

PETROLEUM EXPLORATION

With the Japanese bombing of Pearl Harbour in 1942, the United States Government planned to ensure a supply of fuel from Norman Wells via a refinery at Whitehorse to Alaska for military use.

The construction of the Canol pipeline for this purpose crossed 580 miles of rugged, mountainous country – much of it unmapped. Thousands of American

troops, many of them blacks from the deep south who had never seen snow before, were sent north to assist in the construction of the Canol road and pipeline. Dene people were hired as guides – for many this was their first experience participating in a wage economy.

The first crude oil was pumped through the pipeline in 1944. Petroleum output rose from 266,882 barrels in 1943 to 1,229,310 barrels in 1944. But by the time the pipeline was completed, the Japanese threat had been countered and other cheaper fuel sources had been found. Production at Norman Wells fell to 353,117 barrels in 1944.



Early oil rig in the Sahtu
Present-day rig near Colville Lake

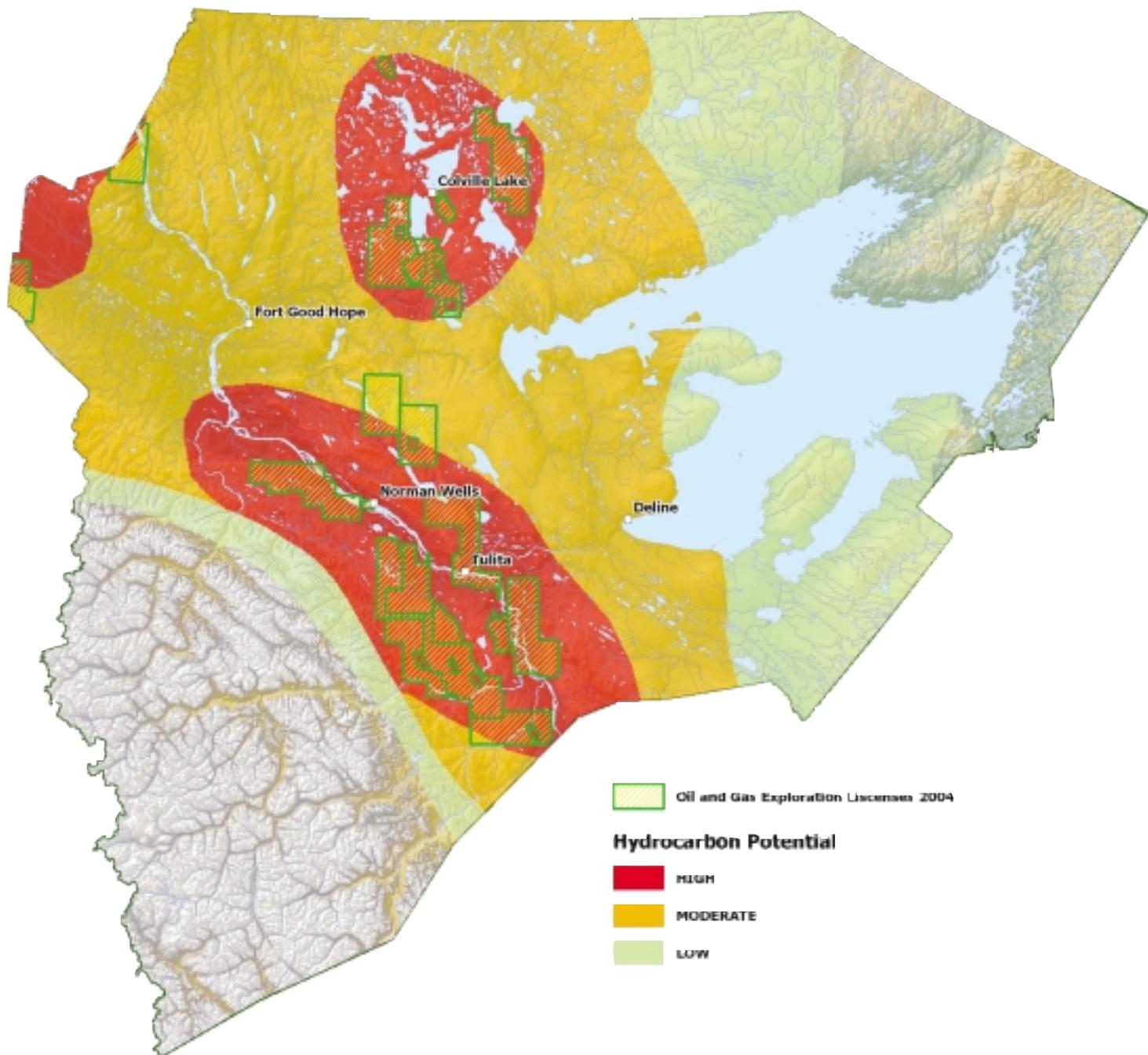
There is one thing I would like to say about the oil in Łe Gohlını (Norman Wells). What was the name of the man who found that oil? It was our own father, Francis Nineye. When he found the oil, he took a sample of it, put it in a lard pail and brought it out into Tulit'a. That same summer, he had an accident and died.

