United States Department of the Interior





AA-085087 (1864)

SEP 1 2004

Memorandum

To:

Chief, Branch of Lands and Realty (932)

From:

Navigable Waters Specialist & Michael Sour

Subject: Navigability of Klutina River and Klutina Lake in the Copper River Region

On July 18, 2003, the State filed an application for a recordable disclaimer of interest for the bed of the Lower Klutina River from its mouth at the Copper River to and including Klutina Lake. The State's application also included Upper Klutina River and "all interconnecting sloughs" from Klutina Lake upstream to the mouth of Stephens Creek in Section 31, T. 4 S., R. 4 W., Copper River Meridian (CRM). The Upper Klutina River, Klutina Lake, and Lower Klutina Rivera are shown on the State's maps entitled "Klutina River and Lake Recordable Disclaimer of Interest Application" (two maps) dated May 1, 2003. The maps were submitted with the State's application.¹

In support of its application, the State also submitted four Bureau of Land Management (BLM) memoranda dated November 5, 1979, August 15, 1980, January 19, 1983, and May 17, 1993, all containing statements to the effect that Lower Klutina River, Klutina Lake, and Upper Klutina River are navigable. The BLM issued these memoranda in support of land conveyances to Native corporations and the State of Alaska under the Alaska Native Claims Settlement Act (ANCSA) and the Alaska Statehood Act, respectively.

The purpose of this paper is to review the merits of the State's application. The paper considers: 1) whether any new information changes or modifies BLM's navigability findings; 2) whether any decision of the federal courts or Interior Board of Land Appeals changes or modifies BLM's navigability findings; and 3) whether the state's application for lands underlying the subject water bodies meets the regulatory requirements (43 CFR 1864).

Briefly stated, this paper affirms that Upper and Lower Klutina River and Klutina Lake are navigable. The United States no longer has any right, title, or interest in the lands underlying the

¹ Tom Irwin to Henri Bisson, BLM, July 18, 2003, file AA-085087 (1864), Alaska State Office, BLM records, Anchorage. Robert M. Loeffler, Director, Division of Mining, Land & Water, signed the letter.

Lower Klutina River, the riparian lands having been conveyed out of federal ownership.² However, navigability is still relevant for making determinations under the Equal Footing Doctrine. Finally, the application for "interconnecting sloughs" is ambiguous and imprecise. Without a land survey, it is impossible to identify the specific "interconnecting sloughs" included in the State's application.

Land Status

The United States holds title to most riparian lands of Klutina Lake and the lower reaches of Upper Klutina River (in T. 3 W., R. 4 W., CRM). Otherwise, the riparian lands have been conveyed out of federal ownership, primarily to the State of Alaska, Ahtna, Inc. (a Native corporation), and to various individuals. The federal lands are managed by the BLM.

Lower Klutina River, twenty-five miles long, flows through six townships. For the most part, riparian lands in these townships have been interim conveyed (IC Nos. 346 and 347) or patented (50-80-0108 and 50-80-0109) to Native corporations. The exceptions are located in the vicinity of the Richardson Highway crossing (near the river's mouth) and in the vicinity of the lake outlet. Near the Richardson Highway crossing (Section 13, T. 2 N., R. 1 W., CRM, and Section 18, T. 2 N., R 1 E., CRM), the State and private individuals hold title to riparian lands. Two Native allotments are located along the river just below the lake. The entire river, averaging more than three chains in width, is meandered and segregated from uplands on the federal survey plats.

Klutina Lake lies in four townships. In T. 1 S., R. 3 W, CRM (the northern end of the lake), the Native corporation holds title to approximately five miles of riparian land along the north bank of the lake. Several Native allotments are also located along the lake in this township, and one is located at the mouth of St. Anne Creek in Section 33, T. 1 S., R. 4 W., CRM. Otherwise, the riparian lands are currently under the BLM's jurisdiction. However, Ahtna, Inc., has selected these lands in T. 2 S., R. 3 W., CRM, under AA-8140-3 and in T. 3 S., 4 W., T. 2 S., R. 4 W., and T. 3 S., R. 4 W., CRM, under AA-8140-3 and AA-11126.

Upper Klutina River lies in two townships. In T. 3 S. 4 W., CRM, the river is selected by Ahtna, Inc., under AA-8140-3 and AA-11126. Upstream, in T. 4 W., R. 4 W., CRM, the land has been tentatively approved to the State under AA-6800.

BLM Navigability Determinations

The BLM first considered the navigability of Lower Klutina River and Klutina Lake while processing land selection applications under the Alaska Native Claims Settlement Act. Initially, the agency viewed the river as not navigable, citing the Klutina Lake Road along the river and the lack of information about use of the river for travel, trade, and commerce as reasons.³

² Section 901(b)(1) of the Alaska Submerged Lands Act of August 16, 1988 (Public Law 100-395).

³ Curtis V. McVee to Chief, Branch of L&M Operations, December 5, 1975, Horace D. Sanders to Files, April 5, 1976, and Stanley H. Bronczyk to Files, May 4, 1978, file AA-6658-EE, Part I, Alaska Native Claims Settlement Act files (2651), BLM records, hereafter ANCSA files. However, see Sue A. Wolf to Raymond D. Craig, Copper

However, in 1979 it concluded that the river and lake were navigable because "there is evidence of historic use of the Klutina for travel and commerce." The agency was referring to the Valdez Gold Rush of 1898 when possibly hundreds of stampeders boated down the Klutina Rivers and Lake to Copper Center. The river and lake were excluded from Interim Conveyance Nos. 346 and 347 to Kluti-Kaah Corporation and Ahtna, Inc., respectively. (The village corporation subsequently merged into Ahtna, Inc., the regional corporation.)

In 1983 the BLM also concluded that the Upper Klutina River was navigable upstream from Klutina Lake to the south boundary of NW¼ of Section 31, in T. 4 S., R. 4 W., CRM, or where Stephens Creek empties into the river. Largely based upon evidence of gold rush stampeders in 1898 boating down the river, the 1983 determination was incorporated in a BLM decision to tentatively approve the conveyance of lands in T. 4 S., R. 4 W., CRM, to the State, and it was not appealed. In 1993 the agency affirmed the determination for the downstream reach of the river in T 3 S., R. 4 W., CRM. This determination has not yet been incorporated in a decision to convey lands in the township.⁵

Other Federal Navigability Determinations

Neither the U.S. Army Corps of Engineers nor the U.S. Coast Guard currently identify the Klutina River or Klutina Lake as navigable. On its current website and in a document dated January 1993, the Corps of Engineers does not list the river as navigable. However, in a 1987 document entitled "Administrative Determinations on Navigability," the Corps listed the river as "navigable to mile 41.8 (Grumman)," that is, from the Copper River to the head of Klutina Lake. The document has the word "old" handwritten on it, suggesting that this was a proposed and not an official determination. In September 1973, when it considered the navigability of rivers and streams on the Trans-Alaska Pipeline route, the Corps reportedly held that the river was navigable up to Klutina Lake.⁶

The word "Grumman" in the Corps' 1987 document refers to the Grumman Ecosystems Corporation. In 1974 and 1975 the corporation, under contract to the U.S. Army Corps of Engineers, Alaska District, investigated current use of rivers, streams, and creeks on the Trans-Alaska Pipeline route for travel, trade, and commerce. The contractor reported that sportsmen

Center, January 28, 1975, file AA-6658 A/1, ANCSA files, where it is stated that BLM considers the river to be navigable.

⁴ Curtis V. McVee to Chief, Division of ANCSA Operations, November 5, 1979, file AA-6658-A and file AA-6658-EE, ANCSA files; and Ricky M. Elliott, Decision, April 15, 1980, file AA-6658-A/2, ANCSA files, BLM records.
⁵ Louis H. Carufel, "Navigability Report: Valdez-SS-FY'83-#1, January 7, 1983; and Robert D. Arnold to Chief, Division of ANCSA and State Conveyances, January 19, 1983, file AA-006800, State selection files, BLM records. The BLM gave tentative approval on August 5, 1983. See also Louis Doores, Jr., to Chief, Branch of Survey Preparation and Contracts, May 17, 1993, file AA-8104-EE, ANCSA files.

⁶ U.S., Army Corps of Engineers, "Administrative Determinations on Navigability," n.d. (1987); U.S., Corps of Engineers, Alaska District, "Navigability Determinations," January 1993, in writer's files. The river is also not listed as navigable on its October 19, 1995 list posted on the Corps' website (www.poa.usace.army.mil/reg). For the Corps' 1973 determination, see Grumman Ecosystems Corporation, Report on Navigability of Streams Tributary to the Copper River and Prince William Sound (Prepared for U.S. Army Engineer District, Alaska, February 1975), vol. 2, p. 4-150. See also U.S. Coast Guard, "Navigable Waters of the U.S. Within the Seventeenth Coast Guard District (State of Alaska)," revision date of August 13, 1998, in writer's files.

and recreationists utilized boats on the Copper River and its major tributaries, namely the Chitina, Klutina, Gulkana, and Tazlina Rivers. There was evidence of commercial boat traffic on the Copper River, and possible evidence of such traffic on the Klutina River. Given the road network and reliance upon airplanes for travel, the contractor doubted that waterborne commerce, other than that associated with recreation, would develop in the area. As the contractor put it: "The only boating of commercial significance is for recreational purposes where guides either take sportsmen down a 'wild' river or on a fishing trip. This may constitute interstate commerce if the sportsmen are from outside the state. There is potential for waterborne commerce of this nature in the future, especially when pipeline construction commences and this area becomes even more accessible."

In its report to the Corps of Engineers, the Grumman Ecosystems Corporation concluded that Klutina River to and including Klutina Lake was navigable. This was based upon reports that gold rush stampeders in 1898 used the river as a route of travel and that guides and recreationists boat the river in more recent times. The contractor cited the following factors in reaching this decision: "historical commercial river usage for shipment of freight"; "apparent boatability to mile 41.8, upper end of Klutina Lake"; "present use of river for fishing and boating"; "potential exists for increased recreation in form of fishing and boating"; and "potential for commercial transport of commodities, other than people, not probable." After conducting fieldwork in the area, corporation employees cautioned that the river was not easy to navigate. During a July 1974 helicopter trip over the entire Lower Klutina River, one employee made a "subjective evaluation that this reach of the Klutina River is boatable, but with extreme caution." The helicopter landed him at a spot along the river approximately five miles above the Richardson Highway bridge crossing. Here the employee recorded that the river was 400 feet wide and the banks 10 feet high. As to the river's navigability, he wrote, "turbulent, rocky, forget it." 10

The Grumman Ecosystems Corporation also considered the navigability of the Upper Klutina River. It concluded that the river was not navigable "because of an excessive stream gradient and inadequate depth for boating." The seventeen-mile-long river falls at an average rate of 45.9 feet per mile. "The river is characterized by a swift flowing, steep gradient, sediment-choked, shallow and narrow channeled mountain glacier stream."

Like the Corps of Engineers, the U.S. Coast Guard has also considered the navigability of the Klutina River at the Trans-Alaska Pipeline crossing at mile 1.3. In 1970 it determined that the river is navigable at this point.¹² The river is not listed on Coast Guard's 1998 inventory of navigable waters in Alaska.

⁷ Grumman, vol. 1, pp. 3-78 and 3-79.

⁸ Grumman, vol. 2, p. 4-150. This source makes reference to a "shipment of freight during early '30's from Klutina Lake downstream," but it provides no further details and the event is not discussed elsewhere in the publication. The writer did not find evidence of the event in the local newspapers. Grumman, vol. 2, p. 8-10.

⁹ Grumman, vol. 2, p. 4-155.

¹⁰ Grumman, vol. 2, following p. 4-164.

¹¹ Grumman, vol. 2, p. 4-151.

¹² Grumman, vol. 2, p. 4-150. The writer did not obtain a copy of the Coast Guard's 1970 document cited by Grumman. See also U.S. Coast Guard, "Navigable Waters of the U.S. Within the Seventeenth Coast Guard District (State of Alaska)," revision date of August 13, 1998;

Klutina River System—Physical Characteristics

Upper Klutina River

The Upper Klutina River heads in Klutina Glacier and flows northerly in a wide valley to empty into the southern end of Klutina Lake. From Stephens Creek, the river flows a little more than ten miles to the lake, falling about eighty feet in this distance. The stream gradient for this reach is approximately 7.6 feet per mile. The farther upstream one proceeds, the steeper the gradient. From the 2,400-foot elevation line crossing, the river flows approximately seventeen miles to the lake. The gradient is about forty feet per mile. ¹³

Approximately six miles from the lake, the river divides into two main channels which empty into the lake about a mile apart. On the U.S. Geological Survey maps (Valdez C-6, 1950, minor revisions 1965) the eastern branch, approximately seven miles long, is the larger of the two and bears the name Klutina River. Historically, this branch was considered to be the main stem of the Upper Klutina River. The western branch, also about seven miles long but unnamed, is smaller and mostly confined in one channel, which in its upper reaches intersects a number of small lakes. In 1919 a Bureau of Fisheries consultant reported that the western branch probably used to carry more water than when he saw it. At that time, it followed a torturous course through a thickly forested area and was filled with beaver dams. In addition, the water was clear, only a small amount of glacial water entering at its head. By 1950, however, the situation was entirely different. Aerial photos taken in 1950 and 1954, as well as the U.S. Geological Survey map cited above, clearly show the glacial waters of the Upper Klutina flowing through the western branch. Glacial water still flowed in the eastern branch as well. By 1978, the western branch was carrying much of the flow of the Upper Klutina River. In an aerial photo taken in August of that year, the eastern branch carries far less water than the western branch. The eastern branch consists of a thin ribbon of water, clear in the upper reaches and glacial in the lower reaches, flowing through a broad area of gravel bars. In contrast, the western branch is filled entirely with glacial water. Otherwise, the configuration of the branch appears unchanged from that shown on the maps except where it leaves the main stem. In the photo, the western channel leaves the main stem in Section 9, T. 4 S., R. 4 W., CRM. This is approximately a mile and a half downstream of the connection (Sec. 17) shown on the map. 14

Frederick C. Schrader of the U.S. Geological Survey, who crossed Valdez Glacier to the Upper Klutina in 1898, described the river as flowing through a narrow canyon-like valley, with steep, rocky mountain slopes on either side of the river rising to a height of 5,000 feet. Schrader clearly regarded the eastern branch as the main river and referred to "one or more sloughs" meandering

¹³ Grumman calculated that the river falls from elevation 2400 feet to 1719 feet in 17.2 miles. This equals 39.6 feet per mile—not 45.9 feet per mile. Grumman, vol. 2, p. 4-151.

¹⁴ See aerial photograph CIR 60 roll 2670, frame 7933, August 1978, Division of Cadastral Survey, Alaska State Office, BLM; USGS black-and-white aerial photographs dated July 3, 1954, in writer's files; and Louis Doores to Chief, Branch of Survey Preparation and Contracts, May 17, 1993 (pp. 19-20), file AA-6704-EE, ANCSA files, BLM records.

along the opposite side of the valley.¹⁵ As is typical with glacier-fed streams, water levels increase steadily as temperatures and the rate of glacier melt rise. "During normal stages," Schrader observed," the river, which may not exceed 100 yards in width and 3 or 4 feet in depth, oscillates from side to side of the valley, as the accumulation of morainal debris and gravel may lead to a shifting of the channel. Only during the higher stages of the river, at times of maximum thaw and rain, does it extend as a continuous sheet entirely across the valley."¹⁶ With cooler temperatures in the fall, there is less glacial melt and, as a result, water levels decline.

