



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
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AA-085085 (1864)

To: Chief, Branch of Lands and Realty (932)

From: Navigable Waters Specialist

Subject: Navigability of Porcupine River, Upper Yukon Region, Alaska

On December 10, 2003, the State filed an application for a recordable disclaimer of interest for the bed of the Porcupine River from its mouth at the Yukon River to a point between monuments 50 and 51 on the United States-Canada International Boundary. The State also applied for lands underlying Rock Slough, Middle Channel, Henderson Slough, Joe Ward Slough, Sixmile Slough, Nine Mile Slough, and Curtis Slough, as well as “all interconnecting sloughs between the lines of ordinary high water” of the Porcupine River. The State included with its application a legal description of the river, three maps dated May 3, 2003 showing the Porcupine River, and supporting evidence.¹

As supporting evidence of the Porcupine River’s navigability, the State noted that the Washington Treaty of May 8, 1871, ratified by the United States and Great Britain, “permanently established navigation rights ‘for the purposes of commerce’ on the Porcupine River for Britons and Americans.” In addition, the State submitted copies of two Bureau of Land Management (BLM) memoranda dated May 13, 1974 and April 21, 1983. Both memoranda state that the Porcupine River is navigable. However, the 1974 memo contains no factual evidence of the river’s navigability. The 1983 memo contains but three sentences about past use of the river as a highway of commerce. No mention is made of the Porcupine River sloughs named in the State’s application.²

The purpose of this paper is to review the merits of the State’s application. This paper summarizes the factual evidence of commercial navigation on the Porcupine River and other water bodies named in the State’s application. Prepared under the aegis of the BLM, James H. Ducker’s “Alaska’s Upper Yukon Region: A History” (1982), contains an excellent history of

¹ Tom Irwin to Henri Bisson, BLM, December 10, 2003, file AA-085085 (1864), Alaska State Office, BLM records, Anchorage. Marty Rutherford, Assistant Commissioner of the Alaska Department of Natural Resources, signed the letter.

² Curtis V. McVee to Joe Upickson, May 13, 1974, and Robert W. Faithful, IV, to Acting Chief, Division of ANCSA and State Conveyances, April 23, 1983, file AA-85085 (1864), BLM records. These documents were prepared for informational purposes only. They were not prepared in order to issue Decisions that could have been appealed to an administrative law court or the federal court.

the Porcupine River. Since its completion, the BLM has discovered much additional evidence of the use of boats on the Porcupine River. Instead of summarizing all of the available evidence, this paper focuses upon the old evidence and newly discovered evidence of commercial navigation on the Porcupine River. Finally, this paper also considers whether the State's application for lands underlying the subject water bodies meets the regulatory requirements (43 CFR 1864).

Land Status

The Porcupine River in Alaska flows through forty-one townships. Of these townships, twenty-four are located within the Yukon Flats National Wildlife Refuge; and eighteen are within the Arctic National Wildlife Refuge. The Yukon Flats National Wildlife Refuge was created by the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. By this Act, Congress also created the Arctic National Wildlife Refuge, which included the pre-statehood Arctic National Wildlife Range (on the North Slope) and an additional 9,160,000 acres of land. These additional lands include the Porcupine River watershed in Alaska. Therefore, at the time of statehood, lands underlying the Porcupine River were not reserved or withdrawn.

Non-federal lands along the Porcupine River, as shown on the Master Title Plats, consist of Native corporate lands and Native allotments. In its lower reaches, large blocks of land abutting the Porcupine River have been conveyed out of federal ownership to Native corporations. These lands have been either interim conveyed (IC Nos. 651 and 652; 1079) or patented (50-99-0421, 50-99-0420, 50-99-0424, 50-99-0425, 50-99-0432, 50-2000-0187, 50-2000-0188, 50-2000-0289, 50-2000-020) to Gwitchyaa Zhee Corporation of Fort Yukon or to Doyon, Ltd. The vast majority of Native allotments are located along the lower reaches of the river. The uppermost Native allotments on the Porcupine River are located at the mouth of Salmon Trout River in T. 27 N., R. 28 E., FM. Certificates have been issued for most Native allotments located along the river. All conveyances to the Native corporations and Native allottees excluded the bed of the Porcupine River.

