

Fishing Livelihoods: Changes in the Fish and Water in Places we Consider Important

Are community members able to fish for food and share fish within the community and region?
How has harvest and the quality and quantity of fish harvested changed in the community over time?
How should harvesting of fish be protected for future generations?
(Volume3, May 2018)

SUMMARY

Tracking Change: Local and Traditional Knowledge in Watershed Governance is a six year research program funded by the Social Sciences and Humanities Research Council and led by the University of Alberta, Mackenzie River Basin Board, the Government of the Northwest Territories in collaboration with many other valued Aboriginal organization partners and universities. The broad goal of the project is to create opportunities to collaboratively document and share local and traditional knowledge (LTK) about social-ecological change in the Mackenzie River Basin, Lower Mekong and Lower Amazon Basins and determine its' role in watershed governance. In 2016-17, the project aims to address the following themes and priorities: ¹

Themes and Priorities for Tracking Change... Sub-Projects in 2016-2017

- ✓ historical and contemporary observations and perceptions of conditions and change in the health of the **aquatic environment** (e.g., water quality, quantity, flow, groundwater, permafrost conditions);
- ✓ historical and contemporary observations and perceptions of conditions and change in **fish species** (population, movements, diversity, invasive species) and other **aquatic species** (e.g., geese, beaver);
- ✓ sustainability of **fishing livelihoods** (e.g., harvesting levels and practices, diet, health, access issues, perceptions of change in the health of valued fish species);
- ✓ implications of change for **governance** (e.g., how maintain healthy relationships to the aquatic ecosystem, maintaining respectful and spiritual relationships, respecting treaty rights);

¹ These priorities were recommended in a workshop with the NWT Water Stewardship Strategy Aboriginal Steering Committee and the Mackenzie River Basin Board Traditional Knowledge Steering Committee (Feb. 10, 2016). Additional input was solicited for the research priorities from Aboriginal organization partners and other members of the Project Team by email in October 2015.

How is fishing changing?

	Question	Optional Answers
1	Do you or a member of your household currently fish for food?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	If you set a net, or go fishing, which areas do you most commonly visit?	<input type="checkbox"/> Great Bear Lake <input type="checkbox"/> Great Bear River <input type="checkbox"/> Other Lakes <input type="checkbox"/> Mackenzie River <input type="checkbox"/> Other Rivers
3	If you set a net, or go fishing, which fish species do you most commonly harvest for food?	<input type="checkbox"/> Lake Whitefish <input type="checkbox"/> Jackfish <input type="checkbox"/> Lake Trout <input type="checkbox"/> Arctic Char <input type="checkbox"/> Arctic Grayling <input type="checkbox"/> Coney <input type="checkbox"/> Loche <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____
4	How many times do you set a net during the fall/winter (dene words?)?	<input type="checkbox"/> More than 10 times <input type="checkbox"/> Between 5-9 times <input type="checkbox"/> Between 1-4 times <input type="checkbox"/> I didn't set a net
5	How many times do you set a net during the spring/summer (dene words?)?	<input type="checkbox"/> More than 10 times <input type="checkbox"/> Between 5-9 times <input type="checkbox"/> Between 1-4 times <input type="checkbox"/> I didn't set a net
6	If you set a net are you harvesting more or less fish now than in the last 5 years?	<input type="checkbox"/> A lot more <input type="checkbox"/> Somewhat more <input type="checkbox"/> The same <input type="checkbox"/> Somewhat less <input type="checkbox"/> A lot less <input type="checkbox"/> I don't know
7	If you set a net, are you harvesting more or less fish now than in the last 10 years?	<input type="checkbox"/> A lot more <input type="checkbox"/> Somewhat more <input type="checkbox"/> The same <input type="checkbox"/> Somewhat less <input type="checkbox"/> A lot less <input type="checkbox"/> I don't know

8	Optional - When you set a net, are you harvesting more or less fish now than in the last 25 years?	<input type="checkbox"/> A lot more <input type="checkbox"/> Somewhat more <input type="checkbox"/> The same <input type="checkbox"/> Somewhat less <input type="checkbox"/> A lot less <input type="checkbox"/> I don't know
14	How often to you catch fish with cysts or lesions	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
14	How often do you catch fish with discolored organs?	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
	How often do you catch fish with too many bugs or worms to eat?	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never
14	How often do you catch fish that are too soft?	<input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> Never

How does fishing benefit the household and community?