Stephens Creek, located at approximately river mile 10, is the Upper Klutina River's principal tributary. The creek is about ten miles in length. Schrader described it as being as large and swift as the main branch of Upper Klutina and requiring careful crossings.¹⁷

There is general agreement among observers that the main Upper Klutina is swift and shallow. After an overflight of the river in 1974, employees of the Grumman Ecosystems Corporation wrote that the river is "a swift flowing, steep gradient, sediment-choked, shallow, and narrow channeled mountain glacier stream." During the Valdez Gold Rush of 1898, various stampeders and government explorers made similar remarks. Benedict noted that in early May that the first four miles was "a mere thread of a stream." By late July and early August, however, the drainage from Klutina Glacier was "gathered at Twelve-Mile Camp into a single stream, of an ice-like coldness and arrow-like swiftness, which, early in August when at its full, is nearly one hundred feet wide and between two and three feet deep." While at Twelvemile Camp Schrader watched two pack animals swept downstream while attempting to cross the river. In early August 1898, Koehler recalled: "At this season of the year the river was big enough to carry any kind of boat. In the latter part of May this same stream, when visited, was insignificant in size. By partly swimming and partly wading, the opposite side of the river was safely reached." "

Klutina Lake

Located in the Chugach Mountains approximately forty miles north of old Valdez and less than twenty miles west of the Richardson Highway, Klutina Lake at twenty-two square miles in area is one of the largest lakes in the Upper Copper River region. "Klutina" is an Indian word meaning "long way to head lake." The lake and its outlet, Klutina River, are one of the major western tributaries of the Copper River. Like Tazlina Lake, situated less than fifteen miles to the west, Klutina Lake (elevation 1,719 feet) is a crescent-shaped body, flowing north between high

¹⁵ Frederick C. Schrader, "A Reconnaissance of a Part of Prince William Sound and the Copper River District, Alaska, in 1898," in U.S. Geological Survey, Twentieth Annual Report . . . 1898. Part VII-Exploration in Alaska in 1898 (Washington: GPO, 1900), 357.

¹⁶ Schrader, 388.

¹⁷ Schrader, 357, 388-89.

¹⁸ Grumman, vol. 2, p. 4-151; Neal D. Benedict, "The Valdes and Copper River Trail, Alaska, With 158 Photographic Views" (unpublished manuscript, Anchorage Historical and Fine Arts Museum, 1899), 43; Schrader, 357; Robert Koehler, "A Trip to Copper River," in U. S. Senate, Compilation of Narratives of Explorations in Alaska (56th Congress, 1st session, Rept. No. 1023) (Washington: GPO, 1900), 608.

¹⁹ Shirley A. Baker, "Chronological Report Covering Investigations on the Copper River, Oct. 1 to Oct. 18, incl., 1921," Copper River, 1921, Reports of Bureau of Fisheries Agents, 1917-29, Central Classified Files, Records of the U.S. Fish and Wildlife Service, Record Group (RG) 22, National Archives, Washington, D.C. Microfiche at Alaska Resources Library, Anchorage.

mountains and then swinging east to empty into the Klutina River. It is approximately sixteen miles long and three miles wide. ²⁰

The lake's depth is not known. One geologist at the turn of the century estimated its maximum depth at not more than two hundred feet. The lake's beaches of fine gravel "slope gently" into the lake. The lake reportedly rises four or five feet during the summer months as a result of glacier melt, snowmelt, and rainfall. This leaves little or no part of the beach exposed. The lake water is milky from glacial silt.²¹

The principal tributaries of Klutina Lake include the Upper Klutina River, Hallet River, Mahlo River, and St. Anne Creek. The Upper Klutina and Hallet Rivers empty into the lake on its southern end. Both rivers head in glaciers. According to U.S. Bureau of Fisheries investigators, Hallet River is "very shallow" and subject to "frequent shifting." Mahlo River (formerly called Salmon Creek) is a clearwater stream approximately forty feet wide and eighteen inches deep. St. Anne Creek, which heads in a narrow, elongated lake called St. Anne Lake, is also a clearwater stream; it is forty feet wide and two feet deep at its mouth. Both Mahlo River and St. Anne Creek are historically important as salmon-spawning streams. 22

Lower Klutina River²³

The Lower Klutina River flows twenty-five miles from the northern end of Klutina Lake to the Copper River. Throughout its length, the river flows through a country of rolling hills in the east and "relatively flat, but gently sloping land" to the west.

In a report on investigations of salmon-spawning grounds in the Klutina River system, the U.S. Bureau of Fisheries provided a good description of the river:

The Klutina River is a swift stream showing a succession of rapids for some distance above its junction with Copper River at Copper Center. At the mouth, it is probably 100 yards in width, and during the summer months between 7 and 10 feet in depth. The stream bed is of glacial gravel in which are embedded many large boulders. At times of extremely high water Klutina River overflows the low banks at its mouth, but at a short distance above the Copper it is confined to its course by steep clay banks. The general direction of the flow is southeast.

Approximately 25 miles from the mouth of the Klutina River the largest rapids in that stream are encountered. Just upstream from the rapids is the 'big eddy' which is an expansion of the river with a

²⁰ Stan Carrick, "Copper River Region Hydrologic Data" (Navigability Project, Water Resources Section, Alaska Division of Geological & Geophysical Surveys, June 1987), 241.

Schrader, 389-90; Manuscript Regarding Copper River and Its Tributaries, "Copper River Original Copy," c. 1935, SSR49, Bureau of Fisheries, Alaska Division, Entry 167, RG 22, NA (microfiche at Alaska Resources Library). Hereafter cited as "Copper River Original Copy," c. 1935.
 Ibid.

²³ Grumman, vol. 2, p. 4-156 ff., contains numerous photographs, mostly aerial views dated July 1974, of the Klutina River. Subject matter includes: boating activity near Klutina Lake, mile 24; gravel shoaling in meanders, mile 22; constricted flow with light rapids, mile 21; gravel shoals near mile 20, trail in background; entering gorge near mile 16; turbulent flow with large boulders, mile 15; gravel shoals near mile 14; turbulent flow with large boulders, mile 12; well-defined channel with large boulders near mile 9; 10 foot banks at mile 5.8; turbulent flow (10 fps) at mile 5.8; aerial view of landing site, mile 5.8; Richardson Highway Bridge at Mile .7; and mouth of Klutina River. Almost all of these are helicopter aerial shots, taken July 1974.

number of islands and several channels. There appears to be very little current in the eddy, and here is provided the only resting place of significant size for fish in the entire course of the river.

The eddy is located 5 miles from the outlet of the lake; between it and the lake the stream flows more gently and with unbroken water of considerable depth. The river banks here are low and densely forested with spruce. An easily distinguished trail made during the early gold rush days and kept open by trappers, prospectors, and wild animals follows the north bank to the lake.

In the late 1970s, the Grumman Ecosystems Corporation described the flow as laminar for five miles below the lake. The river is about 200 feet wide in this reach. In the first eight miles below the lake, the river falls about fifteen feet per mile. Once past this reach, however, the river gradually narrows as it flows through a gorge, the walls of which are 500 feet high in some places. The gradient increases to thirty-six feet per mile in this seventeen-mile-long reach.²⁵

By all accounts, the river is fast and rocky. Geologist Schrader wrote: "The roughest and most rapid portion of the current seems to lie between Amy's Landing, about 6 miles below the foot of the lake, and Copper Center, throughout which distance, for about 20 miles, the river is a continuous line of whitecaps rushing at the bottom of its narrow bluff-bordered canyon. The roughness is largely due to huge boulders lying in various attitudes and places in the bed of the stream." Abercrombie described the river leaving Klutina Lake "with a gentle, smoothly-flowing current, which prevails for some 3 miles. Then the gradient increases to such an extent that from Amy's Landing to Copper Center, 21 miles, where the Klutena debouches into the Copper River, is one succession of rapids." 26

Reports of velocity and depth measurements are rare. Schrader estimated the current at about fourteen miles per hour. In July 1976 Grumman Ecosystems Corporation employees obtained a figure of ten feet per second at mile 6 at a time when the river was at a moderately high stage. They decided not to take depth measurements because the current was too strong and dangerous for wading. A BLM employee rafting down the river, however, estimated that river depths ranged from two to ten feet.²⁷

The Lower Klutina River is a typical lake-fed glacial river. Flows increase quickly after the spring breakup, reaching a maximum in July as a result of snowmelt, glacial melt, and rainfall. Flow variability is moderated somewhat by the lake. In July streamflows may be two to four times the annual average. In late summer and early autumn, flows may approximate the average. Low flows occur before the freeze-up. During the winter the river may freeze to the bed,

²⁴ "Copper River Original Copy," c. 1935.

²⁵ Grumman, vol. 2, 4-154. For a river profile, see plate 8, Grumman, 6-11.

²⁶ Schrader, 392; W. R. Abercrombie, "A Military Reconnaissance of the Copper River Valley," in U.S., Senate, Compilation of Narratives of Explorations in Alaska, 587. A BLM outdoor recreation specialist made a similar statement about the Klutina: "Rocky rapids most of the length of the river." L.J. Kajdan, Navigability Field Report (form), November 7, 1975, file AA-6658-EE, Part I, ANCSA files. Gold rush stampeders named two particularly treacherous sets of rapids as "Devil's Elbow" and "Hell Gate." According to Benedict, Hell Gate was so named "both because of its own merit and because of its resemblance to the famous Hell-Gate in the East River near New York City." The series of rapids located below "Hell Gate" were sometimes referred to as the "Bull Rapids." See Benedict, 88; and George C. Hazelet, "Diary, February 17, 1898-April 30, 1899" (unpublished manuscript, Alaska Resources Library), 69.

²⁷ Grumman, vol. 2, 4-154; L.J. Kajdan to Files, c. 1975, file AA-6658-EE, Part I, ANCSA files

resulting in overflows and flooding. The records show that Copper Center near the river's mouth has been flooded at least twice—in December 1935 and again in December 1964.²⁸

Manker Creek is the principal tributary of the Lower Klutina River. A right-bank tributary about three miles below the lake, the clear water creek is narrow and shallow. It is slow-moving, fifteen to twenty feet wide, and eight to twelve inches deep. It is not known to be an important red salmon-spawning stream.²⁹

History of Use

Copper River Indians

Little is known about the prehistory of the Klutina River system. There are no published archaeological reports about the area, perhaps an indication that archaeologists have not yet surveyed the rivers and lake. What is known comes primarily from accounts of various explorations conducted by the Russians and Americans during the eighteenth and nineteenth centuries. Modern anthropologists have also made efforts to record the oral history of the Ahtna Indians.

Anthropologists have identified at least nine cultural sites in the Klutina River drainage area. Two are located along the Lower Klutina River. Near Cooks Bend of the Klutina River, at mile 18 of the Klutina Lake road, Jim McKinley of Copper Center stated that "a red painted design" was located on a "sheer rock cliff" above the river. According to oral tradition, this was made by the sole survivor of an Eskimo raiding party that had perished in an attempt to descend the river in a skin boat. Other evidence of Native use included an ancient moose fence which gold rush stampeders found along the east bank of Manker Creek (formerly called Grayling Creek). During the 1890s, Chief Stickwan, who lived at Wood Camp along the Copper River, may have maintained the fence. 30

Several sites are also located along Klutina Lake. As in historic times, protohistoric man also fished at the outlet of Klutina Lake. Jim McKinley described Indians building a fish trap and a fence in a backwater part of the lake and then wading into the water and spearing salmon. In 1898 J. J. Rafferty, a guide, stated that this place was a favorite camping ground of the Indians and may have been the former campsite of some unknown white trapper. As Rafferty described the scene:

The U.S. Geological Survey operated a stream gage station on the Klutina River from 1949 to 1967. Grumman, vol. 1, 2-180, 187, and vol. 2, 4-147 and 4-148. For the 1935 flood, see *Valdez Miner*, December 20, 1935, 1, and subsequent issues. For the 1964 flood, see *Fairbanks Daily News-Miner*, December 16, 1964, 1, 9, and subsequent issues. The Army Corps of Engineers explains the winter floods as follows: "Copper Center is subjected to winter flooding as a result of ice formation on the Klutina and Copper Rivers. Super cooling of the surface water in contact with sub-zero air occurs during the early winter season inducing the formation of bottom ice. Eventually this build-up of ice (glaciation) causes the river to rise above its banks, subjecting the community to flooding. Thus, the flooding problem is associated solely with glaciation, and not with high discharge." U.S., Corps of Engineers, Alaska District, "Environmental Impact Statement-Klutina River Flood Control, Copper Center, Alaska—Preliminary Draft" (Anchorage, March 1971), 2-3.

29 "Copper River Original Copy," c. 1935.

³⁰ Holly Reckord, Where Raven Stood: Cultural Resources of the Ahtna Region. Occasional Paper No. 35 (Fairbanks: Cooperative Parks Studies Unit, University of Alaska, 1983), 141, 143.

Several summer shelters of spruce bows and poles had been built so long ago so as to have fallen into decay. Two caches built of 6-inch poles were also discovered. One contained a lot of furs and a gun. The other cache was empty and showed better workmanship. It is possible that this cache may have been built by a white man, who perhaps spent some time here years ago. A clinker-built bateau was also found tied to the trees with willow withes. The boards were ¾-inch square, the ribs 2 inches square. The length of the boat was 20 feet, and it carried a 30-inch beam. The depth of the boat was 2 feet. She had evidently been built many years previous and was badly sprung and weather-beaten. The nails were square cut and of steel. 31

Rafferty also located a cache of clothing which was wrapped in a black slicker coat and shoved up in the overhanging branches of a spruce tree. The coat had rotted away, and the contents "parted at the touch of the hand." ³² Graves are reported at the lake's outlet, on its south side. ³³ In 1898 a group of prospectors found and photographed skeletons of an "Indian wigwam" and "sweat tent" at the head of the lake. ³⁴

Indian habitations were also reported along St. Anne Creek, an important red salmon-spawning stream. In 1898 gold rush stampeders found old winter "habitations" along St. Anne Creek from its mouth to St. Anne Lake. Local residents' oral tradition includes an account of a battle here between the Indians and Chugach Eskimos. They also claim that in the winter of 1898 stampeders burned an Indian house near the creek, probably within a mile of its mouth. 35

Russian and American Exploring Expeditions

The Russians maintained a trading post at Nuchek on Hinchinbrook Island in Prince William Sound from the late eighteenth century until the 1860s, but little is known about their activities in region, much less in the Klutina River drainage area. They were almost certainly aware of the Klutina Lake-Valdez Glacier trade route, because they passed the information to the Americans after the Purchase. In 1884, when Lieutenant W. R. Abercrombie made his first attempt to explore the Copper River, he learned of the Valdez Glacier route to Klutina Lake first from some Upper Copper River Indians and then from an "old Russian" in Prince William Sound. He was later taken to see an old village site near Port Fidalgo which had once played an important role in the history of this trade route. As Abercrombie recorded the story: "Some years ago, probably twenty or thirty, the portage was used entirely by the Upper River Indians, who came down Copper River to the stream heading in the lake, which not being previously named or visited by white men, is designated as Lake Margaret [Klutina Lake]. Up this they traveled to the lake, hence to the foot of the passage. Here they left their bidarra³⁶ and packed their furs over to salt water, where bidarras were furnished by the Chigachimutes for the voyage to Port Etches. For

³¹ J. J. Rafferty, "From Port Valdez to Copper River, Down That River, Thence to Prince William Sound," in U.S. Senate, *Compilation of Narratives of Explorations in Alaska*, 615-16.

³² Rafferty, 616.

³³ Reckord, 143-144.

³⁴ Benedict, 75.

³⁵ Reckord, 145.

³⁶ In 1885 Lt. Allen described a bidarra or baidarra, which he used on the upper Copper River and several of its tributaries, as a moose-skin boat 27 feet long, 22 inches deep, with a 5-foot beam. Lieutenant Henry T. Allen, "Report of a Military Reconnaissance in Alaska, Made in 1885," in U.S., Senate, Compilation of Narratives of Explorations in Alaska, 432.

this service the Upper River Indians paid a tribute in fur, not only for the bidarra, but also for the privilege of passing through the country." Abercrombie was told that the Upper Copper Indians abandoned the route after some sort of a conflict, presumably with the Eskimos. Afterwards, they descended the Copper River in the annual trade journeys to Nuchek. ³⁷

When in 1885 Lieutenant Henry T. Allen ascended the Copper River, he learned from the Indians that Klutina River was "the largest tributary of the Copper save the Chittyna [Chitina]" and that it headed in a large lake "where fish are abundant." One Indian named Nicolai claimed to have traveled to its source when he was a boy. As if to confirm Abercrombie's information, the Indians also told Allen that it was necessary to cross large glaciers at the head of the lake to reach tidewater and Nuchek. Allen would not attempt to explore the route, but continued on up the Copper River. He would have been shocked to know that in little more than a decade thousands of people would take the Valdez Glacier route to gain access to Interior Alaska.