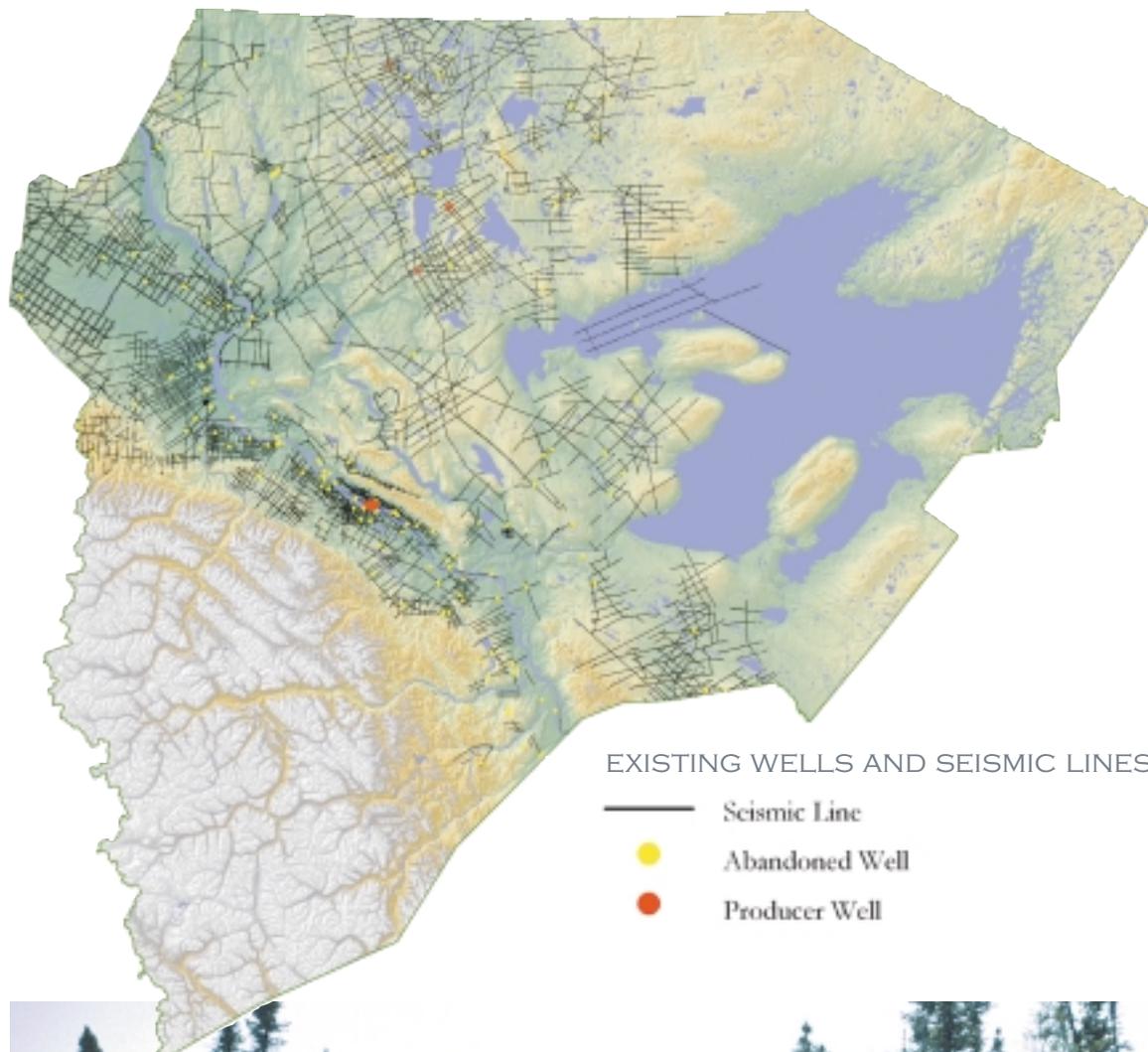
Now the white people turn around and claim they found the oil. My dad was the first guy to find that oil. He was staying right where Åe Gohlını is now, and the Dene had about five or six log shacks. They were trapping and hunting there for a living. He took the sample of that oil in a lard kettle and brought it into Tulit'a. He gave it to Gene Gaudet, the Hudson's Bay Manager, and he sent it out on the boat, it had to be a boat, there was no planes then. We never heard of that oil again and we never got the lard kettle back. We never could do anything about it again. There is no record.

By John Blondin from *Dehcho: "Mom, We've Been Discovered!"* (Dene Cultural Institute, 1989)



top - Rigworker, near Colville Lake
middle - Drilling Island, Norman Wells
bottom - Gas plant, Norman Wells





WHAT ARE SEISMIC LINES?

Most people in the Sahtu easily recognize the long, relatively straight cutlines that criss-cross much of the landscape. These lines are created during the early stages of oil and gas exploration to help “see” what is below the ground. Once a seismic line is cleared, sophisticated equipment is laid out along it to measure acoustic shocks that are sent through the ground. By analysing the variations in the acoustic shocks as they travel through the ground, exploration companies can get an idea of what lies underground and if there is any indication of oil and/or gas.