BLM Navigability Determinations

The BLM first considered the navigability of the Porcupine River while adjudicating land selection applications filed under the Alaska Native Claims Settlement Act. As noted above, Gwitchyaa Zhee Corporation of Fort Yukon and Doyon, Limited, applied for lands along the lower reaches of the Porcupine River, generally from a point in T. 23 N., R. 19 E., FM, several miles below the mouth of Joe Ward Slough, downstream to the Yukon River. In its Decisions of 1982 and 1983 on these applications, the BLM determined that the Porcupine River was navigable. These determinations were not appealed. The BLM subsequently excluded lands underlying the Porcupine River from the various Interim Conveyances issued to the Native corporations.³

³ See Decisions and navigability maps (cited in the Interim Conveyances) in easement files F-14857-EE, F-21779-4, and F-21779-6, ANCSA files, BLM records. See also Interim Conveyance Nos. 575, 651, 652, and 1079 in these casefiles. Interim Conveyance No. 1079 was issued on August 30, 1985.

The BLM has issued few, if any, Decisions for land claims along the remainder of the Porcupine River—i.e., from T. 24 N., R. 19 E., FM, upriver to the International Boundary—which required a navigability determination. However, in 1983 BLM-Alaska completed an historical study of travel and transportation in the Upper Yukon region. This history contains much information supporting a finding that the river is navigable from the Yukon River to the International Boundary. In fact, the BLM concluded as much. In a memo summarizing the evidence, the BLM reported that “Natives, Hudson’s Bay traders at Fort Yukon, and shippers destined for Old Crow, Yukon Territory, and Chalkyitsik have been the primary commercial users of the Porcupine River. Craft similar to the larger vessels on the Yukon traveled the Porcupine into Canada, including thirty- and forty-foot Hudson’s Bay boats carrying four to five tons, the steamboats *Pauline* and *Vidette*, and barges operated by at least three firms in the 1950s and 1960s. . . . Although some steamboats had difficulty with seasonally low water near the border, this did not prove to be an obstruction to navigation.”⁴

Porcupine River Physical Characteristics

Most of the Porcupine River, 555 miles long, is located in Canada. Approximately 214 miles is located in Alaska. In this distance the river flows through four physiographic areas: the Upper Ramparts, Coleen Lowland, Lower Ramparts, and Yukon Flats. In the Upper Ramparts the river flows in a single channel thirty miles through a narrow valley with cliffs up to 500 feet high. In the Coleen Lowland, from below Howling Dog Canyon to near the mouth of Rat Creek, the river widens and numerous vegetated islands appear in its channel. In the Lower Ramparts section, the river again narrows as it flows through a hilly country. Near rivermile 131 the river enters the Yukon Flats, a vast area of lowlands and numerous small lakes. The river flows through this area in a wide, meandering channel, sometimes nearly doubling on itself. In one section above the mouth of Black River, the river breaks into a number of short, wide, meandering sloughs, named Rock, Henderson, Middle Channel, Joe Ward Slough, Sixmile, and Ninemile, before its waters again are concentrated into one channel. The river empties into the Yukon River at Fort Yukon in two main channels, about four miles apart.⁵ According to a Canadian explorer, “The current is uniform, with few riffles and no rapids, and has an average rate of about three miles an hour.”⁶

The principal tributaries of the Porcupine River are, in downstream order, Salmon Trout River, Coleen River, Black River, and Sheenjek River. By far the Black River is the largest tributary of the Porcupine River in Alaska; it is the only with a settlement (the Indian village of Chalkyitsik) on its banks. At the time of statehood, the only other settlement along the Porcupine River was Old Crow in Canada.

