KUSKOKWAK CREEK
HUC 30502, Zone 2, Kuskokwim River Region

FINAL
INTERIM SUMMARY REPORT

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PREFACE

The research and writing of this study is funded by the U.S. Department of the Interior, Bureau of Land Management (BLM) through the Navigability Assistance Agreement (Cooperative Agreement # LO9AC15466). The State of Alaska (State) and the BLM established an assistance agreement in 2004 to facilitate the preparation of navigability reports that could be used for a variety of purposes, including the process for determining who owns title to the land under inland water bodies. Under the Statehood Compact, land under navigable waterways is reserved to the State. Navigability is based on historic use of water bodies for travel, trade and commerce up to the time of Statehood (1959), or recent use of the water bodies that demonstrates susceptibility to travel, trade and commerce in 1959.

The Navigability Assistance Agreement began as a pilot project focused on researching the history of use of water bodies in the Kuskokwim River region. The scope of work for the Assistance Agreement calls for identifying potentially navigable water bodies where the United States is an upland landowner or may otherwise have a potential interest in the submerged lands; gathering information from BLM records and a 1985 regional history of the Kuskokwim River region; writing narrative histories of each water body summarizing land status, land conveyance decisions, past navigability determinations, physical character of the water body, and a history of use on the water body. These reports are prepared in stages. The first stage (Phase I-A) consists of land status. An interim summary report (Phase II-B) is generally limited to information in the files of the U.S. Department of Interior and a regional history of the Kuskokwim River region written by C. Michael Brown in 1985. A final summary report (Phase IV) incorporates expanded research in materials located in other state and federal agency files, the holdings of various libraries and archives in Alaska, and interviews with people who have knowledge of use of the water body.

The present report represents work at the Phase II-B level. The research and writing of this report was conducted by State employees working under the guidance of an Assistance Agreement Management Team composed of representatives of BLM and the State. The management team sets priorities, reviews the reports on water bodies at various stages, and decides at what point enough research, analyses and writing has been completed on each specific water body. The management team directed the authors of these reports to refrain from drawing conclusions about the water body's navigability or susceptibility to navigability. Rather, the management team directed the authors to provide an overview at the end of the report summarizing the types of evidence of historic and contemporary use and highlighting those areas (such as portions of the water body) where gaps in knowledge remain and additional research might be warranted.

Documents that are key to understanding agency decision making or the point of view of an interested party are indicated as Attachment 1, Attachment 2, etc., which appear after the corresponding endnotes. These documents are listed in the Table of Attachments and can be viewed in their entirety in a separate PDF file that supplements this report.

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Attachment 2. Ann Johnson, Interim Conveyance (IC) No. 799 to Iqfijouaq Company and IC No. 800 to Calista Corporation, February 29, 1984, BLM files, F-14854-A.

Attachment 3. Wayne A. Boden, Memorandum on Navigable Waters on or along Small Tracts in Quinhagak (Window 1562), February 21, 1989, BLM files, F-14885-EE.

Attachment 4. Carl E. Neufelder, Land Law Examiner for BLM, Memorandum on Interview Report for Navigability on Kuskokwak Creek Native Allotment F-17479-C, February 14, 1989, BLM files, F-17479.

Attachment 5. MTPs for Kuskokwak Creek.

KUSKOKWAK CREEK
HUC 30502, Zone 2, Kuskokwim River Region
II-B Interim Summary Report

I. Introduction

Kuskokwak Creek is located in the Yukon-Kuskokwim Delta Region, within Zone 2 of HUC 30502 (Figure 1). Kuskokwak Creek empties into Kuskokwim Bay.