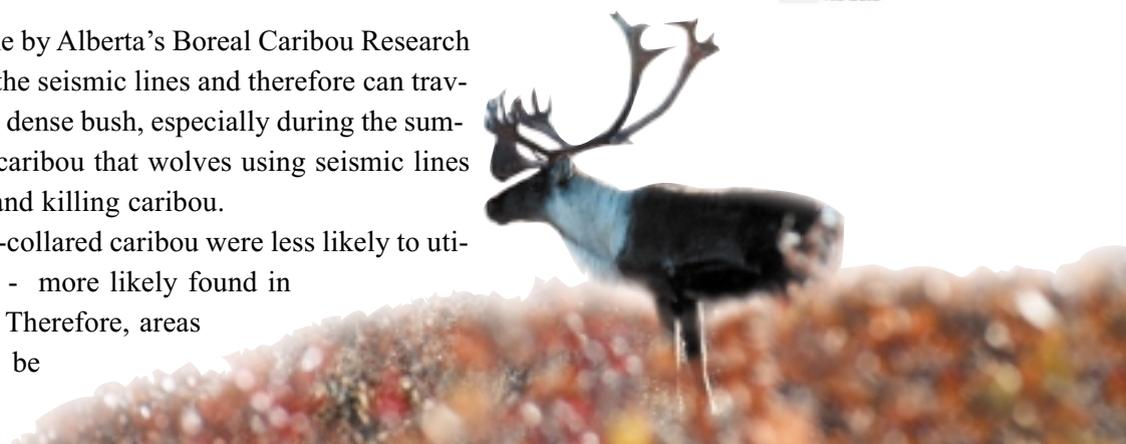
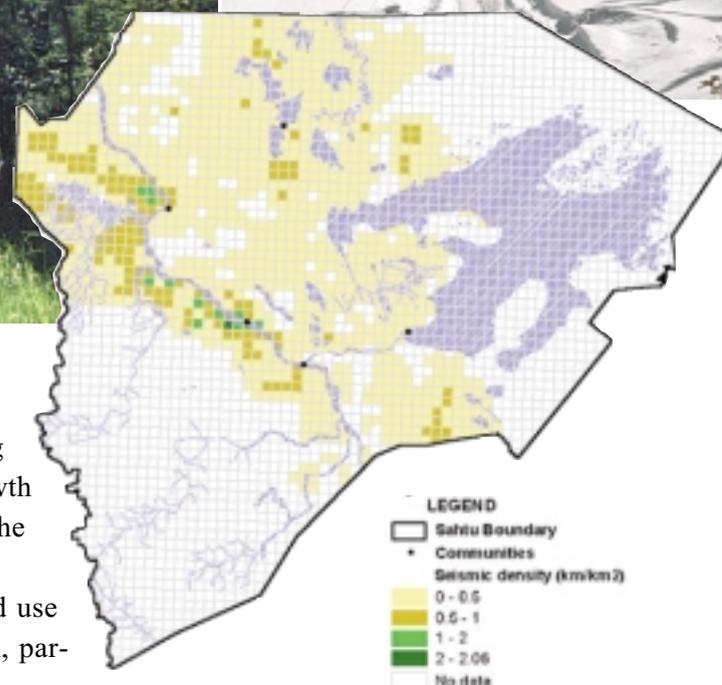
CARIBOU AND SEISMIC LINES

Woodland “boreal” caribou are distinct from the woodland “mountain” caribou even though both are genetically the same subspecies. The key distinction being boreal caribou live in small, rather isolated groups and prefer areas of old growth conifer forest whereas the mountain caribou inhabit the plains and valleys of the Mackenzie Mountain region.

Research shows that boreal caribou are sensitive to the more intensive land use activities found in their habitat such as oil and gas exploration and extraction, particularly the cutting of seismic lines.

Extensive research in northeastern Alberta done by Alberta’s Boreal Caribou Research Program (BCRP) have found that wolves utilize the seismic lines and therefore can travel much faster through the forest than through the dense bush, especially during the summer. It was found by monitoring radio-collared caribou that wolves using seismic lines were able to increase their efficiency at finding and killing caribou.

With this increased risk of predation, the radio-collared caribou were less likely to utilize habitat with a high density of seismic lines - more likely found in areas over 250 meters away from seismic lines. Therefore, areas within 250 meters of seismic are considered to be areas of habitat loss for caribou.



MACKENZIE VALLEY PIPELINE PROPOSAL

In the 1960s, the Sahtu became the focus for major industrial development with the proposal of a Mackenzie Valley pipeline.

A flurry of seismic activity led to the discovery of major gas reserves at Prudhoe Bay, and subsequently beneath the North Slope of Alaska. The construction of a pipeline through Alaska was subject to delays due to environmental concerns and aboriginal claims. There was also opposition to transporting the fuel by tanker along the shores of the Pacific.

In 1967, feasibility studies were launched for a Canadian pipeline route. The pipeline would be 2,600 miles long, stretching from Alaska, across northern Yukon, then south through the Mackenzie Valley. The idea was given added impetus with the discovery of Canadian gas fields in the Beaufort Sea.

The federal government recognised that there could be legal complications in pursuing development, given that provisions of Treaty 11 remained unfulfilled. An initial offer including a financial package and promises of reserves was rejected by the Indian Brotherhood of the Northwest Territories.

In 1973, Chief Francois Paulette of the Fort Smith Chipewyan band filed a “caveat” claiming an interest in lands covering over one million square kilometres. Justice William Morrow decided the Dene case deserved to be heard. The Supreme Court reversed the decision upon appeal by the government, but the initial decision made it clear that aboriginal interests could no longer be ignored.

The Berger Inquiry from 1974-1977 investigated the “terms and conditions that should be imposed” in respect of the proposed pipeline. The Inquiry led to a moratorium on pipeline development in the Mackenzie Valley. It had a lasting impact on the people of the Sahtu in other respects. Research was initiated on aboriginal land use practices. This included the massive Dene Nation mapping project, and a variety of social and economic studies showing the significance of hunting and trapping for the communities. A layer of experienced Dene and Métis negotiators emerged in the Sahtu to lead the communities into the future.