⁴ Robert W. Faithful, IV, to Acting Chief, Division of ANCSA and State Conveyances, April 21, 1983, in writer’s files. On May 3, 1983, the BLM sent copies of this memo to the principal upland owners (i.e., Doyon, Ltd., U.S. Fish and Wildlife Service. Copies of the historical report were sent in July 1983 to the State of Alaska, Doyon, Ltd., and the U.S. Fish and Wildlife Service. See Robert W. Faithful, IV, to Ron Swanson, July 25, 1983, to Thomas D. Williams, July 25, 1983, and to U.S. Fish and Wildlife Service, Anchorage, July 25, 1983, in writer’s files.

⁵ The river is shown on the following maps: U.S. Geological Survey, Coleen, Alaska (1956, limited revisions 1983), Black River, Alaska (1956, limited revisions, 1984), and Fort Yukon, Alaska (1956, minor revision 1994). Scale: all 1:250,000.

⁶ Dawson, *Report on an Exploration in Yukon District*, 225.

Evidence of Commerce

The Porcupine River, like the Yukon River itself, has a long history as a highway of commerce. For decades before and after the Purchase of 1867, the Hudson's Bay Company relied upon the river in transporting trade goods and furs, from its Fort Yukon post, deep within Russian America territory, to its eastern seaboard posts via Peel River, Mackenzie River, and other river and lake systems in Canada. After the Klondike Rush of 1897-98, and the construction of the White Pass & Yukon Railway from tidewater at Skagway to the Yukon River at Whitehorse, Canadian and American fur traders moved into the Porcupine River country and established trading posts. Unlike the Hudson's Bay Company, Canadian traders transported goods from Whitehorse or Dawson to their Porcupine River posts in sternwheel steamboats and gasoline-powered launches. Some Americans also supplied their posts by boat from Fort Yukon and Circle.

The Hudson's Bay Company established a trading post at Fort Yukon in 1847. Company officials, not to mention the Russians, were well aware of the fact that the post was located in Russian America. Nevertheless, the Russians did not interfere with the company's fur trade. Each year the company transported supplies and furs in thirty- to forty-foot boats up and down the Porcupine River, one link in a long chain extending to Peel River, Mackenzie River, and so on to Hudson's Bay in eastern Canada. These boats were capable of carrying four and a half tons of cargo. From Fort Yukon, the trip usually required three weeks to reach La Pierre House in the headwaters of the Porcupine. The return trip was accomplished in less than a week.⁷

After the Purchase of Alaska, the United States quickly asserted its sovereignty. In 1869 Captain C. W. Raymond of the U.S. Army ascended the Yukon River from the Bering Sea to Fort Yukon, determined that the Hudson's Bay Company's post was located on American soil, and requested the local company officials to move the post to Canada. Uncertain over the location of the 141st meridian, the International Boundary, the company subsequently moved its post several times up the Porcupine River within Alaska. The company established a new post at Howling Dog Rock or Red Gate on the Upper Porcupine River. About 1887, this post was abandoned for a new post known as Old Rampart at the mouth of Salmon Trout River. When in 1889 the U.S. Coast and Geodetic Survey determined that the International Boundary crossed the Porcupine River farther upstream, the company moved its post once more, this time to the site of New Rampart House or simply Rampart House, located just east of the 141st meridian. In 1894 the Hudson's Bay Company finally abandoned Rampart House.⁸

Several other traders moved into the vacuum. Dan Cadzow is probably the best known. As early as 1900 Cadzow began freighting out of Fort Yukon on the Porcupine River with a large poling boat. Presumably he was then trading out of Rampart House because in 1904 he leased

⁷ Murray, *Journal of the Yukon*, 98; Dall, *Alaska and Its Resources*, 103-106; Whympier, *Travel and Adventure in the Territory of Alaska*, 220; Wright, *Prelude to Bonanza*, 55, 73-77; Dawson, *Report on an Exploration in Yukon District*, 25-26; Ducker, "Alaska's Upper Yukon Region," 232; Bennett, *Yukon Transportation*, 13-14.

