

Impacts of Weather/Climate Change on Yukon River People



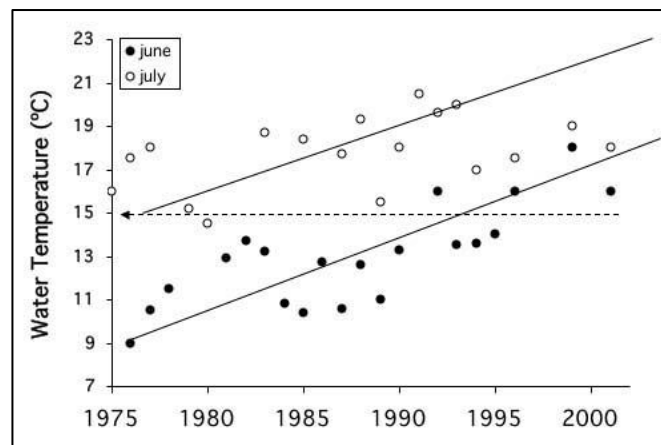
For thousands of years, the Yup'ik and Athabaskan people who live along the Yukon River have depended on the fish, wildlife and fauna of the region. The plentiful salmon, berries, moose and other foods literally fill the role of the “grocery store” for these communities, and play a central role in culture and identity. Based on years of observation, traditional ecological knowledge provides essential information about when the salmon are coming, and many other events.

In recent years, weather patterns have changed, and the methods people have traditionally relied upon in predicting the weather can no longer be trusted.

According to some studies, water temperatures on the Yukon River have also risen steadily since 1975. Increasing water temperatures may be contributing to the appearance of a fish parasite, *Ichthyophonus*, in Yukon River Chinook in recent years. Warming water temperatures pose a clear threat to salmon, which require temperatures of 55°F to protect spawning beds.

Additional impacts include:

Forest Fires: As temperatures warm, forest fires have become both more frequent and more severe. In addition to threatening human life, forest fires can cause severe damage to fish & wildlife habitat. It can take hundreds of years for burned areas to restore themselves before supporting fish and wildlife again.



Water Temperature on the Yukon River 1975-2006
Courtesy of Dr. Richard Kocan

Bank erosion: Increased water volumes as warm temperatures melt snowpack more quickly are causing bank erosion in parts of the river. Eroding banks change stream channels and force riverside structures, including traditional fish camps, to be relocated.

Future Impacts

The lives, cultures and economies of the Yup'ik and Athabaskan people of the Yukon River are inextricably tied to the well-being of the fish and wildlife populations. Impacts to these resources cause a direct effect on Yukon River people, for without these subsistence resources, living in these remote locations would be virtually impossible.



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