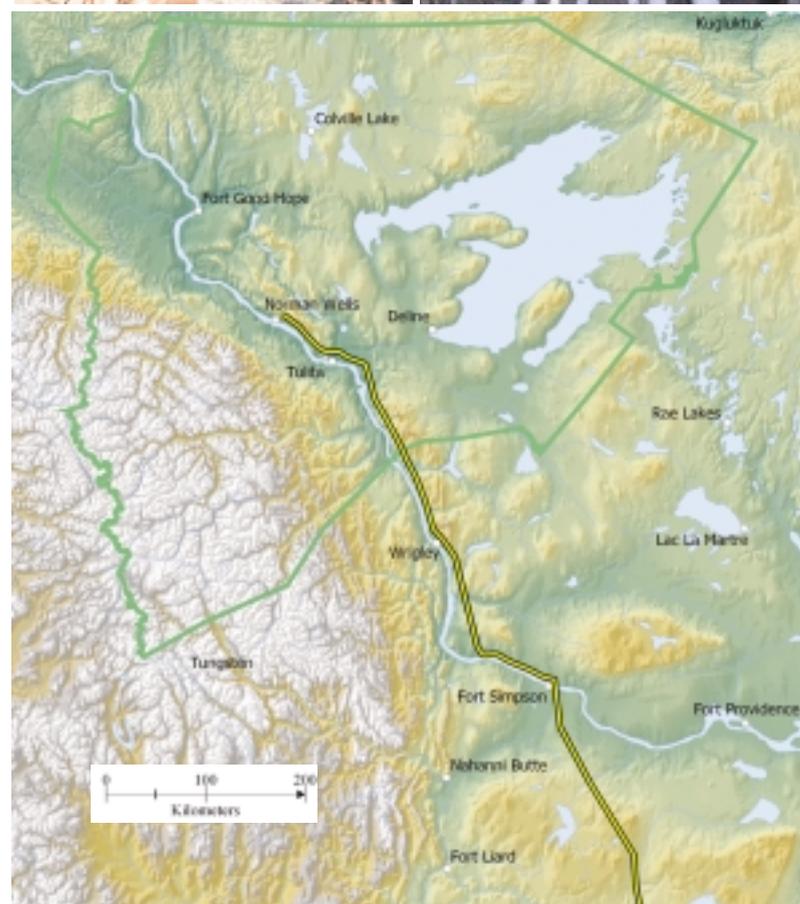
above - proposed Mackenzie Valley pipeline route and alternative Alaskan route
below - Laying the present-day Enbridge Pipeline and route map



THE PRESENT MACKENZIE PIPELINE ROUTE

The present Enbridge Pipeline extends approximately 870 kilometres (540 miles) between Norman Wells, Northwest Territories and Zama Alberta. From Zama, crude oil is transported through the pipeline facilities of others to Edmonton for refining.

As of July 2001, 26,000 barrels of sweet crude are shipped every day to Zama from Norman Wells along the Enbridge-owned pipeline which was completed in 1985. Because of the permafrost, it has to be cooled down to ensure that it does not melt the frozen earth and cause pipeline breaks.



In 1930, prospectors found pitch blend radium and uranium at Great Bear Lake. At first, the main interest was in the radium used for medical purposes. But when the lethal use of uranium was discovered, the Somba K'e (Port Radium) mine was secretly transferred to the Canadian government.

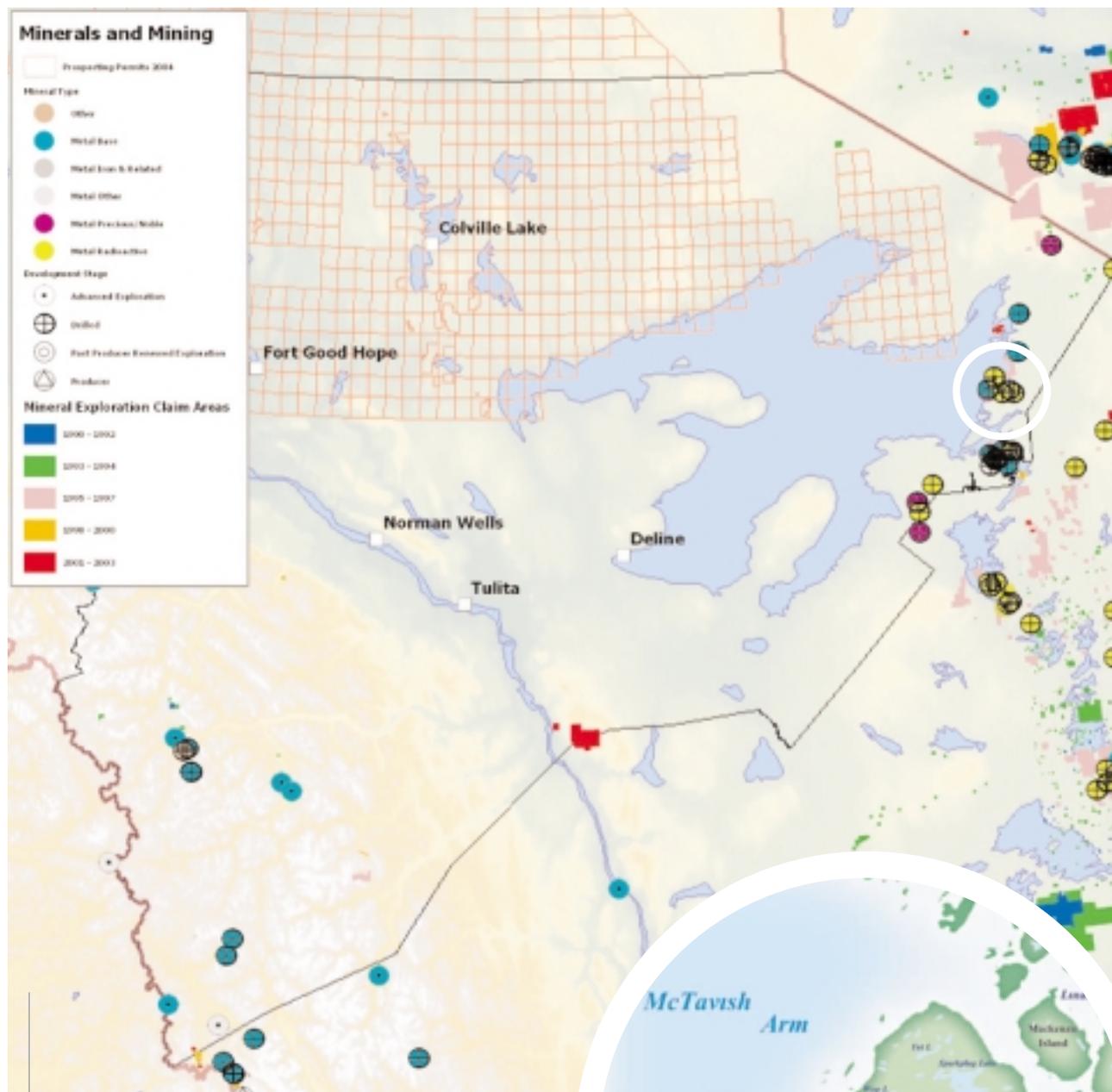
The uranium ore from Great Bear Lake was refined at Port Hope, Ontario, and from there went directly to the Manhattan Project to make an atomic bomb. After the destruction of Hiroshima and Nagasaki, Great Bear Lake uranium ore was sent to the United States for the construction of more bombs.