Valdez Gold Rush of 1898³⁹

For a decade or more before 1897, prospectors, miners, adventurers, and the like had been streaming northward to the Yukon River country. When in 1897 steamers *Excelsior* and *Portland* arrived in San Francisco and Seattle, respectively, with a "ton of gold" from the Klondike River in Canada, the dam broke, and the stream became a raging torrent. Thousands of people, their imaginations inflamed by reports of riches in the North, crowded into the offices of steamship companies in Seattle, Vancouver, and San Francisco for passage to the new Eldorado. People chartered or purchased boats of every size and shape to reach Alaska. Those who managed to escape the turbulent waters and uncharted rocks of Southeast Alaska finally arrived at the ancient Indian trails which led to Interior Alaska.

Both the Alaska Commercial Company and the Pacific Steam Whaling Company embarked on a vigorous campaign to advertise the merits of Valdez Bay trails to Interior Alaska. The campaign was successful. In early November 1897 about twenty people from San Francisco landed at Valdez Bay. In December, steamer *Bering Sea* arrived with a large number of passengers. Two months later, vessels of every size began to enter the bay. In April, 1898, the Pacific Steam Whaling Company's passenger steamer *Valencia* arrived with some six hundred people, in addition to horses, mules, burros, and dogs.

By early summer, some 3,000 to 4,000 people had landed at Valdez. According to one estimate, about 2,000 people had already reached the summit of Valdez Glacier and were well on their way to the new camp of Copper Center. Another 1,500 people were scattered along the trail to the summit of Valdez Glacier. A number of people were gathered in shacks, tents, and cabins,

³⁷ Needless to say, Abercrombie's naming of Klutina Lake as "Lake Margaret" did not stand the test of time. Lieutenant W. R. Abercrombie, "Supplementary Expedition into the Copper River Valley, Alaska," in U.S., Senate, *Compilation of Narratives of Explorations in Alaska*, 389, 391.

³⁸ Allen, 437.

³⁹ See Jim and Nancy Lethcoe, *Valdez Gold Rush Trails of 1898-99* (Valdez: Prince William Sound Books, 1996) for a thorough account of the stampede to Valdez and the crossing of Valdez Glacier.

⁴⁰ "Early Settlement of Valdez," *Pathfinder of Alaska*, I (February 1920): 24.

intending to prospect the coast or search for an easier route to Interior Alaska. Less than ninety people planned to remain at the new town of Valdez.⁴¹

The Valdez Glacier Trail was perhaps one of the most arduous and dangerous routes traveled by the gold rush stampeders of 1898. It took days of back-breaking work to reach the summit of the glacier, days without wood for fires, pulling heavily-laden sleds with dogs, horses, rope and tackle, searching for the trail constantly disappearing in snowdrifts, digging and pulling provisions and equipment out of snowslides and crevasses. Those with enough food and ambition then descended Klutina Glacier to the Upper Klutina River.

Gold Rush Trails in the Klutina River System

Upon reaching the foot of Klutina Glacier, stampeders utilized various modes of travel and transportation in order to reach Copper Center. During the winter months, most sledded their supplies and equipment to Copper Center, either following a trail along the westerly side of the lake and rivers or, when ice conditions permitted, descending the frozen lake and rivers. During the open season, many prospectors, especially those with pack animals and large amounts of freight, took the Klutina Lake trail, which followed along the westerly bank of the lake and continued down the Lower Klutina on the bluffs overlooking the river. 42 (The former trail along the lake and Klutina River is shown on U.S. Geological Survey maps; reportedly, evidence of the trail can still be seen on the ground to this day.) A prospector with an outfit of five hundred pounds could cover a mile a day on the trail. 43 Finally, many stampeders built boats and descended the river and lake to its outlet. There they had the choice of boating down the Klutina River to Copper Center, following the trail to Copper Center, or sledding down the river after the the river froze. One observer was probably correct in his claim that most stampeders preferred to wait until winter. "The great majority of prospectors preferred to camp above the rapids and go down the river on sleds after winter had silenced the boisterous stream and covered it with a sheet of strong ice," he wrote. 44 Yet, there is no question that many chose to descend the river in their small boats.

Of course, not all stampeders followed the Klutina River route to Copper Center. Some decided to prospect the surrounding country, and some headed north overland in search of an alternative route to the Interior. During the winter months, some followed a trail along St. Anne Creek from Klutina Lake to St. Anne Lake and thence northward to an old Indian trail following the Tazlina River to the Copper River. According to Schrader, this trail was suitable only for winter travel because it was too difficult to traverse the "marshy country" during the summer. Another prospectors' trail extended from the Lower Klutina up the valley of Manker Creek to the headwaters of Tonsina River. ⁴⁵

Boating Upper Klutina River in 1898

⁴¹ Schrader, 349, 352; Hazelet, 28, 38.

⁴² Schrader, 367. In 1996 the Alaska Outdoors Council filed an application with the BLM for the "Valdez-Copper Center Trail" (RST633) under R.S. 2477. See file AA-078662 (2822.01), BLM records.

⁴³ Rafferty, 616.

⁴⁴ Benedict, "The Valdes and Copper River Trail, Alaska," 80.

⁴⁵ Schrader, 342, 366-67; Oscar Rohn, "Trails and Routes," in U.S. Senate, *Compilations of Narratives of Explorations in Alaska*, 780-81.

In the spring and summer of 1898, boating down the Upper Klutina was a popular method of reaching Klutina Lake. From Klutina Glacier, the stampeders either sledded or packed their supplies and equipment to the head of Klutina Lake or stopped at Twelvemile Camp, located on the left bank of the river about three miles upstream of Stephens Creek or where spruce trees make their first appearance on the trail. According to Abercrombie, the camp was about twelve miles from the summit of Valdez Glacier on a "grassy meadow behind a big, rocky bluff." During the spring breakup, when snow conditions made it virtually impossible to use sleds any longer, stampeders congregated at the camp, began whipsawing boats, and awaited the breakup of the river. The camp's existence was relatively brief. In May Benedict observed "something like a hundred tents" at the camp. At about the same time, a guide named Gumaer counted about 125 tents in good timber on both sides of the stream. In July Lieutenant Lowe estimated about 300 people in the camp, many of them waiting for water levels to decline so that it was safe to boat. By September 1, only about thirty tents remained at the camp.

Most stampeders built their boats of local timber near the river or lake, mainly at Twelvemile Camp but also at Sawmill Camp, about three miles down the trail. Visiting Twelvemile Camp in the spring, Benedict discovered "that boat-building was in full blast... and that every day men were engaged getting out timber for the purpose with whipsaws in the forest of spruce just west of the camp; and almost every day some new boat was launched and held in waiting for the moment when the water in the river should be deep enough to allow it to start down stream with its cargo." Later, a few enterprising men established a small sawmill at Sawmill Camp, the owners cutting timber for boat construction for a fee. It became "the great boatbuilding center of this region." Like Twelvemile Camp, this camp's existence was also brief. In the summer of 1898 about a hundred tents marked the location of the camp; by the fall, only a few tents remained.⁴⁷

The stampeders' boats came in many different sizes and shapes. Most boats ranged in length from twenty to thirty feet. C. H. and Grant Remington built a skiff, the "Punky Bo," about one mile below Twelve mile Camp. It was sixteen feet long with a beam of four feet and about eighteen inches deep. Studying the historical record, the Lethcoes found that the quality of construction ranged as widely as the builders' skill levels. "Some were long, graceful bateaux while others were stubby, flat bottomed scows varying in length from twelve to thirty-six feet." In addition, some stampeders brought canvas boats or "knockdowns" with them. When disassembled, canvas boats weighed about ninety pounds, and made a bundle of about five feet in length and one foot in diameter. The boats were furnished with false bottoms of light boards, which were placed on the real bottom of the boat to protect the canvas from stones and sandbars. Benedict recalled that one prospecting party hauled a fine "knockdown" yawl over the glacier and assembled it at Twelvemile Camp. 48

⁴⁶ Abercrombie, 569; Schrader, 357; Koehler, 608; Benedict, 10, 178; Guy H. Preston, "Across Valdez Glacier with Sleds Drawn by Hand," 601, and P. G. Lowe, "From Valdez Inlet to Belle Isle, on the Yukon," 591, in U.S. Senate, Compilitation of Narratives of Exploration in Alaska.

⁴⁷ Benedict, 45, 49, 178.

⁴⁸ Benedict 1899:46-48; Copper River Joe, 18; and Lethcoe and Lethcoe, 70. Benedict's photographs of boats at Sawmill Camp appear in Carolyn Jean Holeski and Marlene Conger Holeski, *In Search of Gold: The Alaska Journals of Horace S. Conger*, 1898-1899 (Anchorage: The Alaska Geographic Society, 1983), 82 and 83.

The Upper Klutina was not an easy river to navigate. The river is fast and shallow, rarely more than three feet deep. 49 In 1898 Benedict recorded that stampeders began launching their boats not long after the spring breakup. By the first of June the river at Twelvemile Camp was deep enough for boats, "and many boats were to be seen passing down the river every day." It was not clear sailing to Klutina Lake, however. Shallow and fast water, tree stumps, and deadfalls were all hazards to navigation. Men pushed and pulled their heavily laden boats through a shallow place just below the camp. Not far below this place, the river was four or five feet deep, but it twisted and turned so sharply and with such force that prospectors were unable to keep their boats in the channel. Many boats were wrecked in this section, Benedict claimed. Yet, many other boats, including Benedict's, succeeded in passing through this section safely. More often than not, boats were lined down the fast river. As Benedict described this method: "it became the practice to keep them (boats or rafts) somewhat under control from the shore by means of a long line attached to the stern. . . . Six men were necessary upon the rope to guide properly in this manner a boat laden with 3000 pounds, in a current running from eight to ten miles an hour. Upon the Lower Klutena, where the fall of the river was greater, even this resort was not always successful in averting trouble; but on the slower going Upper Klutena it was always a perfect safeguard, although it was actually more wearing on the crew than letting the boat run free. . . . " Oftentimes, men were forced to tow the boat up the river in order to transport all their goods to the lake. This task usually required one to twelve men pulling the boat with a line and one man in the boat with a pole keeping the boat off the river banks.⁵⁰

In his diary for the period May 14 to June 5, 1898, Horace S. Conger of Minnesota recorded his party's efforts to build boats on the Upper Klutina. He suggested that the river was boatable as early as mid May. By May 14, some boats had already been launched at Twelvemile Camp. Five days later Conger noted that the river at his location was approximately fifty feet wide, three feet deep, and swift. Between May 20 and June 4, Conger and party built three "bateaux," one skiff, and one scow, all from local timber. On May 23 he recorded that nine "bateaux" had descended the river, which he described as "easy to navigate." He soon discovered that it was not easy. Leaving camp on June 4 in the boats, he described subsequent events as follows: "Did not go more than a mile before Baasen was swept off the stern end and passed out of sight. Two minutes later the boat struck a stump and swamped, leaving Reigel hanging to a dead tree. Parties below caught part of the sacks; ten we never more shall see. I came near smashing my oar a number of times. Was stranded 6 times. Had 3 ton on board." They had departed the camp at six o'clock in the morning and finally reached the lake at one o'clock the next morning, "wet to the skin." In other words, they required nineteen hours to travel thirteen miles.

Undeterred, the Conger party returned to Twelvemile Camp with a boat to haul additional provisions to the lake. It took four men eight hours to haul the boat back up the river. This time it took only an hour and a quarter to descend the river.⁵¹

⁴⁹ Lethcoe and Lethcoe, 71.

⁵⁰ Benedict, 58-60, 62-65. See Lethcoe and Lethcoe, 72, for a Benedict photo of five men walking a boat down the Upper Klutina River in less than knee-deep water.

Holeski and Holeski, 84-94. See also pp. 68, 78, 82, 83, 85, and 87 for photographs of boats and boat-building at Twelvemile Camp and Sawmill Camp.

J. J. Rafferty, a member of a U.S. Army expedition, arrived at Twelvemile Camp on May 7. Everybody was then building boats, he wrote. The soldiers also decided to build boats, but they had difficulties in finding suitable timber and tools. Eventually they found prospectors willing to build the boat (dubbed the "Oscar") and others loaned tools. It took two days to build the boat, and on May 27 they started for the lake accompanied by another boatload of prospectors. They stopped occasionally to push the boat over a bar, and once a snag punctured a hole in the boat, requiring them to stop and make repairs. Once, the boat was swept into some overhanging trees. When they reached the lake, it was covered with ice eighteen inches thick and thawing had just begun along the shoreline. 52

So far as is known, only two men drowned in the Upper Klutina in 1898. According to Captain Abercrombie, this was remarkable given the fact that "the river banks were strewn with wrecks." As warmer days passed and the river continued to rise, stampeders evidently hesitated in attempting to boat the river. In mid July, Lieutenant Lowe found about three hundred people at Twelvemile Camp waiting for the river to go down so that they could safely descend it.⁵³

Boating Klutina Lake in 1898

In 1898 many prospectors rowed or sailed boats from the Upper Klutina across the lake to Klutena City at the foot of the lake or to Amys Landing (or Rapids City), located near the mouth of Manker Creek. In early June, soldiers and prospectors crossed the lake in a scow, twenty men on the line dragging the scow and three men in the bow pushing floating eighteen-inch-thick ice cakes away with pike poles. Ten boats were tied behind the scow.⁵⁴

Later in the year, many discouraged prospectors returned to Valdez over the glacier route. Several men profited from the exodus by offering boat passage across the lake. One Dr. "Ottaway" or "Ottawa" operated a steam launch on the lake. This launch may be the "small steam yacht" which the government geologist, Schrader, observed "doing a very prosperous business" in transporting prospectors from the foot to the head of the lake. It was a fourteen-foot boat with a steam engine and carried four to six men at a time. Benedict observed a fine schooner, the "Manhattan," on Klutina Lake. It is also possible that the schooner was used for hire. Remington wrote that a group of prospectors from San Jose, California, constructed and launched a two-masted schooner, the "Admiral Dewey," at Sawmill Camp. The captain, Chris Tjosevek from New York, operated the schooner for hire, transporting passengers and "so many hundreds pounds of pack" for \$5 per person. In late 1899 the schooner was beached near the mouth of Mahlo River. ⁵⁵

Boating Lower Klutina River in 1898

⁵² Rafferty, 615.

⁵³ Abercrombie, 587; Lowe, 591; Lethcoe, 71. The Lethcoes identified two men by name who drowned in the river. ⁵⁴ Rafferty, 615; Hazelet, 53-54, 63.

⁵⁵ Benedict, 48; Schrader, 119, 358; Lethcoe and Lethcoe, 72-73; and Copper River Joe (C. H. Remington), A Golden Cross (?) on Trails from the Valdez Glacier (Los Angeles, Calif.: White-Thompson, 1939), 16, 36, 37, and 55.

Once they reached the foot of Klutina Lake, the stampeders had the choice of descending Lower Klutina River in boats or following the trail to Copper Center. (Or they could await until the river froze over and sled their outfits down the river. It is said that the river did not freeze over in the winter of 1898, however. (Solve) Many chose to boat the river because it was the faster route. A man with a five-hundred-pound outfit required twenty-five days to cover the distance from the lake to Copper Center by the trail. According to Benedict, who chose to walk the trail, it took only two and a half hours to "shoot" the river to Copper Center. Schrader recorded a party with about 1,500 pounds in their boat covering the distance from the lake to Copper Center in about two hours. More time was required to line a boat down the river. (Solve)

Besides the one at Copper Center, two important camps were established on the Lower Klutina River, both located in the section between the lake and where the river enters a gorge. Klutina City at the foot of the lake was probably the largest camp. Benedict reported about 125 tents spread out along the shore for a thousand yards. Koehler observed about 100 tents some distance below the town and on the left bank of the river. When Schrader visited the place, there were "more than 200 tents, shacks, and cabins, occupied by about 350 people, many of whom were prospecting in various directions in the surrounding region." He also observed some tents on the southern side of the lake. About five miles downstream from Klutina City, near the mouth of Manker Creek, Amys Landing (or "Amie's" or Rapids City) marked the beginning of the river's fast and rocky reach, which extended practically to the Copper Center. Benedict counted about 100 tents and numerous caches at this camp. Koehler counted about 60 tents. When he visited the camp, Lieutenant Lowe estimated a population of 300 people.