⁸ Dawson, *Report on an Exploration in Yukon District*, 224; Wright, *Prelude to Bonanza*, 203; Webb, *The Last Frontier*, 48; Lain, "The Fort Yukon Affair," 16; Balicki, "Vunta Kutchin Social Change," 35; Acheson, "The Kutchin of Old Crow," 23.

the buildings there from the Hudson's Bay Company. He would remain there until his death in 1929.⁹

During his long career, Cadzow used several different boats to move furs and trade goods on the Porcupine River. In 1906 he used a forty-four-foot-long, eleven-foot-wide boat or bateaux. Built in Dawson, the boat was capable of carrying ten tons. In 1907 a Canadian newspaper reported that Cadzow ordinarily boated his goods from Dawson to Fort Yukon, there transferring the cargo to three boats, each capable of carrying seven tons. Several dozen Indians—eight men to a boat—would then tow and pole the boats upriver to Rampart House. In 1910 the steamer *Lafrance* was evidently hired to transport supplies up the Porcupine River to Cadzow's post at Rampart House. In 1912 the *Pauline* successfully delivered freight to Rampart House. Cadzow may have continued to transport goods in this manner until 1914 when he purchased a forty-three-foot-long steamer, the *Rampart*, for use on the Porcupine River. This boat was operated on the river to Rampart House. In the early 1920s he reportedly used a scow to transport freight from Dawson to Fort Yukon on the Yukon River and then used several launches to haul the freight from Fort Yukon up the Porcupine River to Rampart House. In 1922 he established a trading post at Potato Creek on the Old Crow River, a tributary of the Porcupine River in Canada. This post was also accessible by launch.¹⁰

Cadzow was not the only trader on the Porcupine River. Both Canadian and American traders operated on the river, some of them serving Chalkyitsik on the Black River and some operating posts along the river in Canada, specifically at Old Crow and at other locations farther upriver. After Cadzow's death in 1929, the trading post at Rampart House apparently was abandoned. A decade later, the place was occupied only by a few Indians during the winter trapping season. The Old Crow trading post continued to be operated. Over the years, it became an important Indian village on the river.¹¹

The Old Crow trading post, located about sixty miles upriver of Rampart House in Canada, in a country rich with muskrats, was supplied by boats operating out of Dawson or Fort Yukon. William "Billie" Moore and Harry Horton may have been the first to open a post there. About three years after opening a post at Fort Yukon, they established a branch post on the Porcupine River bank near the mouth of Crow River. They used the sternwheeler *Aleota* to supply this branch station. It was on this boat that Billie Moore lost both legs in an accident and subsequently died while the boat was on the river in Canada.¹² Local newspapers subsequently identified Oscar A. Schultz as the trader at "Old Crow River." Balikci claims that he and another trapper named Billy Johnson built the first store at Old Crow.¹³ Like Cadzow, Schultz obtained

⁹ W. Dempster to Robert Woodall, April 19, 1962, Box 1, Dan Cadzow Collection, Yukon Archives, Whitehorse, Yukon Territory, Canada.

¹⁰ *Yukon World* (Dawson), August 11, 1905, 4 and September 24, 1907, 3; *Yukon Valley News* (Rampart), December 6, 1905, 2; *Fairbanks Daily Times*, August 12, 1906, 5; *Dawson Daily News*, July 27, 1906, 3, July 31, 1906, 8, July 29, 1910, 1, July 9, 1912, 4, July 31, 1912, 4, July 17, 1916, 1, August 8, 1917, 4, August 19, 1922, 4, September 7, 1922, 4, September 16, 1922, 2; Certificate of British Registry for the "Rampart," Official No. 116615, July 17, 1914, Box 1, Dan Cadzow Collection, Yukon Archives, Whitehorse.

¹¹ FitzGerald, "Reconnaissance of Porcupine Valley, Alaska," 221, 225; Box 1, Dan Cadzow Collection, Yukon Archives, Whitehorse, Yukon Territory, Canada.

¹² *Record Citizen* (Ruby), July 18, 1914, 4; *Fairbanks Daily Times*, July 22, 1914, 1.