At its inception, the mine employed few Dene workers. The new demand for uranium led to the employment of Dene people. Many Sahtúot'ine worked as ore carriers, loggers and suppliers of country food for mine employees. Some moved their families close to the mine. The ore had to be transported in 100-pound bags down the Great Bear River by barge, then portaged by truck at the rapids and loaded onto another boat.

At every stop, the bags had to be loaded and unloaded on the backs of the ore carriers. And every time it was handled, the powdery ore would leak from the bags. An estimated 1.7 million tonnes of radioactive tailings were left behind at the mine site when the mine closed down.

The workers and families were not told about the risks from exposure to uranium ore, nor about its connection to the bombing of Hiroshima and Nagasaki. In an effort to make amends, a delegation of Dene people attended the peace ceremonies at Hiroshima in 1998 on the anniversary of the bombing. Bella Modeste was a member of that delegation: "We Dene people are a good people... We hope that blame won't be put on us because we had no knowledge about all that happened in the war."

Deline continues to research the impact of radiation on the environment and the people who lived there.



THE MONEY PLACE

Dene elders knew about the strange substance at what later became known to them as "the money place," Somba K'e, long before they showed it to the white men who claimed to have "discovered" it. For the Sahtúot'ine, this has always been a powerful and dangerous place. George Blondin (1990:78-9) records an ancient story prophesying the grim legacy of Port Radium:

In the old days, the Sahtu Dene traveled across the lake to the Barrenlands every summer, to hunt caribou. Some of these Dene hunters were paddling near the shore on the east side of Sahtu (where Port Radium is today) and they came to a place where rocky cliffs rise high over the water. Like all Dene, they believed it was bad medicine to pass in front of this rock: it was said that loud noises came from within it. These particular hunters pulled their canoes out of the water, but decided not to portage...instead they camped near the cliff. During the night everybody was awakened by the singing of the medicine man... In the morning, when the medicine man stopped singing the people at last spoke to him... "Why did you sing all night...?"

"I foresaw many things and I was disturbed," replied the medicine man... The medicine man told them of his strange vision. "I saw people going into a big hole in the ground -strange people, not Dene. Their skin was white ... [and] they were going into a hole with all kinds of ... tools and machines... On the surface where they lived, there were strange houses with smoke coming out of them... I saw ... big boats with smoke coming out of them, going back and forth on the river. And I saw a flying bird - a big one. They were loading it with things..." "I watched them and finally saw what they were making with whatever they were digging out of the hole - it was something long, like a stick. I wanted to know what it was for - I saw what harm it would do when the big bird dropped this thing on people - they all died from this long stick, which burned everyone... But it isn't for now; it's a long time in the future. It will come after we are all dead."



old core boxes, Port Radium

From Sahtu Heritage Places and Sites Joint Working Group, Rakekée Gok'é Godi: Places We Take Care Of.

RENEWABLE RESOURCE MANAGEMENT

Renewable resources (fish, wildlife, and forests) have sustained the people of the Mackenzie Basin for countless years. In the past, each part of the resource base was managed separately without consideration of how it might be related to the whole. This division often allowed conflicting resource policy to develop.

Resource management has changed over the years, but many people in the Sahtu still have an intimate relationship with the land. The communities use renewable resources in a holistic way – for food, healing medicines, spiritual sustenance, cultural and heritage activities, recreation and income.

In 2000, the Sahtu Land Use Planning Board undertook a Resource Mapping project. The project focused on interviewing people about their uses and knowledge of trapping, timber, fish and plants. People provided the most detailed information about fish harvesting, showing the importance of fish as a subsistence food.

The study showed that people use timber resources for a wide variety of purposes, including traditional arts, healing, construction and firewood. This is reflected in their specific knowledge of the variety of timber available, where drywood, rotten wood and driftwood are included as separate categories. Campsites for hunting, trapping or recreation would often be selected specifically because of the quality of the surrounding timber stand.

Berries and plants are also important resources for people. Berry picking is an important activity for women in the fall. Many people, especially elders, continue to use plants and trees for medicinal purposes.

From "Renewable Resource Potentials for Alternative Development in the Mackenzie River Region," by John T'Seleie and Robert Ruttan, in Dene Rights: Supporting Research and Documents, Vol. 5, Dene Development.

Fisheries are probably the most important renewable resource in the Northwest Territories in terms of quantity and potential for future economic development. Their value as a domestic resource of native people has been clearly documented.

In order that all of the future demands on the fisheries be met, the resource must be safeguarded from pollution and other environmental damage such as over-fishing and hazards such as large dams and other river uses which destroy or damage spawning areas or block migration between critical seasonal habitats.

Furbearing mammals have been the major source of income for native people from the beginning of the fur trade until recent years. Although socioeconomic changes have caused a 'decline in the fur industry,' many individuals still trap for profit and as a way of life.