Located on the north bank of the Lower Klutina River near its mouth, Copper Center was in 1898 the headquarters for all points on the Copper River and on trails leading to Interior Alaska. Schrader estimated a population of 500 to 600 people at the place, most living in tents and a few in cabins. Many were busily building log cabins for the winter. Andrew Holman, who sometimes delivered mail to points on the Valdez Glacier Trail, maintained a store, post office, and hotel in tents. In the fall of 1898, Benedict observed "about seventy-five tents, some fine log cabins, a few caches, and a hotel and post office" at the camp. In late October, Abercrombie counted forty to fifty cabins, each providing shelter to an average of four persons. In late March, 1899, Hazelet reported the camp almost deserted. Of the total number of men remaining in the camp, more than half, or eighteen men, were sick in the hospital. 60

⁵⁶ Reckord, 142.

⁵⁷ Benedict, 80; Schrader, 392.

⁵⁸ Benedict, 178; Koehler, 609; Schrader, 358. In 1919, while describing bear attacks in the Klutina Lake country to a local reporter, Charles Remington mentioned that Klutena City was a camp of 200 to 300 stampeders in the summer of 1898. He remembered a young man crossing the foot of the lake in a boat with a sail, intending to gaff salmon at "Salmon Creek" (Mahlo River). He was mauled by a bear near the river but managed to return to the camp in the boat where several doctors tended to him. *Valdez Miner*, November 1, 1919, 6. See also Holeski and Holeski, 138, for another account of the bear attack.

⁵⁹ Benedict, 80-81; Lowe, 591. In 1899 Rice counted about fifty cabins in the camp. Only three were then occupied. John S. Rice, "From Valdez to Eagle City," in U.S., Senate, *Compilation of Narratives of Exploration in Alaska*, 769. In 1899 Private Garrett, USA, operated a ferry across the Klutina River at this point. Rice, 785. ⁶⁰ Schrader, 358-59; Benedict, 80, 90; Abercrombie, 587; George Hazelet, Diary, February 17, 1898-April 30, 1899, (unpublished manuscript, Alaska Resources Library, Anchorage), 176.

By all accounts, the Klutina River was dangerous for navigation. J. J. Rafferty, who required nine days to descend the river, described his experience as follows:

On the afternoon of June 1 the expedition started down the Klutena. The river at this point was close to 100 feet in width, 5 feet deep, and ran as smooth as a mill pond for 5 miles, at which point it divides into several channels. Here were encountered rapids, and boats had to be lined for a short distance. This could have been avoided had the expedition known that the right-hand channel was the proper one for them to take. Camp [Amys Landing] was made that night at the beginning of the big rapids, which practically extend to the Copper, 20 miles below. Many prospectors were found camped in this vicinity, hesitating to go on for fear of being swamped or their outfits lost or ruined by the water, which was a common occurrence. . . .

At this point the river descends in leaps and bounds over bars and bowlders, with a deafening roar.

... Many cached their goods rather than risk the whole of them on the river, taking a few months' provisions with them for a prospecting trip, and then lined their boats down....

The boat was here abandoned as being too clumsy to make the trip safely, and the expedition joined forces with the men who had carried a portion of its outfit from the place where the boat was built. The goods were to be transported to the Copper in their boat, for which assistance the members of the expedition were to join in helping line the boat down the rapids. In the first days since leaving Valdez the weight of the goods had been much reduced, and with that belonging to the other party gave the boat a load of some 3,500 pounds, most of which belonged to the other party. The boat was well made and well shaped, broad of beam and deep. I thought that with seven men to handle her good time could be made without endangering the cargo. Six men held the rope fastened to the bow and walked along the bank or, as was often necessary, waded in the stream. The boat was allowed to drift sternforemost to offer the least possible resistance. One man remained in the boat, and by means of a long pole kept her out from the shore and off the rocks. In this way the expedition had proceeded about a mile when, in spite of their efforts, the current swept the boat onto a wrecked raft, knocking a hole in her bottom, partly upsetting her crosswise of the current. . . .

Unable to right the boat, the men removed their outfits and, two days later, secured another boat. Loading the goods onto the boat, they prepared to "shoot" the river.

It was decided that it would be safer to attempt to shoot the rapids, and a man was secured as pilot who claimed to have made the trip three times successfully. Nevertheless, the party came to grief on a rock in midstream. For a time, the space of a minute perhaps, they were hung on the rock, . . . but were swept off by the current and hurled downstream, striking a dozen rocks before control of the boat could be regained. Finally they succeeded in landing it upon a bar, completely filled with water and 100 yards above the 'bad rapids,' as they were called, 8 miles from the Copper. The pilot went off downstream, while the members of the expedition packed the goods ashore and opened them out to dry.

The Rafferty party subsequently placed a patch on the boat, pitched and caulked the seams, reloaded the boat, and then "lined" the boat down the river. The party reached Copper Center on June 9, 1898, without experiencing further problems.⁶¹

George C. Hazelet, a well known pioneer of Valdez and Cordova, kept a diary of his trip down the river. Like the Rafferty party, he would also require nine days to reach Copper Center. On the morning of May 23, he and two other men broke camp at Klutena City, loaded the boat they

⁶¹ Rafferty, 616-17.

named the "Mary Ellen" with about 2,800 pounds of supplies, and began the journey down the river. After covering what they thought was about two miles, they noticed a faster current and sighted the first rapids a short distance ahead. Prudently, they landed the boat and walked down to investigate the rapids. They decided to line the boat through them. This they accomplished without difficulty and, after a rest, continued to line the boat down to where a second series of rapids began. Here they found a number of camps and numerous boat wrecks. As Hazelet described it, the river here was especially treacherous:

The river at this point is full of large rocks. Many extend out of the water from two to three feet and some very large ones as close together, so close in fact, that a boat six feet on the bottom could hardly get through. The water rushes through here at a terrible rate, making a noise like waterfall. Rafts and boats were piled high upon each other, goods were spread out to dry, and all looked forlorn enough.

The following day, Hazelet and his companions spent the day studying the methods other boaters used to gain passage through the second rapids. Some men succeeded in lining small boats through the rapids. Others "would hold onto a rope behind and let the boat out or hold it back as the man in the boat dictated." The Hazelet party soon decided that they would transport their supplies in relays down the river. With the help of nine Swedes from Boston, Massachusetts, the "Mary Ellen" was successfully taken downriver about three miles. In turn, the Hazelet party helped the Swedes in lining their boat, the "Show," which Hazelet described as "a big box 8 feet wide and about 20 feet long beginning to narrow at the distance of 12 feet from one end and gradually coming to a point." It carried about 1,500 pounds of supplies.

For the next several days, the Hazelet party and the Swedes parties relayed their supplies down the river. The work was extremely difficult: "The hard part after landing was to pull the empty boats back to camp to reload," Hazelet wrote. The boat, when empty, did not weigh more than 350 pounds, but it took six men to pull the boat up against the current. With the last load of supplies, four men--two with oars and two with poles--shot the rapids in the "Show." They made the run of two miles in less than seventeen minutes with no damage. The boat was landed at camp about six miles below the second rapids.

Breaking camp on May 31, the Hazelet party (now consisting of four men) decided to shoot the remaining distance of the river as well. They floated down the river at a rate of about ten miles an hour "past rocks, fallen trees, round bends" until reaching the "Bull Rapids," where they saw a boat-load of prospectors swamped. They briefly considered lining the boat, but in the end they agreed to "shoot" the rapids. The experience was not without incident:

Well we pulled out and away we went. We had made most the whole rapids safely and just had one bad place left to pass when Anderson who was steering in front lost his head and nerve entirely, let go his oar, fell out of the boat and got clean under. We pulled him in and the boat slid over and we lost nothing but our oars. The boat however had sprung a leak and we had to stop, recaulk and pitch her which took about five hours. Anderson's nerve was all gone and as he would not get into the boat again, this required us to line her all the way....

⁶² The Hazelet party's boats, built in May near the head of the lake, may have been typical. Built in May at the head of the lake, the "Mary Ellen," pointed on both ends, was 22 feet in length and 5 feet 1% inches wide at the bottom and 6 feet 7% inches wide at the top. Hazelet estimated its carrying capacity at 5,000 pounds. The other boat, similar in design to the "Mary Ellen," was 16 feet long and 30 inches wide at the bottom

This took an extra day of travel, but they all arrived safely at Copper Center on the night of June 2.63

Later in the summer, Hazelet and companions would make another boat trip down the Lower Klutina River. After walking the Klutina Lake trail in mid-August 1898, they purchased well over 1,500 pounds of supplies and equipment at Amys Landing and at Klutina Lake from disillusioned prospectors planning to return to Valdez by way of the glacier route and quit Alaska. Loading this material into a boat purchased for \$3, the men decided to shoot the rapids. It was an exciting ride, Hazelet wrote; we "went racing on down the river at a breakneck speed, the waves lashing at us as hard as they could and very frequently throwing buckets full of water into our boat, all over us on the goods." When the boat struck a hidden rock and opened a seam about seventeen miles below the lake, the men were forced to land the boat. They then cached their supplies and walked the remaining distance to Copper Center. About a week later, they returned to the cache on foot, fixed the boat, and then shot the river to Copper Center. Only about a mile of lining was necessary—through Hell Gate and around Devil's Elbow.

In early September 1898, Hazelet and three companions returned to the cache with the boat "Mary Ellen." It took about two days for them to line the boat the ten miles from Copper Center. After loading the boat with about 1,700 pounds of supplies, the four men decided to shoot the river. The river was too much for them, however, and they ended up lining the boat through this Hell Gate and around Devil's Elbow. As Hazelet described the experience:

So Mc and I were at the oars and Bowen with the paddle and Jack on the lookout, away we went, but not far, for as we rounded a curve the boat got the start of Bowen and simply ran up on the bank in spite of him, it slid off in a moment and went on chasing down the stream. In a short time, in missing an old raft hung up in the middle of the river, we struck a large rock. This it seemed would crush the boat to pieces but luck was with us, Mc and I pulled hard and ran the boat onto a bar, . . as we were almost into the Devil's Elbow, we concluded to line it till we got down through this place and Hell Gate. Hung up on a large rock in Hell Gate, owing to carelessness but finally got off, and was soon through with the worst place on the river. Here we took Neil Hessian on board with 200 lbs flour and he and Bowen did the rowing from that point to Copper Center, Jack with the back paddle and me with the front. We struck rock after rock, and once more ran up onto the bank. Got soaking wet from the large breakers, tore the guard rails off from the boat and many time thought we were going to pieces, but after about ¾ of an hour straight running landed at Copper Center with everything in good shape except what little wet it got from waves. 64

How many stampeders' boats were wrecked on the Lower Klutina cannot be precisely determined. Observers frequently commented upon the numerous wrecks. In May Hazelet described the river as "strewn with wrecks of all kinds. Goods can be seen every few rods along the river put out to dry, broken boats are piled up every little distance and all seems one grand wreck." Rafferty counted thirty-six wrecked rafts on the first few miles of the river below the lake, which was the easiest section to navigate. Abercrombie, who claimed that the river was not of commercial use, saw food of all kinds strewn along the river banks and drift piles, and estimated that the prospectors had lost \$20,000 worth of goods on the river. Schrader counted "hundreds" of boats and rafts wrecked on the river. On August 9 Koehler recorded the passage

⁶³ Hazelet, 61-70.

⁶⁴ Hazelet, 102-06.

of twenty men through Twelvemile Camp en route to Valdez by way of the glacier. They had lost all their provisions in the rapids. 65

Many men lost nearly all they possessed to the Lower Klutina River, but their loss cannot be blamed solely on the river. Prior to coming to Alaska, the stampeders were storekeepers, factory workers, farmers, and the like who had been struck hard by the Depression; they knew practically nothing about mining or boating. Rafferty, who safely descended the river, understood this when he wrote: "The fact that this part of the route was strewn with wrecks and many men lost their entire outfits I ascribe chiefly due to the lack of knowledge on their part of how to construct or handle a boat. Of the hundreds of men along the river at that time there was but one who could start from the rapids and take a boat to the Copper with any assurance of escaping safely. Some men made one or two trips in safety, only to be wrecked the next trip. There was no lack of men to make the attempt, but 95 per cent came to grief at some place, there being a marked improvement as the men became accustomed to the dangers to be faced." It must be remembered, too, that these men were in a rush to the gold fields and were willing to take risks in their journeys. According to Hazelet, "so many are in a hurry to reach the Copper River that they go off half-cocked, as it were, and in consequence either loose all their stuff or get it wet which is the next worse thing."

The Lethcoes noted one estimate that more than a thousand boats were built on the Upper Klutina during the spring and summer of 1898. To counter Abercrombie's estimate that 95 percent of the boats were wrecked on the Lower Klutina, they demonstrated Abercrombie's tendency to exaggerate and cited three stampeders' estimate that the failure rate was 70 percent. They agreed with Rafferty that the boats were poorly constructed and the stampeders not skilled in running rivers. The Lethcoes also claimed that several experienced men were hired to run boats down the river at \$50 a trip, but this has not been confirmed.⁶⁷

Hunting, Fishing, and Trapping Activities, 1900-1958

By 1900 the Valdez Glacier was not an important route to the Interior. Since the summer of 1898 Army personnel under the command of Captain W. R. Abercrombie had been at work locating and building a trail over a new route up the Lowe River valley. A year later, soldiers and civilians had extended a good trail to a point near Copper Center and had built shelter cabins and a telegraph line connecting them. Two years after the Valdez Gold Rush, the trail was extended to Tazlina River and a bridge was built over Klutina River.

The Valdez Trail became a key component in the government's trail and telegraph system in Alaska. In 1900 Congress provided funds for the construction of military roads, trails, and bridges in Alaska and a Washington-Alaska Military Cable and Telegraph System. After 1905

⁶⁵ Hazelet, 65; Rafferty, 616; Abercrombie, 570; Schrader, 392; Koehler, 608; Lowe, 591-92.

⁶⁶ Rafferty, 617; Hazelet, 66.

⁶⁷ Lethcoe, 70, 79-80, 133. The Lethcoes cite two sources for the statement that experienced river-runners operated on the Lower Klutina for hire. One is Conger. He states, "Can get fifty dollars for each boat I shoot down, but would not do it for twice that amount, even if it only takes a few hours. There is no chance to stop and rest after once starting, for the banks on both sides are too high and current too swift." Conger, 107-108. It is not certain whether Conger's statement was based on speculation or on fact. The Lethcoes' other source, located in the Valdez museum, was not available to the writer.

the Alaska Road Commission (ARC) in the War Department received annual appropriations for the construction and maintenance of roads and trails in Alaska. Under the direction of General Wilds P. Richardson, the ARC focused its efforts to improving the trail from Valdez to Fairbanks for wagons traffic and subsequently for automobiles. In the meantime, the Morgan-Guggenheim Syndicate built the Copper River & Northwestern Railroad up the Copper River valley from Cordova to Chitina and McCarthy. From 1911 to 1938, when the railroad was abandoned, the Richardson Highway and the Copper River railroad were the principal routes from Prince William Sound to Interior Alaska. Afterwards, of course, the highway's importance grew as the sole overland route from Prince William Sound to Interior Alaska.

In the Copper River Valley, numerous trails and several roads extended from the Richardson Highway to favorite hunting, fishing, and trapping grounds, mining properties, and small communities. Over the decades, small numbers of prospectors, trappers, hunters, fishermen, and scientists journeyed to Klutina Lake over the Klutina Lake trail. (This is the Klutina Lake Trail shown on modern U.S. Geological Survey maps.) Some, especially in the early 1900s, traveled from Valdez to the lake by way of Valdez Glacier. And beginning in the 1920s, some chartered planes to fly them to the lake. By far, however, the vast majority followed the gold rush trail from Copper Center to the lake. This trail was the customary route of travel (at least during the open season) to the lake. There is little evidence of boat travel on Klutina Lake during this period, and almost no evidence of the use of boats on the Upper and Klutina Rivers.

Valdez Glacier-Klutina Lake Trail

In the several decades following the Valdez Gold Rush, a few white men continued to access the Klutina Lake country over the Valdez Glacier route. At the lake they hunted, fished, trapped, and prospected. In 1902 the Valdez newspaper carried reports of men returning to Valdez and Copper Center before the spring breakup made travel over the glacier too difficult. Three men arriving at Copper Center over the glacier trail reported seven men encamped at the lake. One Indian also reported a number of "glacier trotters" there. One of these was Grant Remington. In the spring of 1901 he and a man named Updike returned to Valdez with a load of furs, which Updike took with him to the States. Obtaining another outfit, he returned to the lake with a man named Mason, presumably over the glacier route. Remington spent the year in the Klutina Lake country, but Mason continued on to the upper reaches of the Tazlina River via St. Anne Creek. The following spring, both Remington and Mason arrived in Valdez with a few furs (silver gray fox, cross fox, marten, black wolf, wolverine) from their camp at the foot of Klutina Lake.