¹³ Balikci, "Vunta Kutchin Social Change," 35; Acheson, "The Kutchin of Old Crow," 26.

his supplies at Dawson and transported these in a gasoline-powered launch, the *Moose*. Schultz described the launch, which had been built at Whitehorse, as 37 feet long with a 6-foot beam; it drew 6 to 7 inches of water on average. He claimed that the boat could make the trip from Fort Yukon to Old Crow, an estimated 280 miles, in sixty hours. He didn't say whether this could be accomplished while pushing a barge, which the launch usually did.¹⁴ How long Schultz operated on the river is not presently known. In the last known report of him, in 1919, he was seeking medical treatment in Nenana. Balikci, however, reported that his trading post operated until the 1920's when the price of muskrat skins plummeted.¹⁵

After Schultz's post closed, several local Indians operated a trading post. Balikci described subsequent events as follows: "Two local Indians then tried their hand at trading, with limited success. One was accused of perpetually stealing merchandise, and this native partnership ended. Meanwhile, another trading association was formed between two whites and an Indian. Following many adventures and disagreements these partners found themselves heavily in debt, and Blackfox (pseudonym), the Indian, remained to pay the debts after the whites disappeared. Later Blackfox moved his establishment to Whitestone village for a number of years, only to come back to Old Crow where he still manages the principal store (which he purchased, with the stock, from the Northern Commercial Company.)" Balikci did not indicate whether these traders used boats to supply this post.¹⁶

Balikci did not identify Charles Strom and Harry Healey as traders at Old Crow, but it is clear from Fairbanks newspaper reports that these two men also traded at Old Crow. During the late 1930's the Fairbanks newspaper frequently mentioned them whenever they left Fort Yukon for Old Crow or returned to Fort Yukon from the Upper Porcupine village. In one mid June 1938 report, the men left Fort Yukon for Old Crow with twelve tons of freight. Strom returned later in the summer "for a load of winter supplies." He was using two launches and a barge. In mid June 1939 Strom and Healy arrived in Ft. Yukon from Old Crow to get winter supplies. Within a few days they started on the return trip to Old Crow. By August 1939 Healy had made three round trips "with a pair of boats" between Fort Yukon and Old Crow.¹⁷

In the late 1930s and early 1940s the Jackson Brothers (James and Frank were from Sweden) operated a post at Old Crow. According to Balikci, the two men abandoned their post at LaPierre House in the headwaters of the Porcupine, where they had operated since 1925, to open a post at Old Crow in 1935. This post was also supplied by boat from Fort Yukon. The Fairbanks newspaper in August 1939 noted that Jackson had "been on the Porcupine almost constantly this summer, making his freighting trips." In 1940 he had a barge built at Fort Yukon for use on the Porcupine River. It was sixty feet long and fifteen feet wide.¹⁸

¹⁴ *Fairbanks Daily News Miner*, October 11, 1917, 1

¹⁵ *Fairbanks Daily News-Miner*, August 19, 1919, 4; *Dawson Daily News*, July 15, 1919, 1; Balicki, "Vunta Kutchin Social Change," 35.

¹⁶ Balicki, "Vunta Kutchin Social Change," 35.

¹⁷ *Fairbanks Daily News-Miner*, June 17, 1938, 7, July 12, 1938, 6, June 17, 1939, 6, June 22, 1939, August 8, 1939, 8, and October 19, 1939, 3.

¹⁸ *Fairbanks Daily News-Miner*, August 22, 1939, 7 and July 16, 1940, 2; Balikci, "Vunta Kutchin Social Change," 35.

