



# Climate Change Observations & Issues



# Project Goals

- Document local knowledge on climate change and its impacts on the environment and people
- Encourage climate change discussion between community members and scientists
- Create a public record of this information using Project Jukebox with links to the Alaska Native Knowledge Network



Meeting with the Fort Yukon Tribal Council in July 2009.

# Issues



Fred Thomas



Clarence Alexander



Erosion in front of Clarence Alexander's house

# Issues



Simon Francis

*Now Porcupine is where king salmon is going. Last year Venetie River - never saw them there before. But this year no king salmon in Yukon but lotta king salmon up Porcupine River. But animals know what they're doing. They know the country, you know.*

*Geese hunting, well, there's another example of weather. If you're not willing to risk your life, I mean you can hardly get geese anymore cause the weather is so unpredictable....Usually geese all show up at the same time when the river is going out, and there's sandbars, and you know, high water, and so ice flows around, but you're able to get out there with a boat and find places where these geese are landing. Nowadays it's touch and go. You've got to risk your life for it, which I'm not willing to do.*



Richard Carroll, II

# Issues



Minnie and William Salmon

*Trapping, fall time, November, October - November, its just warm so people trap late, start late and the fur is no good when it's warm. It's no good for trapping too, now. Sometimes in November, it's raining too, that's no good.*

*Lots of animal are missing like summer birds, and fish in the river. Water too low. (Whitefish) usually go back in that dry slough with high water in springtime and stay there during summer and (when) water high again in fall time, they come out. That's why a lot of fish in the past. So not too long ago, no more water. water barely go out with the ice, you know.*



Joe Herbert

# Issues



James Kelly

Water Levels Just in the last five years, water in the Porcupine River is so low, that people really have difficulty traveling on it...And those are from changes, probably from climate change as well, you know, not enough rainfall or other things happening elsewhere...

The key climate change issue facing Tanana is: Well, it's getting warmer, that's changed a lot ~ warmer water ~ yeah, I was gonna say that river temperature and everything that relates to that...it affects the ice, it affects the animals living in the river...effects the dates of safe and unsafe travel, break-up, freeze-up, construction season, all that.



Ruth Althoff, Charlie Campbell and Lester Erhart

# Connections

## Observations

- More fires
- Permafrost melting
- Lakes drying up
- Low snow
- Low water
- Unpredictable weather
- Extreme events
  - Flooding
  - Winter Rain
  - Wind
- Erosion and mudslides

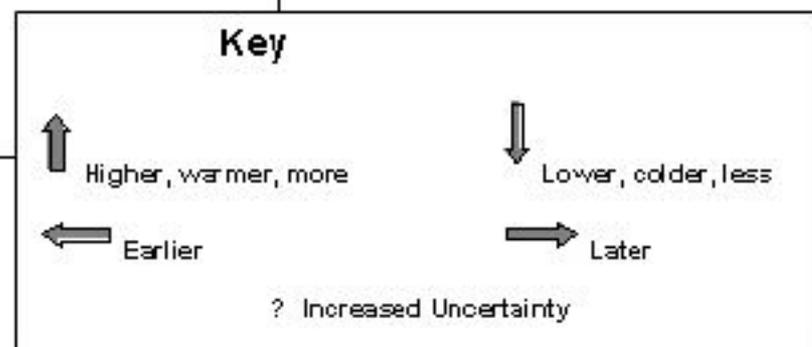
## Activities Impacted

- Moose hunting
- Trapping
- Salmon, whitefish, muskrat and waterfowl harvest
- Land travel
- River travel
- Access
  - Environmental
  - Economic
  - Land ownership & management
  - Regulatory

## Observations of Change and Impacts in Tanana

Summarized by Charlie Cambell

Season	Fall	Winter	Spring	Summer
Temperature	Freeze-up ↑ →	Temperatures ↑	← Break-up	Yukon River Temps ↑ ?
Permafrost thawing, increased erosion in gullies				
Precipitation	Drier ↓	? ↓	? ↓	? ↓
(Unsubstantiated impression of overall decrease in precipitation) Water levels in ponds, creeks, water courses ↓ ? From lower precipitation? Warmer temps? Cyclical?				
Activity	Moose hunting Window →	Trapping, travel	← Geese Hunting Gathering Drift Wood	← Summer Construction Window →
Impacts	<ul style="list-style-type: none"> <li>▪ longer effective moose hunting window</li> <li>▪ later rut (?)</li> <li>▪ later season of navigation</li> <li>▪ drier walking overland &amp; around ponds &amp; lakes</li> <li>▪ lower water levels in sloughs (?)</li> <li>▪ less available pond vegetation for moose feed ?</li> <li>▪ later time on construction shut down</li> </ul>		<ul style="list-style-type: none"> <li>▪ earlier break-up &amp; end of winter travel</li> <li>▪ more compressed season for geese hunting, increased danger of thin ice developing quickly</li> <li>▪ thinner ice thickness resulting in less destruction &amp; increased vegetation on Yukon River beaches from gentler break-up</li> <li>▪ driftwood arrives right after ice - increased danger to collect by boat during run as ice cakes still....</li> </ul>	



# Credits

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Questions? Comments?