One of Remington's neighbors, Fritz Voges, resided at or near St. Anne Creek. He crossed the glacier in 1901, cached his supplies at "12-camp," and spent the summer at the lake near St.

⁶⁸ U.S. War Department, Reports of Explorations in the Territory of Alaska (Cooks Inlet, Sushitna, Copper and Tanana Rivers) 1898 (Washington: GPO, 1899), 417-419; Schrader, 2, 20; U. S., War Department, Alaska, 1899, Copper River Exploring Expedition, Captain W. R. Abercrombie, Second U.S. Infantry Commanding (Washington: GPO, 1900), 24, 26-27, 64, 70-71.

⁶⁹ Alaska Prospector (Valdez), April 17, 1902, 1.

⁷⁰ Alaska Prospector, April 30, 1902, 5.

⁷¹ Alaska Prospector, April 24, 1902, 1. In April 1902 H.A. Monroe returned to Valdez over the glacier route with sixteen dogs. He traveled from the upper Susitina River to Tazlina Lake, and thence to Valdez Glacier by way of St. Anne Creek and Klutina Lake. Alaska Prospector, April 30, 1902, 1.

Anne Creek, "living on what the country produced in the way of game, fish and berries." In the spring of 1902 he nearly froze to death in making his way across the glacier to Valdez.⁷²

The last known instance of prospectors and trappers crossing the glacier to Klutina Lake occurred in 1920. That spring Jack Reiter and DeLate Cook crossed the glacier, intending to spend the summer at Klutina Lake prospecting and preparing for the winter trapping season. Upon learning of their plans, the local reporter wrote, "they will be the first men to go over the old trail for some time, and a report of their trip is awaited with interest." The two men made three trips in nine days in relaying their supplies and equipment over the glacier. They established their quarters in one of the many cabins built by the stampeders of 1898, presumably at the former site of Klutena City. Cook later reported that, though the roofs had caved in, many of the cabins "were in a good state of preservation, and that in several of them the outfits taken in by the Chechacoes for the purpose of mining gold were stored in the cabins." The cabin logs were "dry as tinder and made excellent firewood." They saw abundant wildlife—sheep, bears, wolverines, and goats—but fur-bearing animals appeared to be scarce. In early June, when the lake was still frozen over, the two men returned to Valdez over the glacier, a trip that took little over a day. The day of the cabins in the cabins of the cabins are the cab

In the fall of 1920, Jack Reiter returned to Klutina Lake to hunt and trap. This time he was accompanied by Heinie Berger and two men named James Bolton (or Bolten) and John Johnson, recent arrivals to the area from Ketchikan. The four men tried to go in over the glacier trail with packhorses, but had to give it up because of impassable crevasses. Returning to Valdez, they went to Copper Center in late September and then "up Klutena river to Klutena and Lily lakes." Later, they said they made camp "in the old village built during the stampede of '98, finding the houses in a fair state of preservation." During the winter at least one of them made a trip to Copper Center to mail a letter, which the Valdez newspaper quoted in part. The letter stated that the four men were trapping at Klutina Lake and were "getting plenty of fur." They had planned to stay the summer and prospect, but, in March 1921, they returned to Valdez. The men reported "a fair prosperous season, but did not get rich from their sale of furs." The winter had been very cold, averaging 32 degrees below zero. Sheep, goats, and moose had been plentiful, but furbearers apparently "holed-up" during the cold weather.

Copper Center-Klutina Lake Trails

The Klutina Lake trail from Copper Center was the customary summer route to the Klutina Lake country. In the early 1900s, the trail was probably used to transport dried salmon from the lake to Copper Center where it was sold as dog food. Historically, commercial fishing in the Copper River Valley was limited to the Copper River itself. However, there is evidence that commercial fishing also occurred at Klutina Lake. During the summers of 1902 and 1903, several parties of

⁷² Alaska Prospector, February 27, 1902, 1.

⁷³ Valdez Miner, April 3, 1920, 5; June 12, 1920, 1.

⁷⁴ Valdez Miner, October 2, 1920, 5; February 12, 1921, 8; March 26, 1921, 1. The article identified the men as traveling twenty-five miles to the "head of the lake." Instead, this distance would have put them at the foot of the lake. The gold rush trail over Valdez Glacier was still visible as late as 1959. In 1959 a group of mountain climbers followed the glacier trail to Klutina Lake, later reporting that the trail "was still clearly marked" and that "camp equipment, parts of sleds, snowshoes, cooking equipment, remnants of tents, tools," even a shoe, marked the location of the trail. Valdez Breeze, July 4, 1959, 1.

white men fished for salmon at Klutina Lake, probably planning to sell the salmon as dog food to freighters and Signal Corps men on the Valdez-Eagle and Valdez-Fairbanks trails. In the spring of 1902 Porter and Cummings announced plans to spend the summer at Klutina Lake, fishing for salmon and boarding dogs. William McGee and his son, Jack, besides prospecting, spent the summer at the lake catching a large quantity of salmon. Jack traveled once to Copper Center to get the mail, and both father and son traveled to Valdez in September. They planned to move the fish to Copper Center in the early winter "and have it handy for dog feed in the spring." In 1903 Jim Cummins and Joe Porter were identified as having traveled from Copper Center to Klutina Lake, spent the summer catching salmon, and in the fall selling the salmon. In all these reports, there is no specific mention of the route of travel.

From time to time, the local newspapers carried stories that mentioned travel on the Klutina Lake trail. In the spring of 1939, for example, newspapers reported that Jim McKinley of Copper Center, whose wife had died that winter, took his entire family of four children with him to the lake for the beaver trapping season. He returned to Copper Center in early June. In July 1941 pilot Bob Claypool on a commercial flight from Anchorage to Valdez was forced to land on the Lower Klutina River after the plane's engine exploded and blew off the propeller. Claypool hiked from Klutina Lake to Copper Center and reported the accident. According to the Valdez newspaper, a military rescue team flew from Elmendorf Field near Anchorage to Klutina Lake in a seaplane. The team attempted to descend the Lower Klutina River in a rubber raft, but quickly abandoned this attempt upon finding the current too swift and too many logjams in the river. They subsequently walked the fifteen miles down the river "through dense undergrowth" and "over fallen logs and stones" to the crash site. None of the passengers was hurt. Claypool had succeeded in bringing the plane down on the river. The plane drifted down the river for about a half mile before it "nosed upon a gravel bar and gently turned over." The team rescued the passengers and than followed their trail back to Klutina Lake, a trip that took eleven hours. The

During the winter the frozen Lower Klutina River was also used as a route of travel. In April 1903, the local newspaper correspondent at Copper Center wrote, "From the lake to this place the snow on the river was heavy, but after we broke the trail we had a good trip down the Klutena to the Center." In December 1927 several residents of Copper Center mushed to Klutina Lake in order to rescue trapper Dick Wroworth or Roworth. Roworth, described as a Canadian who had been gassed in France during the war, had maintained a camp "for several years" at or near the head of the lake. (His camp was reported to be about forty miles from Copper Center.) He had been attacked by a brown bear and severely injured, but nearly a month passed before an Indian found him still alive in one of his cabins. The Indian returned to Copper Center and notified the authorities. John and Nelson McCrary and Paul White rushed to the lake with two dog teams, reaching the injured man in fourteen hours. It took them little more than two days to transport Roworth to Copper Center. Roworth eventually recovered and returned to Klutina Lake, where he probably lived until his death. In 1953 a big game guide Joe Pennington

⁷⁵ Alaska Prospector, April 30, 1902, 5, June 5, 1902, 4, September 25, 1902, 4, April 14, 1904, 1. In early September 1905, a Carl Ramstad arrived at Copper Center from Klutina Lake, presumably over the trail. Alaska Prospector, September 7, 1905, 3.

⁷⁶ Valdez Weekly Miner, June 16, 1939, 7; Valdez Miner, July 11, 1941, 1; Anchorage Daily Times, June 19, 1939, 1; Fairbanks Daily News-Miner, July 7, 1941, 6.

⁷⁷ Alaska Prospector, April 23, 1903, 5.

of Snow Shoe Lake, near the Glenn Highway, landed his plane at Klutina Lake and found "Dixon Raworth's" body in his cabin. He had been dead for several months. ⁷⁸

The presence of overflows makes the frozen Lower Klutina River dangerous for travellers. In the winter of 1932 Amos "Frenchy" Fleury and a partner were encamped at their headquarters at Klutina Lake. When Fleury did not return to his camp after several days, his partner started a search and found him unconscious in an overflow on the river. He took Fleury back to camp and then sent a twelve-year-old Indian girl with a dog team to Copper Center, twenty miles distant, for help. She arrived at the small community safely. A Gillam Airways plane landed at the lake and transported Fleury to the Cordova hospital. Fleury's life was saved, but he lost both feet to frostbite. ⁷⁹

Airplane Travel to Klutina Lake

Beginning in the late 1920's, airplanes were increasingly used to access remote mines and lakes in the Copper River Valley. The first airplane landing at Klutina Lake probably occurred in the winter of 1931. DeLate Cook, who had crossed the glacier to the lake in 1920, hired a pilot to transport him, his partners A. A. McCrimmon and William Field, both from Cordova, and about a ton of supplies to the lake in several flights. Nothing more is known about this expedition. However, two years later, one of men, William Field, announced plans to return to the lake with Herman Felder and spend the summer prospecting in the area of St. Anne Creek. They had about a half ton of supplies to fly in. When pilot Bob Reeve and Owen Meals were unable to locate a landing place near St. Anne Creek, Reeve flew Field and Felder to Copper Center. The two men planned to mush from that place to St. Anne Creek and mark a landing field. The local newspaper did not carry a report on their success. 80

During the early 1940s trapper Peter Peterson may also have relied upon planes to access Klutina Lake. During the years 1940 to 1942, Albert Lindemuth, a pilot, flew to the lake and Hallet River country many times and observed Peter Peterson's traplines. Peterson had lived at the lake since 1940, when he built a cabin at the mouth of Hallet River (probably the one shown on current USGS maps). In 1946 he filed an application with the government for five-acre parcels at three cabin sites on his trapline along the lake: one at the mouth of Hallet River, one at the mouth of St. Anne Creek, and presumably another at the foot of the lake. Evidently, Peterson abandoned the country after 1943. He did not trap there in the winter of 1944 or 1945, spending that time with his son in an Army hospital. He eventually withdrew his applications except for the one at St. Anne Creek, and subsequently failed to take any action on even that application. The government closed his case in 1947.

U.S. Bureau of Fisheries' Investigations, 1916-1931

⁷⁸ Valdez Miner, December 17, December 24, 1927, both p. 1; Fairbanks Daily News-Miner, December 16, 1953, 3. ⁷⁹ Valdez Miner, December 31, 1932, 2; February 11, 1933, 3.

⁸⁰ Valdez Miner, December 26, 1931, 4; January 2, 1932, 4; January 9, 1932, 4; January 16, 1932, 4; May 6, 1933, 4; May 27, 1933, 4.

⁸¹ Peter Peterson, "Application for Five Acre Homestead Tract," April 9, 1946; Albert Lindemuth Affidavit, April 3, 1946; George I. Peterson Affidavit, April 9, 1946; and John S. Hellenthal to Bureau of Land Management, April 1, 1947, file A010911 (2563), Box 196, Records of the Bureau of Land Management, RG 49, National Archives, Anchorage.

During first half of the twentieth century, the U.S. Bureau of Fisheries sent a number of expeditions to the Copper River drainage area. Their purpose was to survey salmon spawning beds in order to determine what impacts, if any, commercial fishing operations on the lower Copper River had on the salmon runs. Local residents, both white and Native, had complained that commercial fishing was adversely impacting the salmon runs, and thus endangering the welfare of the Indians who depended upon salmon for food for themselves and their dogs.

The U.S. Bureau of Fisheries sent expeditions to Klutina River and Lake in 1916, 1917, 1919, 1921, 1925, and 1932. In every case, the parties traveled overland from Copper Center to Klutina Lake with pack animals. Some hauled portable boats and used them to explore the lake.

In 1916 and 1917 James H. Lyman, an assistant agent, led the Bureau's first expedition to the lake. Fellow travelers included guide Frank H. Carroll of Copper Center and a man named H.S. Scanlon. Leaving Copper Center on September 6 with a pack horse, the three men reached the lake on the second day by following the river. They then followed the north shore to the mouth of St. Anne Creek and followed that creek upstream for several miles. Lyman quickly identified this creek as an important salmon spawning stream; he described it as about fifty feet wide with a clean gravel bed and averaging one to two feet in depth. Bear signs were plentiful. The expedition apparently did not meet anyone at the lake, but Lyman recorded the statements of hunters and trappers who had observed many spawned-out salmon along the lakeshore and a strong run of salmon up St. Anne Creek. He also noted an "old fish rack" along the creek which could have been used by Natives or prospectors. 82

In mid-August of the following year, Lyman returned to Klutina Lake and St. Anne Creek over the same route with a guide and packhorse. This time he had sufficient time to continue beyond St. Anne Creek and explore the south end of the lake before returning to Copper Center. Lyman arrived at the head of the lake on the fourth day of the journey. He subsequently described their experiences on the Upper Klutina River as follows:

In the afternoon of this day a small fresh water creek was crossed which had several red salmon at its mouth. The spawning area of this creek was too small to reckon it as important. The next six days were of a trying nature to horse and man, but in the light of the discoveries made, they were well worth while. They were spent in crossing the delta of the Halleck [Hallet] and Klutina Rivers – about six miles of deep and turbulent waterways and sloughs – and in breaking trail for 16 miles through marshes (formed by beaver dams), brush willows, and deadfalls, as progress was made up the east shore of the Klutina River to its source, the Valdez Glacier. To cross the waterways it was found necessary to build a raft and transport the supplies around the edge of the lake while the horse was taken by land and forced to swim the rivers and sloughs. In this venture the guide took charge of the lightering while the writer managed the horse through the crossings.

⁸² James H. Lyman, "Semi-Monthly Report of Daily Operations and Observations from September 1 to 19, 1916," Reports and Related Records—All Alaska Miscellaneous Fisheries Reports, 1912-16, Division of Alaska Fisheries, Bureau of Fisheries, Entry 91, Items 333-348; James H. Lyman, Assistant Agent, "Report of the Copper River Fisheries for the Season of 1916," Entry 91, Item 2, Reports and Related Records—Copper River District, 1916-17, Division of Alaska Fisheries, Bureau of Fisheries, Records of the U.S. Fish and Wildlife Service, RG 22, NA. Microfiche at Alaska Resources Library, Anchorage.

When Lyman mentioned "discoveries," he was referring to several important salmon spawning beds on the Upper Klutina. These included "spring fed streams entering the lake near the Halleck [Hallet] and Klutina Rivers" which he believed were "some of the most important spawning beds of the Klutina region." The streams, as he described them, were less than a half mile long and "spread out over clean gravel beds in a channel about 50 feet wide." In the headwaters of the Upper Klutina, he also "discovered" several spring-fed lakes which emptied into the river through short streams. Local Natives had informed Lyman that many red salmon spawned in these lakes. He confirmed that the lakes "offer ideal conditions for the fish." 83

In the summer of 1919 Dr. Henry B. Ward and W. A. Oldfather of the University of Illinois and J. R. Russell of the Bureau of Fisheries spent about three weeks in the Klutina River drainage area before traveling to the Tazlina River by way St. Anne Creek and St. Anne Lake. On July 31 Ward, Oldfather, and guide and packer Frank H. Carroll left Copper Center for Klutina Lake over the Klutina River trail with three horses. One of the horses carried a collapsible canvas boat, which was intended for use on the lakes. According to Ward, "It proved exceedingly difficult to transport, and yet without it we should have been unable to secure the essential information on the lakes and at the spawning grounds." It took them five days to reach Klutina Lake, an exceptionally long time for such a short distance. This may have been the result of Carroll suffering an accident early in the journey and having to return to Copper Center for treatment.