Forest resource productivity in the north is low and timber growth is very slow; up to 200 years may be required to grow a merchantable tree. While existing sawmills are not all recognised as highly profitable ventures, they contribute substantially to the local economies by furnishing seasonal jobs and locally needed products.

Limited operation mills designed to serve the needs of small communities may well prove to be the most efficient way of utilising the irregularly distributed timber resources of the upper Mackenzie Basin. Careful planning and appropriate safeguards reduces or avoids deleterious impacts. Future management of northern forests also considers the value of forests as a critical wildlife habitat and important in the protection of watersheds.



Pictures top to bottom
Drying fish
Stretching beaver skins, Fort Good Hope
Fort Good Hope community sawmill

SAHTU SETTLEMENT HARVEST STUDY

The Sahtu Settlement Harvest Study is an important project required under the Sahtu Dene and Métis Comprehensive Land Claim Agreement (13.5.6) and is the responsibility of the Sahtu Renewable Resources Board (SRRB).

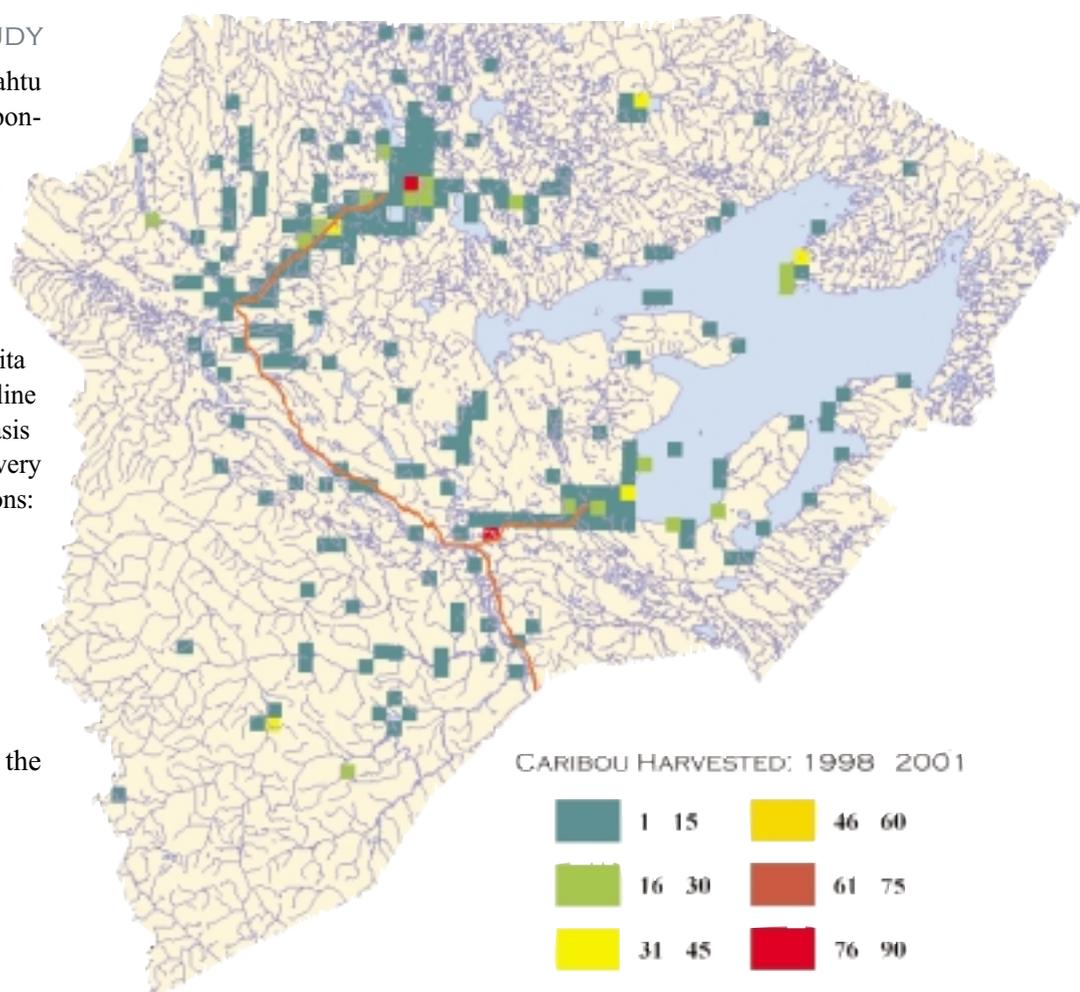
The most recent Sahtu Settlement Harvest Study of Sahtu Dene and Métis hunters, trappers and fishers counted the number of animals, fish and birds currently harvested by Sahtu Dene and Métis throughout a five-year period (1998-2003). The study is confidential; harvester names are not released and information collected not used to prosecute harvesters.

The communities of Colville Lake, Fort Good Hope, Norman Wells and Tulita began participating in the Harvest Study in April 1998. The community of Deline began participating in January 1999. Harvest data was collected on a monthly basis by a community field-worker using a census approach – the aim was to interview every eligible harvester in the Sahtu. An eligible harvester met all the following conditions:

- Is a Sahtu Dene, Métis or non-participant of the claim who provides for their Sahtu Dene-Métis family
- Currently resides in the Sahtu Settlement Area
- Is 16 years of age or over
- Currently hunts, fishes and/or traps

Data collected is entered in the Harvest Study Database. Once completed, the database will be used as a tool by the SRRB to do two main things:

- Make effective management decisions regarding the land and natural resources in the Sahtu
- Determine the Sahtu Basic Needs Level, which is the number of animals required to feed all Sahtu, Dene and Metis households each year so their harvesting traditions can be protected.