9	How much of your harvest do you share with your family?	<input type="checkbox"/> All <input type="checkbox"/> A lot <input type="checkbox"/> Some <input type="checkbox"/> None <input type="checkbox"/> I don't know
10	How much of your harvest do you share with others in the community?	<input type="checkbox"/> All <input type="checkbox"/> A lot <input type="checkbox"/> Some <input type="checkbox"/> None <input type="checkbox"/> I don't know
11	How much of your harvest do you share outside the community?	<input type="checkbox"/> All <input type="checkbox"/> A lot <input type="checkbox"/> Some <input type="checkbox"/> None <input type="checkbox"/> I don't know
12	How much of your fish would you receive from others in the community?	<input type="checkbox"/> All <input type="checkbox"/> A lot <input type="checkbox"/> Some <input type="checkbox"/> None <input type="checkbox"/> I don't know

13	How much of your fish would you receive from others in the Sahtu region?	<input type="checkbox"/> All <input type="checkbox"/> A lot <input type="checkbox"/> Some <input type="checkbox"/> None <input type="checkbox"/> I don't know
----	--	---

Can people still eat the fish?

14	How many meals of fish do you usually eat per week in the <u>spring/summer</u> ?	<input type="checkbox"/> More than 10 <input type="checkbox"/> Between 5-9 <input type="checkbox"/> Between 1-4 <input type="checkbox"/> None
15	How many meals of fish do you usually eat per week in the <u>fall/winter</u> ?	<input type="checkbox"/> More than 10 <input type="checkbox"/> Between 5-9 <input type="checkbox"/> Between 1-4 <input type="checkbox"/> None
16	How has your diet of fish changed since last year?	<input type="checkbox"/> I eat more fish <input type="checkbox"/> I eat the same amount of fish <input type="checkbox"/> I eat less fish
17	How has your diet of fish changed over the last five years?	<input type="checkbox"/> I eat more fish <input type="checkbox"/> I eat the same amount of fish <input type="checkbox"/> I eat less fish
18	How has your diet of fish changed over the last five years?	<input type="checkbox"/> I eat more fish <input type="checkbox"/> I eat the same amount of fish <input type="checkbox"/> I eat less fish
19	How often in the last 3 months have you wanted fish and could not get it?	<input type="checkbox"/> Never <input type="checkbox"/> Once <input type="checkbox"/> 2-3 times <input type="checkbox"/> 4-5 times <input type="checkbox"/> More than 5 times
20	Did you harvest enough fish to meet your needs this past year?	<input type="checkbox"/> No <input type="checkbox"/> Yes

What kind of knowledge is most useful in helping people cope with change?

21	How confident (safe) are you about the health of the fish you are eating?	<input type="checkbox"/> Very confident <input type="checkbox"/> Somewhat Confident <input type="checkbox"/> Not Confident <input type="checkbox"/> I don't know
----	---	---

22	How confident (safe) are you about the health of the water you are drinking?	<input type="checkbox"/> Very confident <input type="checkbox"/> Somewhat Confident <input type="checkbox"/> Not Confident <input type="checkbox"/> I don't know
23	What source of knowledge is most important to your understanding of health of the fish and about harvesting?	<input type="checkbox"/> My own experiences and observations <input type="checkbox"/> Elders and other Fishers <input type="checkbox"/> Resource people and staff working for our leaders; <input type="checkbox"/> Government <input type="checkbox"/> Industry <input type="checkbox"/> Other Organizations <input type="checkbox"/> Television, newspapers, radio and books <input type="checkbox"/> Doctors, nurses and other medical professionals <input type="checkbox"/> Other _____
24	What sources of knowledge do you think most influences your decisions about where to fish and what fish is healthy to eat?	<input type="checkbox"/> My own experiences and observations <input type="checkbox"/> Elders and other Fishers <input type="checkbox"/> Resource people and staff working for our leaders; <input type="checkbox"/> Government <input type="checkbox"/> Industry <input type="checkbox"/> Other Organizations <input type="checkbox"/> Television, newspapers, radio and books <input type="checkbox"/> Doctors, nurses and other medical professionals <input type="checkbox"/> Other _____