The Ward expedition set up camp about a half mile below the lake, "directly across the stream from a large eddy in which salmon were seen jumping and above which an old camp and drying rack" used by both whites and Natives were seen. Ward described the Klutina River generally as "an exceedingly rapid stream" with an "almost a consistent succession of rapids and the bed contains many large rocks." Salmon could rest only for brief periods of time behind the rocks or the "small pools that recur practically everywhere." In the several miles below the lake, however, the river ran deep and slow, allowing for salmon to rest and congregate in large numbers and attracting local fishermen to a number of eddies. Ward described one "big eddy" as "an expansion of the river with a number of islands and several channels" located several miles below the lake. Just upstream from the "big eddy" the remains of cabins, built by the gold rush stampeders, were located in a "large clearing." Whites and Natives now used the cabins in connection with fishing activities, evidence of which included salmon drying racks, net racks. fish platforms, and net stakes. According to Ward's informant (presumably Frank Carroll), whites had used the site extensively to catch salmon to sell to freighters and others for use as dogfood. The fishermen even attempted to catch salmon with a wire net stretched across the river. They were not successful as the current and driftwood quickly carried away the net.

From Klutina River the expedition followed the northerly shore of Klutina Lake to its head. From August 11 to August 19, when they returned to St. Anne Creek and proceeded to Tazlina

 ^{**}Extract from Semi-Monthly Report of J. H. Lyman, 1917," Entry 91, Item 2, Reports and Related Records—Copper River District, 1916-17, Division of Alaska Fisheries, Bureau of Fisheries, Records of the U.S. Fish and Wildlife Service, RG 22, NA. Microfiche at Alaska Resources Library, Anchorage.
 **Aussell noted that it was a canvas boat.

Lake, Ward and his companions explored the Upper Klutina River, Hallet River, and various lake inlets. 85 Describing this area, Ward wrote:

The extreme tip of the lake is bluntly truncated but receives the waters of the Hallet River and the Upper Klutina. The latter empties into it through numerous channels and the former by a single stream which tho it originates to the westward and traverses a valley separated from the Klutina by a considerable mass of mountains, enters close to the west channel of the Klutina and parallels it for a stretch such that it seems to be at first sight a part of the Klutina complex. The valley of the Upper Klutina is broad and flat and traversed by a series of connecting channels; it is occupied also by a considerable number of small lakes. Both the sloughs on the flat and the channels are significant factors in the spawning of the red salmon.

Besides these rivers and channels, Ward noted a number of inlets on this end of the lake. He attributed their formation to the deposition of glacial material from Hallet River but mostly from the Upper Klutina River. In addition, he observed that the trees were more numerous and larger along the west side of the valley.

Ward described the Upper Klutina River in terms of two branches—a western and an eastern branch—and four channels emptying into Klutina Lake. The western branch was an old channel which probably once carried more water than it did in 1919. Following the base of the mountains on the west side of the valley, the stream flows through an area of large and "thickly set" spruce trees between "well marked and firm" stream banks. The stream followed a "torturous" course," and the water was "relatively deep." According to Russell, as the stream was "obstructed by beaver dams every few hundred feet, it was necessary many times to portage our canoe." Ward recorded a similar observation, noting that the frequent beaver dams "formed a labyrinth of channels in which it is difficult to find one's way. In places successive dams were not more than ten or twelve feet apart, and while some of them were only a foot in height, we found one which represented a vertical height of between four and five feet." Ponds and small lakes lay on both sides of the stream, probably the result of overflow from the beaver dams. The water was "slightly milky." According to their guide Frank Carroll, the water had been clear in 1917. Eventually they found a point where "a small quantity" of glacial water from Klutina River flowed into this branch.

The eastern branch of the Upper Klutina River is a typical glacial stream. Referring to its braided character, Ward described it as "broken into fragments by bars, some of which are easily seen and others, lying just below the surface, are not visible in the muddy water." The eastern branch carried far more water than the western branch, and its current "was powerful, but relatively smooth." Ward ascended the stream "for a couple of miles," presumably with the canvas canoe. They saw no evidence of salmon spawning in the stream, but did find the small lakes emptying into the river near the glacier.

The Upper Klutina River empties into the lake in four channels. The First Channel or westernmost channel is, Ward wrote, "a big slough with several long arms"-- "really a lateral

⁸⁵ Ward described the Hallet River as a very shallow, clearwater stream—"in sharp contrast with the milky water of the lake in general"—with a frequently shifting channel. After following the stream for a considerable distance, he concluded that salmon did not ascend the river. His guide said that he had been there on August 19, 1917.

86 J. R. Russell, Birdsview, Washington, to Commissioner of Fisheries, November 26, 1919, Reports and Related Records—Copper River Investigations, Dr. Ward, 1919, Entry 91, Item 1, Division of Alaska Fisheries, Bureau of Fisheries, RG 22, NA. Microfiche at Alaska Resources Library, Anchorage.

pocket from the westernmost branch of the Upper Klutina River, which, in fact, empties into the lake jointly with it." The channel had a gravel bottom and was about 75 feet wide and 3 to 5 feet deep. A small beaver dam was near its head. The water may have been clear because Ward observed several "little fish" in the water and vegetation which ducks were feeding on. The Second Channel and its several shallow "lateral pockets" contained milky water. The channel quickly became "very narrow, with brush projecting clear across the channel of the shallow stream, which increased in swiftness until further progress became impracticable." Located "some 200 yards further" east, the Third Channel was, "clearly an old and well-established channel of the river." Ward canoed up the channel "a few hundred yards" before forced back by obstructions. (He did not identify the obstructions.) The Fourth Channel, located about a half mile to the east, was a braided, swift, and shallow stream. Ward recalled that it was "exceedingly difficult" in ascending this channel because of its swift current and shallow depth. Small ponds formed by overflows were observed along the river, most of them separated from the main channel by sandbars.

In 1921 Shirley A. Baker of the Alaska Fisheries Service visited Klutina Lake to check on the health of the salmon run. He left Copper Center on October 10 with John McCrary of Copper Center with pack horses over the "old trail" to Klutina Lake through a "drenching rain." They made camp at the "Big Eddy," about four miles below the lake. Like Ward, Baker described the river here as spreading "over a big, low, flat country, forming many channels and islands." Between the "Big Eddy" and the lake outlet, the river "is confined to a deep channel, because here the stream flows more gently and with considerable depth of unbroken water. Several eddies are formed between the Big Eddy and the outlet of the lake by an expansion of the stream at or near a bend in the river, or bay points extending out into the river, which are sometimes caused by slides." Numerous signs of human activity were scattered along this section of the river and along the lake to its head. Baker reported "a great number of old, dilapidated cabins which were formerly occupied by prospectors and miners during the early days from 1898 to 1905" as well as abandoned salmon drying racks, net racks, and fish caches formerly used by both whites and Natives.

Baker's report is of particular interest because he described a meeting with several Indians and the Indians' success in descending the Lower Klutina River in a boat. While Baker and McCrary were camped at the lake outlet, Chief McKinley Jim, Big Charlie, and four other Indian hunters crossed the lake to visit them. (Baker noted a "white settler" on the lake but did not identify him by name or his precise location.) The Indians, all from Copper Center, had walked to the lake on August 15 in order to fish. They had caught only forty-five salmon at the lake, but they were not concerned about this because they had caught salmon from the Copper River as well. McKinley Jim advised Baker not to continue to the head of the lake because the salmon run had already passed and he would not see any live salmon there. They also discussed the feasibility of transporting one of the Indian women to Copper Center. She was very sick and needed medical treatment. As she was too ill to ride a horse, the men agreed that the best alternative was to transport her down the river by boat.

Baker and McCrary left the lake on October 12 and reached Copper Center the following day. On the way down, they kept a close lookout for Big Charlie and two other Indians who had left Klutina Lake the day before in a skin boat. Baker's account of the event is worth quoting in full:

Big Charlie's wife was very ill from an attack of inflammatory rheumatism, and it was impossible for her to walk or ride horseback, so Big Charlie and the chief held a pow wow and consulted with the guide and me about the feasibility of coming down the Klutina River in a staunchly made skin boat which they had just finished constructing out of goat and sheep skins in order that they might take the almost helpless woman to a physician. We told the Indians that such a journey was feasible all right, but that it would be necessary to have a good man to steer from the stern of the boat and another good man to keep the bow of the boat headed upstream and row like the devil all the time,--especially when approaching the numerous treacherous places where there are large boulders. We advised the Indians to line the boat downstream when they reached Devil's Elbow and Horse Shoe Bend, two of the most dangerous spots in the river. Noticing so many swift, rocky places that we had not observed before while we were going down the trail on the bank of the river, we became somewhat uneasy about the Indians, wondering whether they had succeeded in passing through these ugly waters safely.

"Immediately after arriving at Copper Center that evening, I called to see the Indian chief and told him about the party coming down Klutina River with the sick woman. As they had not been seen or heard of since leaving the lake, I suggested that a search party be sent out. The Indians arranged to do this the following morning.

"October 14: At Copper Center.

"Just as the search party was ready to start, we heard some peculiar Indian yells, and looking up toward the Klutina River bridge saw Big Charlie rowing, for all he was worth, the little skin boat which held his sick wife and the other Indian who did the steering. They were dripping wet from the splashing waters, but they were very happy and proud of the fact that they had safely navigated the swift Klutina River.⁸⁷

Between 1924 and 1931 the Bureau of Fisheries sent additional agents to Klutina Lake. Not all of their reports are available—for example, the expeditions of 1930 and 1931. Nor do the available reports shed much new light on conditions in the area. In August 5-8, 1924, Howard H. Hungerford, local photographer Lewis H. Smith, and guide John Hondel traveled over the Copper Center-Klutina Lake trail with packhorses. They built a raft and with this crossed the river to examine Mahlo River and Manker Creek. Unable to ascend the lake in the raft because of rough water, the three men walked the distance to examine St. Anne Creek. Retracing their route, they were back in Copper Center by August 20.88 In 1932 the Bureau's office in Washington sent a memo to its Cordova agent, describing salmon spawning grounds of the Copper River. As concerns the Klutina River system, the Bureau stated that Klutina Lake was accessible by "good trail following the north bank of the river" and that Mahlo River was accessible by raft from Klutina Lake. However, one must build the raft because there were no boats available for use on the lake. The Bureau went on to remark that the 1931 expedition used a rubber boat on the lake and found it to be "very satisfactory." Cabins were reported to be located at the rapids on Klutina River, at the mouth of St. Anne Creek, and at the outlet of St. Anne Lake. In 1932 the Bureau did not send another expedition to the Klutina River because of lack of funds.89

⁸⁸ Howard H. Hungerford, Temporary Assistant, "Report of Investigation of Sockeye Salmon Escapement in the Copper River, 1925," General Records—Copper River, 1922-36, Entry 92, Division of Alaska Fisheries, Bureau of Fisheries, RG 22, NA. Microfiche at Alaska Resources Library.

⁸⁷ Shirley A. Baker, Assistant Agent, Alaska Fisheries Service, to Commissioner of Fisheries, November 10, 1921; and Shirley A. Baker, "Chronological Report Covering Investigations on the Copper River, Oct. 1 to Oct. 18, incl., 1921," Copper River, 1921, Reports of Bureau of Fisheries Agents, 1917-29, Central Classified Files, RG 22, NA. Microfiche at Alaska Resources Library.

⁸⁹ Henry O'Malley, Commissioner, to N. O. Hardy, Warden, Cordova, June 14, 1932, General Records—Copper River, 1922-36, Entry 92; and "Copper River Original Copy," c. 1935, Bureau of Fisheries, Alaska Division, Entry 167, RG 22, NA. Microfiche at Alaska Resources Library. Subsequent surveys of the Klutina River system may

Post-Statehood Period, 1959-2002

In the late 1960s, numerous reports of boats on Klutina Lake and Klutina River began to appear in government documents, local newspapers, and magazines. The building of the Copper Center-Klutina Lake road or Brenwick-Craig Road, which made the lake accessible to autos and trucks with boat trailers, helps explain the rise of these reports. The building of the road also encouraged local Native residents with longstanding ties to the land to file applications (mostly Native allotments) with the BLM for allotments along Klutina Lake and Klutina River. Some residents were undoubtedly motivated to make these applications because of the new State's land selections and the probable repeal of the Alaska Native Allotment Act of 1905 by the Alaska Native Claims Settlement Act of 1971.

Klutina Lake Road

As early as 1936 some local residents had discussed the possibility of building a trail or road from Copper Center to Klutina Lake. Reporting on needed roads and trail in the Valdez district at a Valdez Chamber of Commerce luncheon, Stanley J. Nichols, a miner and a later deputy U.S. Marshal, included the Klutina River trail, arguing that an improved trail or road would "open that marvelously scenic country both to tourists and prospectors and miners." Martin Harrais, a Valdez political leader looking to obtain federal funds for river and harbor improvements, reminded chamber officers that Klutina Lake was a natural landing place for airplanes with pontoons. His idea apparently was to build a dock for floatplanes. Prospectors could then use rowboats on the lake. 90

Local residents undertook construction of a road to Klutina Lake after the State enacted a Pioneer Access Road Law (Chapter 154, SLA 1960), which provided State monies in support of road construction into remote areas. The Klutina Lake road, approximately twenty-three miles long and closely following the river, was constructed from Copper Center to Klutina Lake between 1963 and 1965. ⁹¹ By one account, the road comes within fifty feet of the river at approximately thirty-four places. ⁹²

Leonard Brenwick of Glennallen and his brother-in-law Oscar Craig are credited with building the road. ⁹³ The two men may have been encouraged to undertake the project after the new state enacted the Pioneer Access Road Law. In October 1963, Lucy Brenwick, Leonard's wife, who had filed for a Native allotment along the lake a few months earlier, informed the local

have been conducted by airplane. In August 1940, for example, the Bureau of Fisheries conducted a salmon spawning survey of Tonsina, Klutina, Tazlina, and Paxson Lakes by airplane. Ward T. Bower, *Alaska Fishery and Fur Seal Industries:* 1940 (Washington: GPO, 1942), 17.

⁹⁰ Valdez Miner, June 5, 1936, 1, 5; August 14, 1936, 1,3.

Hagen cites the year 1962 as the beginning of construction. Alfred Hagen, "Klutina Lake," Alaska Sportsman (March 1967): 35.
 Gregory A. Miller and Kara A. Nyquist, Memorandum in Support of Defendants' Motion for Partial Summary

⁹² Gregory A. Miller and Kara A. Nyquist, Memorandum in Support of Defendants' Motion for Partial Summary Judgment, October 18, 2002. *Ahtna, Inc. v Josh Hughes and Randy Hughes, d/b/a King Fishers Perch*, Superior Court Case no. 3AN-02-5375 CI, file AA010438, part 5 (75.4), ANCSA files.

⁹³ In 1960 Edward M. Divine of Glennallen claimed in his application for a headquarters site along Klutina Lake that he had built nine miles of road from Copper Center. Nothing more is known about this work.

newspaper that her husband and brother had built about twelve and a half miles of road with an old cat and the help of local residents, namely George Ashby, Jerry Leubke, Homer Jones, and Jim McKinley. They had had several major equipment breakdowns, and, as a result, they did not plan to finish the road until next summer. 94 Two months later, Brenwick contacted his State representative, asking his assistance in obtaining a larger cat and a heavy grader, besides culverts and oil, in order to continue work on the "pioneer access road." The purpose of the road, he explained, was to access land claims that he and others had filed along Klutina Lake. Once the road was built, he planned to set up and operate a sawmill at the lake. Since work on the road had started, others "have showed interest in getting land at Klutina Lake." Without the road, the lake "is accessible only by air or foot." In support of Brenwick's appeal, George I. Ashby of Copper Center wrote a State senator, "When finished, this road will afford fellow Alaskans access to a greater area for hunting, fishing and recreation than is now enjoyed in a large portion of the state. Land will be accessible for home and cabin sites and will in the future grow to be an aid to our state's economy."96 As the principal landowner in the area, the BLM had no objection to Brenwick cooperating with the State in improving the "Klutina Lake trail" for a "public road."97

The State contributed funds to the road construction project (Project X-5119) in 1964 and possibly in 1966. Operating under a State contract of \$6,440, Brenwick had the use of two large bulldozers in the fall of 1964. The following year, he completed the road to the lake. In 1966 the State Department of Highways solicited proposals for the improvement of the "Klutina Lake" Access Road"—basically widening the road to twelve feet, constructing turnouts, bridges, or culverts, clearing, eliminating switchbacks, grading, etc. The road was then suitable for four-wheel-drive trucks during the summer months only. 100 It is not known whether these improvements were actually made. According to Alfred Hagen, who popularized the road and Klutina Lake with an article published in the Alaska Magazine in early 1967, the contractor "improved the road slightly, flattening switchbacks on the Klutina Twist and building an airstrip at Mile 22."101 (Both the State and Ahtna, Inc., agree that the Klutina Lake Road is a valid R.S. 2477 right-of-way. The BLM has not taken a position on the claim. 102)

Hunting, Fishing, Trapping, and Recreation

⁹⁴ Copper River Current, October 25, 1963, 15.

