

## Press Release

### **Citizen science and community-based monitoring are being highlighted by Indigenous leaders, and researchers this week at the 18<sup>th</sup> Session of the United Nations Permanent Forum on Indigenous Issues in New York.**

Community researchers from more than 40 communities participating in the Tracking Change project have been documenting changes in the sustainability of the Mackenzie, Mekong and Amazon river basins since 2016 and are now working together to ensure this knowledge is recognized more globally. The work is being led out of the University of Alberta, in partnership with multiple governments universities and 40 Indigenous partner organizations, communities and governments from the Mackenzie River Basin.

The Mackenzie River Basin is Canada's largest freshwater basin but freshwater fisheries are in decline in this region as in many parts of the world. These are more than just bodies of water. "The rivers are our cultural heritage" - Joella Hogan, Nacho Nyak Dun First Nation.

Community researchers attribute water quality changes and fish habitat disturbance to hydro-electric projects, petroleum and mineral resource development as well as climate change. These impacts include lower water levels, warmer water, increased algal blooms, shifts in the timing and abundance of valued fish species. The impacts of climate change are of greatest concern in areas furthest north in the Basin, as described by Leon Andrew.

"I have lived on the land most of my life. I traveled the land and water. One of the major factors we saw was the wind – the wind from the south now/that blows along the Mackenzie mountains range all the way to the ocean in the Beaufort Delta. It melts everything in its way. This has been a major awakening for me because I didn't know the wind could do such damage". Leon Andrew

The group of partners from Tracking Change are meeting together in New York from April 29-May 3 to bring forward recommendations about the importance of Traditional Knowledge for understanding and managing the changes in fw eco and fish com. Citizen science and community-based monitoring methods developed through the Tracking Change project are being developed within different communities in collaboration with social scientists and biologists.

"We have built a monitoring program that takes what the elders have told us at face value. We don't have to go searching to see if there are differences and there are changes. We know there have been changes. We believe what the elders and land users have witnessed themselves". (Bruce McClean, Mikisew Cree First Nation).

"As a fisheries researcher, I think TK and science could and should complement each other. Local fishers have provided us with lots of new and useful information. I think that biologists have become more and more interested in these contributions of local knowledge. And even some government people have become interested. And we are now working in trying to take some of this knowledge back to local and society as a whole"(Renato Silvano, Brazil).

But not all governments are listening according to some of the Chiefs from Alberta.

“Treaty 8 territory has bountiful in natural resources – it is economic engine for Canada. Because of this, climate change has impacted our environment and our lives. Through the practices of both federal and provincial governments, we are marginalized and left out. There is theft of First Nations resources and we are left in poverty and live third world disgrace. One would think that as First Nations in Treaty 8 territory [of Alberta], we would be wealthy but look at us today. 2019. My late father used to tell me we should be kings upon these land”. (Chief James Badger, Grand Chief of Lesser Slave Lake Regional Council).

More than 1000 from Indigenous communities began to arrive on April 22, 2019 to network together including those from Canada, United States, Brazil, Ecuador, Scandinavia and Russia. These Indigenous communities highlighted some of the ways in ways in which Indigneosu communities could work together to address some of these issues of “We must unite. Be firm all the way from the north pole all the way to the south pole”.

For more information or interviews contact:

Brenda Parlee, University of Alberta, Canada  
[bparlee@ualberta.ca](mailto:bparlee@ualberta.ca)