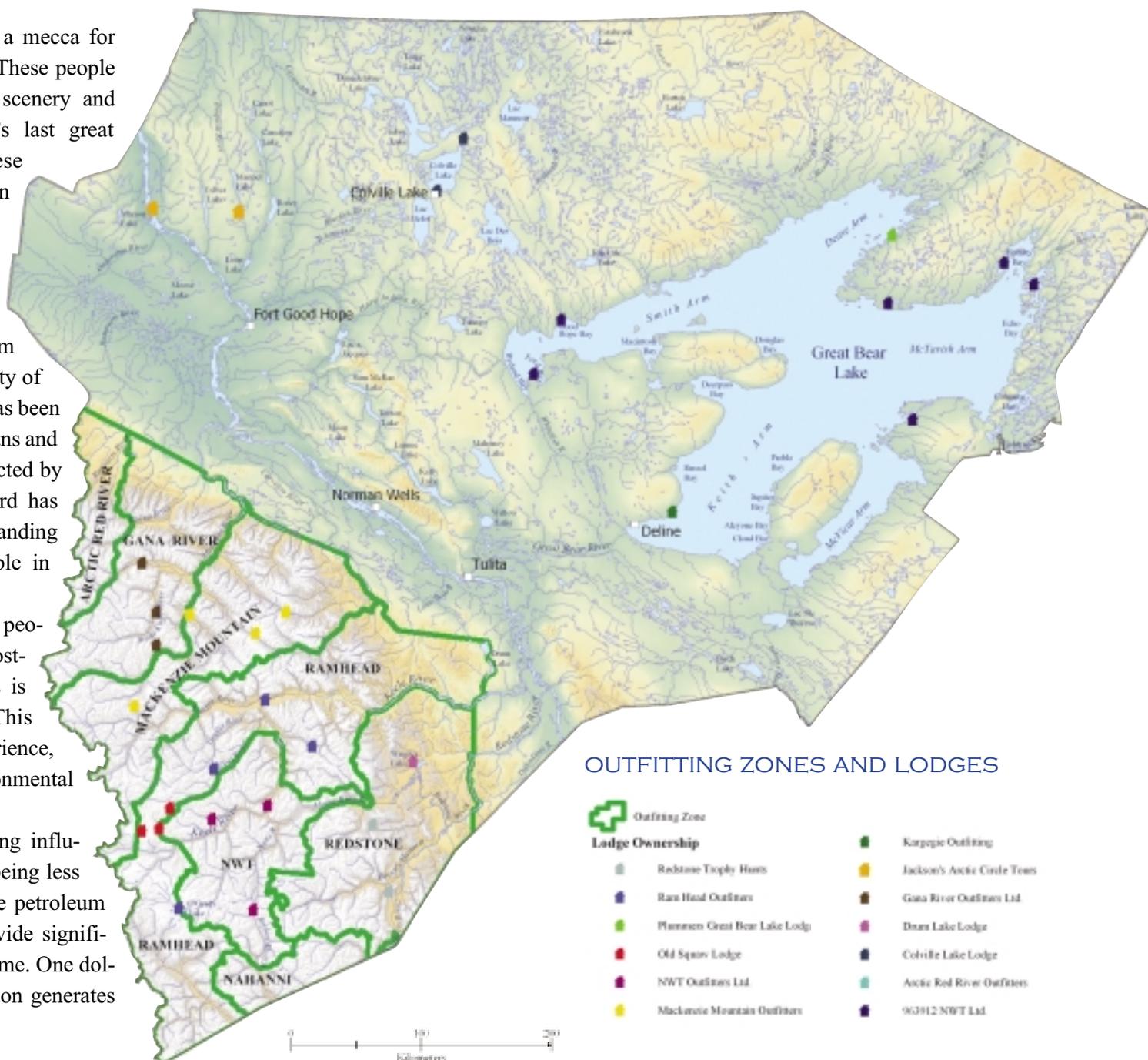
TOURISM

In summer, the Sahtu becomes a mecca for adventurers from other places. These people are seeking to experience the scenery and wildlife of one of the world's last great wildernesses. Increasingly, these people are having an impact on the economy of the Sahtu.

Overall, tourism has been expanding. Hunting and fishing has historically been the strongest sector in the tourism business. However, the popularity of canoeing, kayaking and hiking has been growing in recent years. Americans and Europeans in particular are attracted by the cheap dollar. As well, word has been spreading about the outstanding experience and services available in the Sahtu.

The logistics of transporting people into the area by air can be costly. But the number of tourists is proportionately smaller. This enhances the wilderness experience, and reduces the social and environmental impacts.

Tourism can have a stabilizing influence on the regional economy, being less subject to the fluctuations of the petroleum industry. Tourism tends to provide significant jobs over a long period of time. One dollar spent by a tourist in the region generates about \$3 of business on average.



SPRING HUNT A FAMILY TRADITION

By Teri Bavard, Aurora College, Tulita

The dictionary says that a tradition is a belief or custom which is handed down from generation to generation. In some families, it is a tradition to open presents after the midnight mass on Christmas Eve, or to eat turkey and have the family over on Thanksgiving.

My family has many customs and traditions. One that I especially like is the tradition of going out on the land for spring hunt.