⁹⁵ Leonard Brenwick, Glennallen, to Representative Robert I. Ditman, Valdez, December 9, 1963, file AA-010438 (75.4), part 5, ANCSA files.

96 Ashby wanted the road called the "Brenwick Road." George I. Ashby to Howard Hansen, December 8, 1963, file

AA-078662 (2822.01), ANCSA files.

⁷ Al. J. Holley to Leonard Brenwick, December 23, 1964, file AA010438 (75.4), part 5, ANCSA files.

⁹⁸ Completion Report, Lake Klutina Pioneer Access Road, Project X-5119, November 18, 1964, file AA-010438, (75.4), part 5, ANCSA files.

In 1964 a local writer going by the name of "Klutina Kate" retracted a statement that the road was finished. She said it wasn't. Current River Current, October 22, 1964, 13. According to Lucille Brenwick, her husband "built the now existing road into Klutina Lake in 1963 which was finished in 1965." Lucille C. Brenwick, Statement, August 16, 1971, file AA-7337 (2561), Native Allotment files, BLM Records, Anchorage.

Pioneer Access Road Law, Chapter 154, SLA 1960. Copper River Current, June 16, 1966, 1.

¹⁰¹ Alfred Hagen, "Klutina Lake," Alaska Sportsman (March 1967): 42.

¹⁰² Christopher J. Slottee, Opposition to Defendant's Motion for Partial Summary Judgment and Cross-Motion for Partial Summary Judgment, November 4, 2002, file AA-010438 (75.4), part 5, ANCSA files. See also file AA-078662 (2822.01), BLM records, regarding the Valdez-Copper Center trail.

Local residents generally agree that the road led to greater public use of the Klutina Lake area. In 1971 Lucille Brenwick wrote, "Since the new road was built, public use of the Klutina Lake area has increased many fold, particularly around the lake outlet." Lee Adler, a federal wildlife biologist, observed that the vicinity of the Klutina Lake outlet had become "a key recreation area." Stewart Nicolai, who owns a Native allotment along the lake, wrote: "the area around the outlet of Klutina Lake and five miles downstream has been used intensively by local natives and non-natives as a recreation area in recent years and to a lesser degree prior to 1963." So popular was the lake outlet by 1975 that Ahtna, Inc., was reportedly considering plans to build a lodge and campground near the lake outlet and airstrip. 104

Before the road was completed to Klutina Lake in 1965, four local residents had filed for Native allotments and a headquarters site along the lake. Claiming to have occupied the land in April 1960, Edward M. Divine of Glennallen filed for the headquarters site along Klutina Lake and the west bank of St. Anne Creek. In his application he stated plans to operate a sawmill at the site and to use it in connection with fur trapping activities. He noted as well that he had already built nine miles of road from Copper Center. For unknown reasons, Divine did not pursue efforts to obtain the site. The BLM closed his case after the five-year statutory period expired. 105

Lucille C. Brenwick of Glennallen, Fannie M. Sthienfield of Copper Center, and Jim McKinley of Copper Center, succeeded in obtaining Native allotments along the southern end of Klutina Lake. All applied for their allotments in 1963 and again in 1968. Brenwick filed for land along the north shore of Klutina Lake, just east of Chultik Creek. Sthienfield applied for land adjacent to, and west of, Brenwick's. McKinley's allotment is located across the lake from these two allotments at the mouth of Mahlo River.

Both Brenwick and Sthienfield first applied for their Native allotments in August 1963. Lucille C. Brenwick (born 1913) originally applied for 160 acres, but relinquished all except for forty acres in 1967. In her application she claimed to have used the land as a headquarters for hunting and trapping since 1963, this on a part-time basis as she held a job at Glennallen. In June 1972 the BLM examiner, who reached the site in a boat from the end of the road at the lake outlet, found three buildings (a cabin, a generator shed, and an outhouse), all built in 1968, on the land. He also noted a "cat trail" extending from the lake outlet to the site. ¹⁰⁶ In her 1968 application Sthienfield (1906-1986) claimed to have used her land annually since the summer of 1963 for

¹⁰⁴ L. J. Kajdan, Navigability Field Report, November 7, 1975, file AA-6658-EE, Part I; Robert D. Arnold to Chief, Division of ANCSA Operations, November 5, 1979, file AA-6658 A/1, ANCSA files.

¹⁰³ Lucille C. Brenwick, Statement, August 16, 1971; Lee R. Adler to District Manager, ADO, August 16, 1971; Stewart Nicolai, Statement, September 7, 1971, file AA-7337, Native allotment files, BLM Records.

¹⁰⁵ Edward M. Divine, Glennallen, "Notice of Location of Settlement or Occupancy Claim in Alaska," May 2, 1960, file A-051881 (2563), Box 385, Records of the Bureau of Land Management, RG 49, NA, Anchorage. It is not known whether Divine was associated with Leonard Brenwick. His references to a sawmill and a road suggest a possible connection.

¹⁰⁶ The BLM examiner recommended that a fifty-foot-wide trail be reserved under R.S. 2477. Instead, the BLM

reserved a twenty-five-foot-wide easement for a trail crossing the land between her cabin and the lake. Lucille C. Brenwick, Alaska Native Allotment Application, August 23, 1963; Lucille C. Brenwick, Entry Relinquishment (form), May 22, 1967; Lucille C. Brenwick, Alaska Native Allotment Application and Evidence of Occupancy, September 21, 1968; John Tiffany, Land Report, January 9, 1973, file AA-060536, Native allotment files, BLM records.

hunting, fishing, and berry-picking activities. The BLM examiner found no evidence of occupancy other than "an old, rusty cake pan and an old, rusty chimney jack" and two trails: the Klutina Lake Trail running along the lakeshore and the Ottaway Valley trail on the left bank of Chultik Creek. ¹⁰⁷

Jim McKinley (born 1899?), who, by the late 1960s, resided at Copper Center for much of the year, applied for an allotment at his family's trapping and hunting camp at the mouth of Mahlo River. The U.S. Geological Survey's Valdez C-5 quadrangle (1951) shows a cabin at this location. McKinley claimed that he was born and raised here from 1899 to 1918. Whenever he was not working for the Alaska Road Commission, he lived at the lake during the winter for trapping and during the summer for fishing. A house or cabin, built by his father in the 1920s and still usable in 1968, sat in a five-acre clearing. Upon visiting the site, a BLM land examiner found a "dilapidated but still usable cabin" as well as several "completely ruined cabins." When he questioned McKinley's use of all 160 acres of land, several Copper Center residents submitted statements in support of McKinley's claim. Stewart Nicholai recalled that in the spring of 1932 he had walked from Copper Center to Klutina Lake to inform McKinley that his son was missing. He stated that McKinley had lived there since 1929 and knew from others that he had lived there before that date. Walter Charley, a cousin of McKinley's, said that McKinley's parents had lived there for years. The BLM ultimately approved McKinley's application for the entire 160 acres. 108

After they had constructed the Klutina Lake Road, Leonard Brenwick and Oscar Craig (died 1967) applied for adjoining five-acre headquarters sites along the Klutina River, about a quarter-mile downstream from the outlet of Klutina Lake (in Sec. 26, T. 1 S., R. 3 W., CRM). (Craig had the upstream claim.) Evidently they intended to use the land in connection with hunting and fishing activities. In his application of 1965 Brenwick claimed to have spent more than \$1,700 in buildings on the land besides "several thousand dollars of my own money building a road to this area." He planned to provide "water transportation on Klutina Lake." Craig stated that he also intended to use the land for hunting and fishing. He claimed a cabin on the land that his father use to occupy many years ago. As the claims were in conflict with the Klutina Lake Recreation and Public Purposes classification of May 11, 1965, the BLM informed both men that their applications were unacceptable. Eventually, both cases were rejected and closed. 109

¹⁰⁷ Fannie M. Sthienfield, Alaska Native Allotment Application, August 28, 1963; Fannie M. Sthienfield, Alaska Native Allotment Application and Evidence of Occupancy, December 6, 1968; John Tiffany, Land Report, June 5, 1974, file A-60537, Native Allotment files, BLM records.

Jim McKinley, Alaska Native Application, August 26, 1963 and December 17, 1968, file AA060538; John Tiffany, Land Report, April 8, 1974, file AA060538, Native allotment files, BLM records. The examiner recommended the approval of forty acres and the reservation of a fifty-foot-wide right-of-way along the lakeshore under R.S. 2477 because "this is a good fishing lake."

Brenwick, Notice of Location of Settlement or Occupancy Claim in Alaska, August 17, 1965; Leonard Brenwick to Bureau of Land Management, April 10, 1966; Daniel A. Jones to Leonard Brenwick, September 14, 1966; and T. G. Bingham to District Manager, Anchorage, August 1, 1967, file A-063185, (2563), Box 472, Records of the Bureau of Land Management, RG 49, NA, Anchorage. After Craig's death, his wife Mary applied to purchase the site. In 1972 the BLM examiner reported that Mary Craig and two children lived on the land while hunting and trapping. BLM ultimately rejected the application because Mary did not use the land in connection with a commercial operation. Oscar J. Craig, Notice of Location of Settlement or Occupancy Claim in Alaska, September 15, 1965; John Tiffany, Land Report, June 16, 1972; Mary E. Craig, Application to Purchase

In 1965 three other men filed for five-acre headquarters sites along Klutina Lake, all of them near St. Anne Creek. Edward W. Ahrens of Anchorage occupied the land in late January 1965, planning to construct hunting cabins. So did Raymond G. and Neannine A. Hanes, both of whom occupied the land on January 25, 1965. Terrance M. McMullin of Copper Center planned to establish a trapping headquarters. None claimed any improvements. The BLM rejected all three applications for various reasons. 110

Three additional Native allotments are located along Klutina Lake or Klutina River. In 1966 and again in 1972 Herbert R. Smelcer of Glennallen applied for land along the right bank of the Klutina River, about a mile below the lake. Smelcer claimed to have used the land since 1966 except for those periods when he served in the military and attended college, and he did not claim any improvements on the land. However, in August 1979 a BLM examiner discovered considerable evidence of long-term use of the land. (The examiner's report is not in the casefile.) He saw and photographed a partially finished cabin; an outhouse; remains of an old cabin and an old steambath; an old cabin which Smelcer had fixed up; another cabin "well stocked and signs of use inside," and a boat that Smelcer had found on the land.111

Mildred E. Truitt's Native Allotment parcels are located along Klutina Lake at St. Anne Creek and on both sides of the Klutina River at the lake outlet. Her case was a controversial one, partly because she was not a resident of the Copper River region, partly because local residents could not attest to her use of the land before construction of the Klutina Lake Access Road and the Recreation and Public Purposes Classification of May 1965, and partly because she had applied for highly desirable land. In 1971 Truitt filed an application under the Native Allotment Act, claiming that she had occupied the land in April 1965 for the purposes of fishing, berry picking, hunting, and trapping. For improvements, she cited campsites, a remodeled old cabin, and traplines. 112 Truitt subsequently claimed that she had used the land before 1965. Numerous people outside of the Copper River region submitted statements and affidavits to the BLM in support of her claim. According to her husband Charles McKee (married Sept. 1971), Truitt had been traveling to Klutina Lake annually since 1960, hiring Paul Leveulette, a pilot and operator of Mt. Tyone Lodge on Tyone Lake, to fly her to the lake. Beginning in 1965, she used the road each year to reach the lake. 113 Several pilots and hunters corroborated this statement. They

Headquarters Site," June 23, 1972; J. A. Hagans to Mary E. Craig, December 14, 1972, J.A. Hagans to Mary E. Craig, June 7, 1973, file A-063606 (2563), BLM records.

¹¹⁰ Edward W. Ahrens, Notice of Location of Settlement or Occupancy Claim in Alaska, April 22, 1965; file A-062382 (2563), Box 442; Raymond G. and Neannine A. Hines, Notice of Location of Settlement or Occupancy claim in Alaska, April 22, 1965, file A 062381 (2563), Box 442; Terrance M. McMullin, Notice of Location of Settlement or Occupancy Claim in Alaska, June 1, 1965, file A-062551 (2563), Box 443, Records of the Bureau of Land Management, RG 49, NA.

¹¹¹ In 1982 the BLM surveyed forty acres and conveyed the land several years later. Herbert Roy Smelcer, Alaska Native Allotment Application, July 18, 1966; Herbert R. Smelcer, Alaska Native Allotment Application and Evidence of Occupancy, July 13, 1972; file AA-88, Native allotment files, BLM records. There are nineteen color photos of the land, improvements, and artifacts in this file.

Mildred E. Truitt, Alaska Native Allotment Application and Evidence of Occupancy, July 28, 1971. The application for three parcels was approved in 1975. Robert E. Sorenson to Mrs. Mildred Truitt McKee, July 18, 1975, file AA-7337, Native allotment files, BLM records.

¹¹³ Charles McKee, Statement, November 6, 1974; and Harold Brown to Casefile AA7337, September 16, 1974, file AA-7337, Native allotment files, BLM records.

usually flew to Klutina Lake in floatplanes in August of each year beginning in 1960 or 1962, and often met Truitt or family members at the lake. They observed her fishing and drying moose meat. One man claimed to have traveled overland from Copper Center to Klutina Lake in 1963, 1964, and 1965. Clifford N. Penn of Anchorage said that in August 1963 he and Dwight Gosnel went to Klutina Lake for the first time on a hunting trip. He drove the road as far as possible and then took motorbikes or trail bikes the remaining distance to the lake. At the outlet he saw a camp where someone was drying fish and moose meat. It was also there in 1964. The following year, he crossed the river and met Truitt and her husband there.

The last Native Allotment is located along the Klutina Lake Access Road on "nearly level land above the bluff" overlooking the river. (More specifically, the land claim is located in Sections 23 and 26, T. 1 N., R. 2 W., CRM, about 11½ miles from Copper Center.) Stewart Nicolai (over 60 in 1972) of Copper Center applied for the land in 1969, writing that he had used this land during the winter to hunt moose and trap marten, lynx, and wolverine since November 1936. He cited a campsite and tent frame as improvements. A BLM land examiner visited the site in 1972 and found the improvements. 116

Aside from the headquarters sites and Native Allotments, a Boys' Camp was also operated near the Klutina Lake outlet in the late 1960s and early 1970s. Carl J. Wilson, the camp operator, entered the area in 1967 and filed for a homestead (160 acres) along the Klutina Lake Road in Sections 29 and 30 T. 2 N., R. 1 W., CRM. According to Wilson, he and his wife resided on the land from 1967 to 1971, building a house, a garage, several sheds, a well, and an outhouse. In 1972 he relinquished eighty acres and then apparently abandoned the land as he filed no further documents with the BLM. The BLM canceled the entry. In any case, Wilson operated a Boys' Camp at this location before he abandoned the land and then moved it upriver to the lake outlet onto Oscar Craig's land claim, which he had leased from Craig's wife. According to federal biologist Lee Adler, Wilson "was trying to help train and rehabilitate boys at his camp. He trained them in woodcraft and self sufficiency. He also had them do chores and learn the meaning of physical labor. Some of the chores were K.P. duty, trail building and general maintenance work. He also trained them in safe gun handling; this area is heavily populated with black and grizzly bears. . . ." It is probably left the site in the early to mid-1970s after the BLM rejected Mary Craig's application for the land.

Recreational and Commercial Boat Traffic

¹¹⁴ According to Paul Leveulette, his father had taken Mildred Truitt from Anchorage to Klutina Lake in his airplane each year between 1960 and 1965. Paul Leveulette, Jr., Statement, October 14, 1974, file AA-7337, Native allotment files, BLM records. This voluminous file contains numerous statements corroborating Truitt's claim that she used the lands prior to 1965. Several were made by hunters who made annual fall trips to the lake by floatplane. Other people corroborated this statement.

