes

Opportunities Identified by Participants

DISCUSSION



Questions from the Audience