In 1944 James “Jim” Jackson sold the Old Crow trading post to the Northern Commercial Company. How long this firm operated at Old Crow is unknown. It is known, however, that the company relied upon modern riverboats to supply the post. After its twenty-five-ton motorboat sank in the Porcupine (the fur cargo was saved), the company purchased a new thirty-ton riverboat, named *The Marion*, in the spring of 1945 for use on the Porcupine River. In 1946 the company used either steamer *Donjek* or the diesel-powered *Emma R. No. 2*, skippered by Don Peterson, to transport the first Caterpillar tractor to Old Crow. The Fairbanks newspaper reported that this was the first large boat, transporting 72.5 tons of cargo, to go beyond Rampart House. Peterson succeeded in reaching a point within thirty-two miles of Old Crow before stopped by low water (only eight inches deep).¹⁹

By 1959, at the time of Alaska statehood, Old Crow in Yukon Territory, Canada, was the principal community on the Porcupine River. According to Mrs. Margaret Hamilton, a nurse married to the Anglican priest at Old Crow, the village consisted of about 190 people.²⁰ No other Indian villages were located along the Porcupine in Alaska, though a village called Chalkyitsik (population approximately 95) was located on Black River, a tributary of the Porcupine River. According to Richard Carroll of Fort Yukon, only a few trappers then lived along the Porcupine River or its tributaries. Sam Herbert with his son and daughter-in-law at Shuman House and Ed Owens on the upper Coleen River were among the best known.²¹ Neil McDonald, then the principal trader, described Old Crow as follows:

Old Crow is a very small village on the Porcupine River in the country of the Loucheux Indian. Here they live the life of trapping and hunting. The village is very isolated and is the last village in the Yukon Territories before the Arctic coast. There are no roads or cars here, only the trails which start from the village to the tundra. The Porcupine River serves as the main highway to the Outside. The mail arrives once a month by plane from Fort Yukon.

The people here are poor and living mostly of trapping with a very low price for fur and conditions are bad at times. But the Loucheux people like their place, this is where they were born and this is where their ancestors lived and this great North Country is the place where they feel free and where they feel happy. The Outside World does not tempt them too much, they prefer to roam the vast Northland searching for caribou and other game.²²

Besides several traders, an Anglican mission school and a detachment of Royal Canadian Mounted Police were located at Old Crow. The traders were named Neil MacDonal and Philip Dicquemare. (In the 1960's McDonald was succeeded by Joe Netro, reportedly a trader since 1924. By 1968 he wanted to retire and sell his store at Old Crow.²³)

By this time, residents of Old Crow, including the traders, relied to some extent upon airplanes for travel, mail delivery, and freighting. Both Wien Airlines of Fairbanks and Great Northern Airways of Dawson served the community.²⁴ The bulk of freight destined for the traders,

¹⁹ *Fairbanks Daily News-Miner*, August 23, 1944, 3, July 6, 1945, 3, June 22, 1946, 8, July 18, 1946, 1, August 3, 1946, 3.

²⁰ *Fairbanks Daily News-Miner*, April 12, 1958, 5.

²¹ *Fairbanks Daily News-Miner*, May 13, 1963, 8.

²² *Fairbanks Daily News-Miner*, August 9, 1958, 4.

²³ *Fairbanks Daily News-Miner*, September 4, 1962, 7, March 9, 1968, 2; Josie 1964, 11.

²⁴ *Fairbanks Daily News-Miner*, November 15, 1961, 2 and October 19, 1965, 2.

mission, and Mounties was probably delivered by boat, however. In the 1950s, 1960s and into the 1970s, the Brainstorm Freighting Service was the principal, if not the only, riverboat freighting operation on the Upper Porcupine River. Other than what can be gleaned from the local Fairbanks newspaper, little is known about this company's riverboat operations. Newspaper correspondents Edith Josie of Old Crow and Alan Innes-Taylor of Eagle (near the International Boundary on the Yukon River) frequently made references to the riverboat's arrivals and departures from 1955 to at least 1971. The company operated the riverboat *Brainstorm No. 35* and several barges out of Dawson on the Upper Yukon. Until his death in 1958 George Kirk, a former Mountie stationed at Old Crow for sixteen years, captained the riverboat. According to Ducker, Kirk used a forty-foot tug boat and a twenty-ton barge to move supplies from Dawson to Fort Yukon and thence to Old Crow. He was succeeded by a Captain Burkhard in 1958, a Mr. Stutter (or Stetter) in 1963, and a Captain Warmsby in 1966.²⁵