¹¹⁵ Clifford N. Penn, Anchorage, Statement, October 15, 1974; Clifford N. Penn, Affidavit, October 26, 1974, file AA-7337, Native allotment files, BLM records.

¹¹⁶ Stewart Nicolai, Alaska Native Allotment Application and Evidence of Occupancy, September 9, 1969; John Tiffany, Land Report, June 16, 1972; Ralph W. Wilson to File of U.S. Survey No. 5112, January 28, 1974, file AA5724 (2561), Native allotment files, BLM records.

¹¹⁷ See file AA-999 (2567), BLM records.

¹¹⁸ Lee R. Adler to File, April 29, 1974, file AA-7337, Native Allotment files, BLM records.

During the latter half of the 1960s, recreational boaters traveled over the Klutina Lake road to visit Klutina Lake and the upper reaches of Klutina River. Beginning in the late sixties or early seventies, reports of recreational float boating down the entire Lower Klutina River were published. In the early seventies, jet boats with powerful motors were used on the entire river. By the eighties, commercial recreation operators were transporting sports fishermen and tourists up and down the river in powerful jet boats and inflatable rafts.

Klutina Lake Boating

At the time of statehood, few if any boaters operated on Klutina Lake. In the early 1960s Clifford Penn of Anchorage submitted several statements to the BLM in support of Mildred Truitt's Native allotment applications in the Klutina Lake area. Clifford Penn of Anchorage recalled a trip he made to Klutina Lake over the Klutina Lake trail in 1963 or 1964 and seeing someone in a boat on the lake. He thought it was Truitt and her husband (McKee) because when he returned over the same trail in 1965 the couple took him to St. Anne Creek in a boat. If Penn's memory is correct, the question arises as to how Truitt's boat was transported to the lake—by river, air, or land? According to McKee, his wife and family always accessed the lake prior to 1965 by airplane. After 1965, when the Klutina Lake Access Road was completed, they traveled overland to the lake. Certainly by 1968 Truitt's family had a boat on the lake. In August of that year, Paul S. McGiboney recalled, Truitt and he traveled from a boat landing near the lake outlet to St Anne Creek where they fished for whitefish, lake trout, and grayling.

Beginning in 1965, when the Klutina Lake Road was completed, the Copper Center and Valdez newspapers carried reports of local residents traveling to the lake to hunt (bear), fish, and recreate. Certainly they took boats with them. On one weekend nearly two dozen people went to the lake. At least one couple had a boat on the lake. ¹²² In late August 1967 John E. Blodgett and Edward F. Porsch, two young men working on a state highways project in the area, drowned when their canoe apparently overturned in the lake. When they did not show up for work, a state employee flew over the lake and spotted their submerged canoe. ¹²³

In March 1967 the popular *Alaska Sportsman* magazine published Alfred Hagen's article about the new Klutina Lake Road and the lake's gold rush history. Hagen made at least five overland trips to the lake. He did not identify when he made the first one. It was not an easy trip, he wrote. It took two hours to cover the twenty-three-mile-long road—"seventeen miles in second gear, five miles in low gear and one mile in high gear." In the fall of 1966, he noticed the road was "somewhat improved" and a gravel airstrip about 1,200 feet long alongside the river at Mile 22. For the benefit of history buffs, he reported "well over one hundred cabins from Mile 19 to

¹¹⁹ Clifford N. Penn, Statement, October 15, 1974; Clifford N. Penn, Affidavit, October 26, 1974, file AA-7337, Native allotment files, BLM records...

¹²⁰ Harold Brown to Casefile AA-7337, September 16, 1974, reporting on a visit by McKee and his attorney, file AA-7337, Native allotment files, BLM records.

¹²¹ Paul S. McGiboney, Statement, October 5, 1974, file AA-7337, Native allotment files, BLM records. On August 12, 1971, federal biologist Lee R. Adler visited a tent near the outlet of Klutina Lake. He found a notice of intent signed by Mildred Truitt. It read, "By Klutina River pioneer access road and by boat." See Lee R. Adler, Land Report, June 16, 1972, AA-7337, Native allotment files, BLM records.

¹²² Copper River Current, September 5, 1965, 11; Alaskan Bush News, July 25, 1968, 3 and August 8, 1968, 4. ¹²³ Valdez Breeze, September 8, 1967, 1; Fairbanks Daily News-Miner, September 7, 1967, 1.

Mile 23" dating from the gold rush days. On his second trip to the lake, Hagen hauled "a twelve-foot aluminum cartop boat with a 5 ½ h.p. outboard." He launched the boat at Mile 22, determined to proceed upriver to the lake and explore its shoreline. He was surprised by the river's current, writing it "seemed we stayed in one spot for fifteen minutes before moving against the swift current." Eventually he reached the lake three miles upstream and followed the southern shore, exploring small creeks and cabins. He experienced no difficulties until he reached a point about halfway up the lake. When the wind started to blow hard, he decided to cross the lake to his camp on the north shore. It was a foolish decision, he wrote, because they encountered four-foot waves that could have easily swamped the small boat. Hagen recommended to his readers who wanted to visit the lake that they bring a cartop boat with at least a ten-horsepower motor or "that eighteen-foot cruiser or larger," which he thought would be ideal for the lake. He warned that it was necessary to have the right vehicle to travel over the road, especially that part at Mile 14 called the "Klutina Twist," where the road was a series of steep and sharp switchbacks on a hill. 124

No doubt Hagen's article in the *Alaska Sportsman* helped to popularize Klutina Lake as a recreational destination. The lake offered opportunities to fish, hunt, and retrieve artifacts of the gold rush era. By the early 1970s, two to three hundred hunting and fishing parties annually visited Klutina Lake by auto and airplane. During the summer of 1974, as many as twenty-five vehicles were seen at one time at the upper end of the Klutina Lake Road. It did not take long for someone to launch a cruiser. In 1970 Frank Brandau of the Alaska Department of Fish and Game observed a man with "a large cabin cruiser type boat" near the lake outlet. He used the boat while fishing during the early summer weekends.

Klutina River Boating

Beginning in the early 1970s, kayak and inflatable raft enthusiasts were attracted to the Klutina River, driving the road to the lake and then floating down the river to Copper Center. In mid summer 1970 M. K. Hession accompanied a group of ten or twelve kayakers who descended the river from a point just below the lake. In her account of the trip, Hession thought that the road was more of a challenge than the river. She described it as a "bad (unimproved jeep road) but passable in VW's [Volkswagons] and other high clearance vehicles." On the other hand, she classified the river as a low III. The river was then flowing at about 4,400 cubic feet per second. It was not a difficult river to kayak, she wrote, though many in the party were novices and ended up swimming in the river and one person's boat was even crushed in a logjam. "It's good

¹²⁴ Hagen, 34-35.

¹²⁵ L.J. Kajdan, Navigability Field Report, November 7, 1975, file AA-6658-EE, Part 1, ANCSA files. This file contains numerous statements from the public about use of the Klutina Lake as well as Hudson Lake.

[&]quot;Justificiation Statement for Public Use Recommendations: Klutina River Road," n.d., file AA-6658-EE, Part I, ANCSA files.

¹²⁷ Frank Brandau, Billings, Montana, to Kenneth Roberson, Alaska Department of Fish and Game, November 10, 1973, AA-7337, Native allotment files, BLM records. See also Scott Anderson's "Outdoors" column describing a fishing trip to Klutina Lake over the road during a Fourth of July weekend. *Fairbanks Daily News-Miner*, July 9, 1976, 15. "It's a long, hard drive to Klutina Lake, but once you're there the lake and the Klutina offer top quality fishing" for red salmon, Dolly Varden, whitefish, grayling, and lake trout.

whitewater and pretty too," she opined. ¹²⁸ In 1972 a large group from Fairbanks also descended the river in kayaks. ¹²⁹

Boating enthusiasts generally classify the Lower Klutina River as a WW II-III stream. ¹³⁰ In 1976 Sepp Weber, a kayak enthusiast, wrote that the river "offers fantastic white-water paddling at low water volume. It is dangerous, if not possible, at high water." He classified the uppermost ten miles as WW2 and the remaining distance as WW3. In 1982 Jack Mosby and David Dapkus rated the river as "easier than the Tonsina but harder than the Tazlina River" to navigate by kayak, raft, and whitewater canoe. In 1994 expert kayaker Andrew Embick, who resided at Valdez, described the river as "a wide-open, unobstructed river which is quite fast but not technically difficult." He indicated, however, that the river did not attract many recreational boating enthusiasts. "The river is too hard for canoeists, too easy to be a challenge for macho kayakers (though the surfings and play are good), too short for an extended wilderness touring trip, and too long a drive for a short day trip!" he wrote. Nevertheless, those who wanted to float the river could hire Jon Breivogel of Copper Center to transport kayaks in his jet boat to Klutina Lake for \$75 or \$80 per person, depending upon the total number of people. ¹³¹

By 1975 at least, commercial fishing guides were operating up and down the entire length of Klutina River in riverboats. ¹³² Evidently the industry grew by leaps and bounds. By 1988, the Klutina River fishery was the second largest in the Upper Copper River basin, surpassed only by the Gulkana River fishery. According to the Alaska Department of Fish and Game (ADF&G), "Shore anglers primarily fish the lower 1 mile of the Klutina River near Copper Center along the Richardson Highway while float anglers access the river at Klutina Lake. Boat anglers use the launches at Copper Center and can fish the entire river, but most of the boat fishery takes place in the lower 8 river miles. The fast water of the Klutina River makes this a challenging boat trip and limits it to only the most experienced boaters equipped with large jet riverboats." ¹³³ In 1989 the ADF&G reported approximately twelve guides operating boats on the river. In comparison, five guides operated on the Gulkana River. In the period June 24 to August 10, the guides made 416 trips. Of the 123 fishing parties interviewed by the ADF&G, almost ninety percent had been guided. The remainder were "generally local residents with vast river boat experience that were familiar with the river." Most shore anglers stayed between the new and old Richardson

¹²⁸ M. K. Hession, typed statement, n.d., file AA-6658-EE, Part I, ANCSA files.

¹²⁹ "Justification Statement for Public Use Easement, n.d. (Klutina River), file AA-6658-EE, Part I, ANCSA files. This document also identifies Peter Hennig and Erhard Krinke as having descended the river in 1973. "Extra nice, extra pretty whitewater river, but undeniably the roughness of the road up to lake restricts use somewhat. Use will increase greatly if road is made good."

benches." WW3 streams have "numerous irregular waves, rapids of medium difficulty, wide, clear passages, low benches." WW3 streams have "numerous irregular waves, rapids with narrow passages [and] require expertise in maneuver, inspection need, splash cover mandatory." Sepp Weber, *Wild Rivers of Alaska* (Anchorage: Alaska Northwest Publishing Co., 1976), 58. Mosby and Dapkus rated the stream as entirely WW3: "Rapids with high, irregular waves often capable of swamping an open canoe. Narrow passages that often require scouting from shore." Jack Mosby and David Dapkus, *Alaska Paddling Guide* (Anchorage: J&R Enterprises, 1982), 10.

131 Sepp Weber, 94 and 95; Mosby and Dapkus, 64; and Andrew Embick, *Fast and Cold: A Guide to Alaska Whitewater* (Valdez: Alpine Books, 1994), 156 and 157.

L.J. Kajdan, Navigability Field Report, November 7, 1975, file AA-6658-EE, Part I, ANCSA files.
 Kent J. Roth and Kevin J. Delaney, "Estimates of Sport Effort and Harvest of Chinook Salmon In the Klutina River, 1988," Fishery Data Series No. 80 (Juneau: Sport Fish Division, Alaska Department of Fish and Game, March 1989), 2.

Highway bridges. A little more than ten percent made the journey over the Brenwick-Craig Road (Klutina Lake Road) to within a few hundred yards of Klutina Lake. ¹³⁴

Not all guides use riverboats in their businesses. At least one company, headed by Josh and Randy Hughes, utilized inflatable rafts. These may be launched at various places along the road. In 2002 Ahtna, Inc. sued the company when it off-loaded rafts from the Klutina Lake road to the river, arguing that the sixty-foot-wide road easement which may abut the river at various points did not allow one to access the river at these points without the corporation's permission. Ahtna, Inc., would rather funnel access to the river at the site easement near the lake outlet. 135

Upper Klutina River Boating

In 1993 the BLM learned from local residents that some boating has occurred on the Upper Klutina River. Lee Adler, a federal biologist, recalled that he had used a raft on the river. Jon Breivogel, a well known jet boater in the Copper Center area since about 1972, stated that he operated primarily on the Lower Klutina, but he had been on the Upper Klutina a few times. In 1974 he ascended the western branch of the Klutina to its head and then descended what he thinks was the eastern branch. The two branches were similar in character. The western branch was not as wide as the eastern branch, but it was at least four feet deep along the western bank. The eastern channel was a wide, braided stream, especially at its delta, and was at least two feet deep in the main channel. 136

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, land status, the historical record pertaining to the Klutina River system as set forth above, and the legal guidance on title navigability, we conclude that the Upper Klutina River, Klutina Lake, and Lower Klutina River are navigable. The United States no longer has any right, title, or interest in the lands underlying Lower Klutina River, the riparian lands having been conveyed to Ahtna, Inc. In 1979 the BLM determined that the Lower Klutina

¹³⁴ Wilson D. Potterville and Keith A. Webster, "Estimates of Sport Effort and Harvest of Chinook Salmon from the Klutina and Gulkana Rivers, 1989," Fishery Data Series No. 90-58 (Anchorage: Sport Fish Division, Alaska Department of Fish and Game, November 1990), 37 and 38.

Gregory A. Miller to Henri Bisson, November 15, 2002, and Henri Bisson to Gregory A. Miller, November 21, 2002, file AA-10438 (75.4), part 5, ANCSA files. The BLM's position is that the public may access the river from the road wherever the road easement abuts the river. The purpose of the easement is to provide access to public lands and major waterways.

¹³⁶ C. Michael Brown for Donald Koenig to File AA-6704-EE, April 30, 1993, file AA-6667-EE, ANCSA files, BLM records; see also Jon Breivogel's article, "About Jet Boats," in *Copper Valley News*, March 11, 1981, 7.

River from the Copper River to and including Klutina Lake is navigable. The following year, the 1979 determination was incorporated into an appealable decision which resulted in the exclusion of the bed of the river from the conveyance of uplands by Interim Conveyance Nos. 346 and 347. We find no reason to overturn that decision.

The BLM manages most lands along Klutina Lake. Ahtna, Inc., owns lands along the eastern end of the lake. A half dozen Native allotments are also located along the lake in this area. Again, in 1979 the BLM determined that Klutina Lake is navigable, and, in the following year, issued an appealable decision which resulted in the exclusion of the bed of the lake from the conveyance of uplands by Interim Conveyance Nos. 346 and 347. On the basis of this report, we affirm the determination of 1979 that Klutina Lake is navigable.

The Upper Klutina River, from the mouth of Stephens Creek to Klutina Lake, flows through two townships. In the uppermost township (T. 4 S., R. 4 W., CRM), the State owns the riparian lands. In 1983 the BLM determined that the Upper Klutina River is navigable in this township as far upstream as the mouth of Stephens Creek. Subsequently, the BLM incorporated this determination in a decision to convey uplands in this township to the State by tentative approval. The decision was not appealed. Inasmuch as a tentative approval has the same force and effect as a patent, the United States no longer has any right, title, or interest in the lands underlying the Upper Klutina River in this township. Downstream, in T. 3 S., R. 4 W., CRM, the Upper Klutina River flows northerly across BLM-managed lands to Klutina Lake. In 1983 and, again in 1993, the BLM determined that the Upper Klutina River in this township was navigable. Current information supports the determination that the river was susceptible to use for travel, trade, and commerce at the time of statehood. 137

We recommend that the State's application for "interconnecting sloughs" not be explicitly approved. The location of the ordinary high water mark (the legal boundary) of navigable waters changes over time. If the waters of the Upper Klutina River, for example, flow through a specific 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 riverbed may be subsequently affected by changes resulting from erosion, accretion, or reliction. If, for example, the 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.

Alaska officials of the National Parks Conservation Association, The Wilderness Society, and the Sierra Club have expressed doubts that the Upper Klutina would meet the federal test of title navigability. See Jim Stratton, Eleanor Huffines and Jack Hession to Mike Haskins, December 15, 2003, file AA-0085087, BLM records.