

## **THE YUKON RIVER BASIN WATER QUALITY MONITORING PROGRAM: PARTNERSHIPS BETWEEN GOVERNMENTS AND GRASS ROOTS AT THE NATIONAL AND INTERNATIONAL LEVELS**

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Forging the largest international treaty between First Nations, sixty-six tribes and First Nations of Alaska and the Yukon Territory have joined to create the Yukon River Inter-Tribal Watershed Council (YRITWC) to reinforce their collective interest and stewardship of the Yukon River. YRITWC's mission is to monitor, preserve, and protect the health of the Yukon River Basin, a goal which is made complex by the four major jurisdictional factions in this area. First Nations of the Yukon Territory, Alaska Natives, the United States, and Canada all have a stake in the watershed. The tribe's self-determination in conjunction with its control of human and natural resources offer unique advantages, and challenges, for successful monitoring. Issues include establishing primary jurisdiction, allocating resources to the monitoring effort, and setting protocols with a defined management standard of quality.

The Yukon River Basin consists of 330,000 square miles, with one-third in the Canadian Yukon Territory and two-thirds in Alaska. From 2000 to 2005, the United States Geological Survey (USGS) conducted a study of the Basin to establish baseline water quality conditions. The collaboration of the USGS and Environment Canada (EC) was essential for understanding variations in water quality as the Yukon flows from the Canadian headwaters to the Bering Sea.

In 2004, YRITWC and USGS began partnering to continue and extend water quality monitoring into a long-term database. YRITWC worked with USGS to develop sampling methods, protocols and a training structure modeled after USGS methods (USGS, TWRI, Book 9).

In March 2006, YRITWC began monitoring the Yukon River Basin, funded by an Administration for Native Americans (ANA) grant for regulatory enhancement. Sample sites were established between Dawson City, Yukon Territory, and Pilot Station, Alaska. Discretionary funds were used to establish the Dawson City site. The scope of the Yukon Territory monitoring effort is determined, to a large degree, by available funding.

In early 2007, YRITWC received a grant from EC to conduct a workshop with EC, USGS, Yukon Territory Government, and Water Survey of Canada. At the workshop, interested native tribes joined the YRITWC to assist in ongoing water quality monitoring efforts.

Through the collaboration of USGS, EC, and YRITWC, the five year water quality database has been extended to seven years. First Nations in the Yukon Territory will continue to participate as long as funding levels permit. YRITWC also continues to pursue collaborative partnerships throughout the Yukon River Basin.

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