In her daily chronicle of events at Old Crow, Edith Josie recorded the comings and goings of the *Brainstorm*. The riverboat usually made at least two trips to Old Crow—one in June and another in August. The June trip apparently was made just a couple of weeks after the breakup of the river ice. One year Josie recorded that the river at Old Crow broke up on the afternoon of May 30. She recorded the arrival of the *Brainstorm* on June 13. Several residents of Old Crow—John Kendi, for example—served as pilots on the trip up the Porcupine River. The crew usually unloaded the boat in less than a day and immediately thereafter left Old Crow to return to the Yukon River. Some years, depending upon the water levels, the boat could be taken beyond Old Crow. In 1964, for example, the riverboat ascended the Porcupine beyond Old Crow, perhaps to some point near Bell River.²⁶ There were years, too, when the river was too low for navigation. In 1966 the river was exceptionally low. Josie reported that the riverboat succeeded in reaching Old Crow on June 23 with a load of freight for the Mounties and oil. On August 1 she recorded that the boat was still at the village. The water was so low that even small boats could not reach the village. For example, Bill Smith from Fort Yukon made it only to Rampart House before low water stopped him. He had to walk the remaining distance to Old Crow, a six-day trip.²⁷

The following year, 1967, conditions were much better. As Josie at Old Crow chronicled the riverboat's arrivals and departures:

Brainstorm boat left toward Dawson. They sure done a very best trip to Old Crow from Dawson. After it arrived and went back to Fort Yukon for some gas they make four days fast trip. They will try and make five trips to Old Crow from Dawson. [June 16 entry]

They unload that evening and next day, July 1st, they had a baseball game with six teams. They start to play 9 a.m. and finished at 7 p.m. that evening.

Morning at 8:30 a.m. Brainstorm boat left for Dawson. Hope they have a good safe trip and come back safe by next two weeks. [July 2 entry]

²⁵ Ducker, "Alaska's Upper Yukon Region," 242. Josie, *The Best of Edith Josie*, 45, includes a photograph of the Brainstorm with a rowboat on board. The photo caption reads, "The Brainstorm boat brings fresh supplies from Dawson City."

²⁶ Josie, *The Best of Edith Josie*, 17, 41.

²⁷ *Fairbanks Daily News-Miner*, July 19, 1966, 3 and August 22, 1966, 16.

We are having a good summer here in Old Crow and the river is high. So nice to travel around with boat. Brainstorm boat is working real good bringing the freight and oil this summer. . . . [T]he boat is bringing some freight for school, nursing station, R.C.M.P., and Rev. Exham and Joe Netro, our trader. [no date]

Brainstorm boat went down far as Fort Yukon and arrived back on Saturday and left on Sunday morning at 10 a.m. Hope to see Brainstorm after two weeks. [July 19 entry]²⁸

In the event that the *Brainstorm* was unable to reach Old Crow because of low water, the crew either waited until the water level rose or utilized smaller boats to transport the cargo to the village. In August 1971, for example, the Fairbanks newspaper reported that the boat was stopped at Rampart House by low water. On the morning of August 3, Josie recorded that “some boys came up with Motor boats from Brainstorm boat.” She predicted “long time till river get high.”²⁹

Porcupine River Sloughs

The State applied for all “interconnecting sloughs” of the Porcupine River. Seven are named in the State’s application: Rock Slough, Henderson Slough, Middle Channel, Joe Ward Slough, Sixmile Slough, Ninemile Slough, and Curtis Slough. These sloughs are located in the same area, approximately thirty-eight miles upriver from the mouth of the Black River. All are named on modern U.S. Geological Survey maps. There is no question as to the location of these sloughs. They are clearly shown on the federal government’s maps. Most other “interconnecting sloughs” were not identified by name or by legal description. The State delineated on a map a few sloughs in the lower reaches of the Porcupine River, including the river’s Lower Mouth and Upper Mouth.