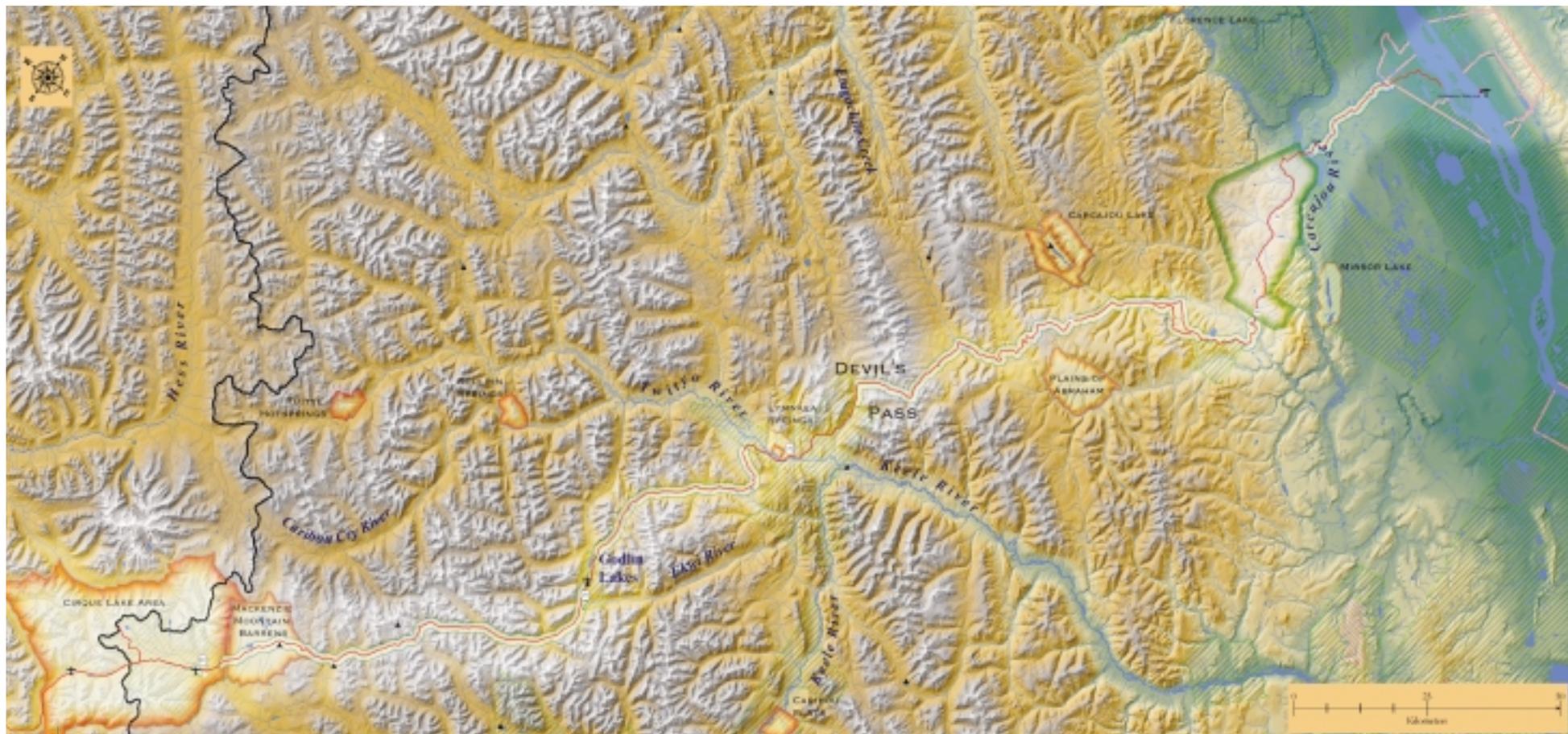
In April, when it is early spring, our family and relatives get together and help each other to go to the campsite up the Mackenzie River before the ice melts. We use the skidoo to take the things in the bush. After breakup, we return to town by boat. It takes just one day to get there.

The tradition of spring hunt is carried on from our ancestors. At least that is what I believe. Following the old ways, many of the people of our community still go out on the land. Traditions are important because it is a way of keeping families together and being there for each other.

We like it out on the land. It is a lot of work, but we enjoy being out on the land with the fresh air. There are many things to do, such as setting snares or just going for a walk to see the beautiful scenery.

I really enjoy the bush, and it is good to know that my children are learning how to live on the land. I especially like the quietness and the peacefulness, and listening to the birds sing. It is a wonderful feeling to experience. You feel free out there on the land.

CANOL TRAIL



The abandoned Canol Road winds its way for 372 km from the Norman Wells oilfield, across the broad Mackenzie River valley, through several mountain ranges, over the Mackenzie Mountain Barrens and up to MacMillan Pass on the Continental Divide, before passing into the Yukon. The raised roadbed provides an opportunity to traverse many portions of the route. Landslides and washed-out bridges make some areas impossible or very difficult to ford.

The Canol Road project was conceived during World War II, when Japanese warplanes attacked petroleum installations in the Aleutian Islands of Alaska. With Pacific shipping and coastal facilities at risk, the Norman Wells oilfield became strategically important. Between 1942 and 1945, more than \$300 million was spent, and 30,000 people were employed, to install 1600 km of telephone lines, lay 2650 km of 4- and 6-inch pipe, and construct an accompanying road to provide access to the pumping stations which lifted the oil over high passes.

By the time the pipeline was completed, the Japanese had been driven from the Aleutian Islands, and the pipeline lost its importance. In April of 1945, after less than a year of operation, the entire project was abandoned. Pump engines and most pipe was salvaged, but a lot of other equipment was simply abandoned. Sixty years later, the remains of pumping stations, road camps, bridges and trucks can still be seen along the trail.

The route has recently been designated the Canol Heritage Trail, and has been given National Historic Site status.



top- Trail switchback
right - Bridge remains
left - Fording river
© SLUPB

The Government of the Northwest Territories published a 30-page Hiker's Guide to the Canol Heritage Trail. Guide contains section maps, important notes about river crossings and trail conditions, and other important information for hikers. The booklet is available from:

Resources, Wildlife and Economic Development
Government of the Northwest Territories
Box 130, Norman Wells, NT, Canada X0E 0V0
Phone: (867) 587-3500