None of the sloughs was specifically identified in the State’s application as a potential highway of commerce. Instead, they were identified as parts of the navigable Porcupine River. If the navigable Porcupine River flows through the sloughs, then the sloughs are considered to be an integral part of the Porcupine River. However, these determinations are made in the present as the need arises—not as of the date of statehood (1959). This is done because of the ambulatory nature of rivers. Most rivers change courses over the land through time. Over long periods of time, the Porcupine River cuts new channels and abandons old channels. New sloughs are created; old sloughs dry up. Changes resulting from erosion, accretion, or reliction affect title. As the Associate Solicitor observed in 1976, “title to the land moves with the water body [e.g., Porcupine River] when the changes in the bed are a result of erosion, accretion, or reliction.”³⁰ If, for example, the Porcupine River no longer flows through the slough as result of accretion, then the accreted lands are owned by the upland owners.

²⁸ *Fairbanks Daily News-Miner*, July 8 (p. 6), August 7 (p. 8), September 11, 1967, 6, and March 9, 1968, 2.

²⁹ *Fairbanks Daily News-Miner*, August 16, 1971, 6. In late June 1970 the Fairbanks newspaper reported that Don Young left Ft. Yukon with his barge for Old Crow. Mr. Young is Alaska’s Representative in Congress. *Fairbanks Daily News-Miner*, June 20, 1970, 10.

³⁰ Hugh C. Garner to Director, Bureau of Land Management, March 16, 1976.

Conclusions

In assessing the navigability of inland water bodies, the BLM relies upon federal administrative and case law and the advice of the Interior Department's Solicitor's Office. The classic definition of navigable waters is found in *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870). Pertinent DOI Office of the Solicitor's opinions include Associate Solicitor Hugh Garner's memo of March 16, 1976 ("Title to submerged lands for purposes of administering ANCSA") and Regional Solicitor John Allen's memo of February 25, 1980 ("Kandik, Nation Decision on Navigability"). The agency is also guided by the Submerged Lands Act of 1953 and the Alaska Submerged Lands Act of 1988.

After reviewing the State's application, the historic record pertaining to the Porcupine River, and the legal guidance on title navigability, we conclude that the Porcupine River was used for travel, trade, and commerce at the time of statehood. Title to lands underlying the river vested in the State of Alaska at the time of statehood. We also affirm BLM's past determinations that the Porcupine River is navigable. These determinations were issued in support of land conveyances under the Alaska Native Claims Settlement Act and the Native Allotment Act.

We recommend that the State's application for "interconnecting sloughs," including Rock Slough, Henderson Slough, Middle Channel, Joe Ward Slough, Sixmile Slough, Ninemile Slough, and Curtis Slough, not be explicitly approved. The location of the ordinary high water mark (the legal boundary) of navigable waters changes over time. If water from the navigable Porcupine River flows through the slough, then the slough is considered to be part of the river. Title to the lands underlying the sloughs passed to the State at the time of statehood. However, title to the river bed may be subsequently affected by changes resulting from erosion, accretion, or reliction. If, for example, the Porcupine River no longer flows through the slough as a result of erosion, accretion, or reliction, then the upland owner owns the land under the former slough. Unlike determinations of navigability, which are made as of the date of statehood (1959), determinations regarding the location of the ordinary high water mark (the legal boundary) of navigable waters are made in the present whenever the need arises.

Summary of Recommendations

1. The State of Alaska's application for the bed of the Porcupine River from its mouth at the Yukon River to the United States-Canada International Boundary should be approved. The Porcupine River was used for travel, trade, and commerce at the time of statehood. The lands underlying the river were not reserved at the time of statehood. Therefore, title to the lands underlying the navigable river vested in the State of Alaska when it became a State (1959).
2. The State of Alaska's application for the beds of interconnecting sloughs should not be approved. If water from the navigable Porcupine River flows through the slough, then the slough is considered to be an integral part of the river. The State would hold title to the lands underlying the slough. If the Porcupine River no longer flows through the slough as a result of erosion, accretion, or reliction, then the upland owners own the bed of the former slough.

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