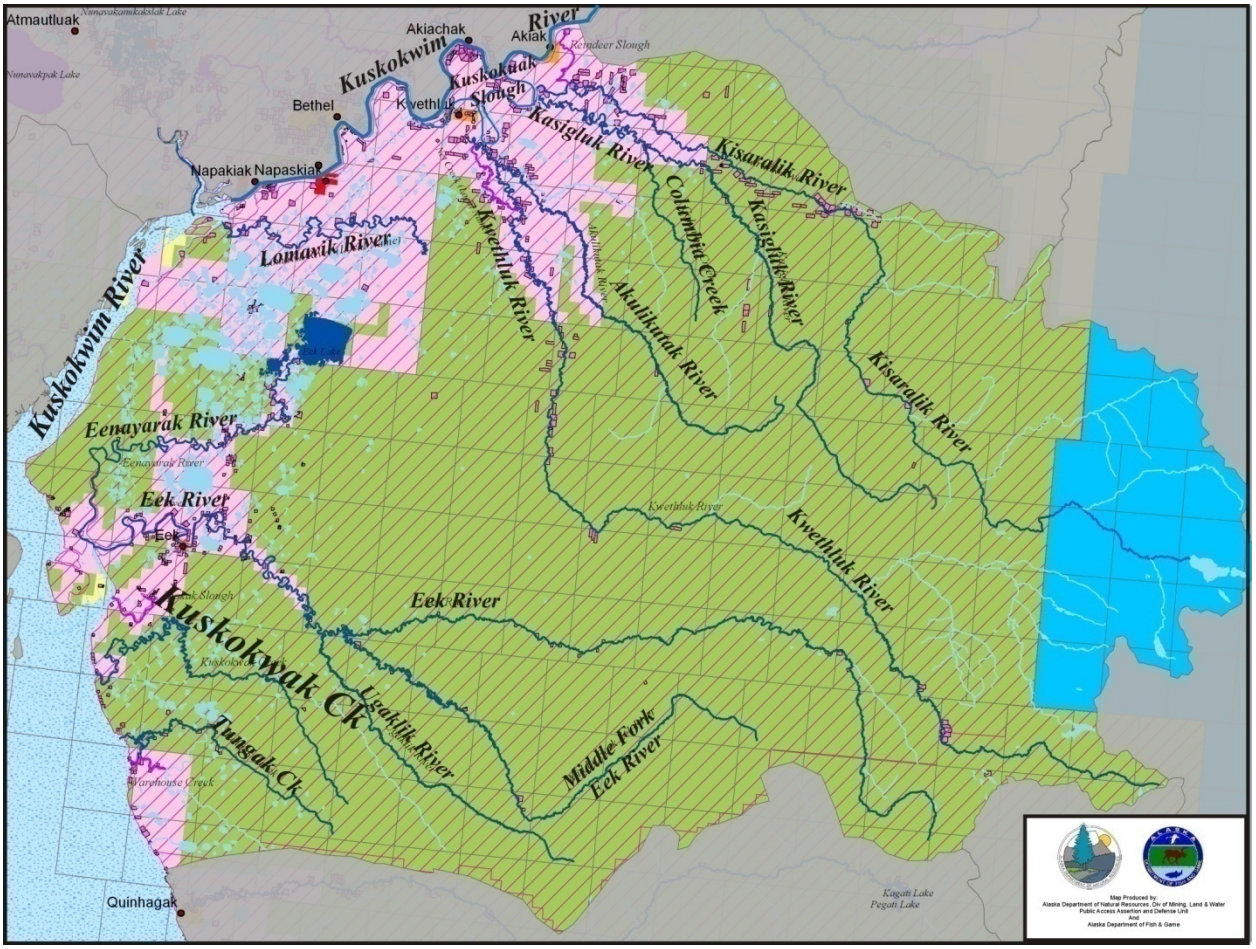

Figure 1. Map showing the location of Kuskokwak Creek within Zone 2 of HUC-30502 of the Kuskokwim River Region.

Kuskokwak Creek originates southwest of the Ugaklik River, about 60 air miles[i] southeast of Bethel. Kuskokwak Creek flows westerly to Kuskokwim Bay. The confluence of Kuskokwak

[i] All air mile distances in this report are based on measurements from: http://sdms.ak.blm.gov/isdms/imf.jsp?site=sdms

Creek with Kuskokwim Bay is approximately 14 air miles southwest of Eek and approximately 54 air miles southwest of Bethel.

The Eskimo name of Kuskokwak was reported in 1914 by the United States Coast and Geodetic Survey (USC&GS).[1] Kuskokwak Creek is one of ten water bodies that drain the Kilbuck Mountains and the south-central portion of the Yukon Delta National Wildlife Refuge (Yukon Delta NWR).

Kuskokwak Creek comprises eight townships:

TRM: Township (T.), Range (R.), (Seward Meridian)

T. 3 S., R. 71 W., SM	T. 3 S., R. 72 W., SM	T. 1 S., R. 75 W., SM
T. 1 S., R. 72 W., SM	T. 1 S., R. 73 W., SM	T. 2 S., R. 75 W., SM
T. 2 S., R. 72 W., SM	T. 1 S., R. 74 W., SM	

II. Land Status

Kuskokwak Creek is bounded by federal, Native village, regional and Native allotment lands (Figure 2-5). The upper, middle and lower portions of Kuskokwak Creek flow through the Yukon Delta NWR and the middle lower portion of the creek is bounded by Native lands and the Yukon Delta NWR. There is one Native allotment on Kuskokwak Creek and one close by. Calista Regional Corporation selected a Sec. 14(h)(1) historic site under the Alaska Native Claims Settlement Act (ANCSA) along the creek, which was recently patented (50-2007-0697) to Calista.

The lower portion of Kuskokwak Creek is located within lands which were selected by a Native village under the ANCSA of 1971 (Figure 2). Lands abutting the lower portion of Kuskokwak Creek were selected in the 1970s and conveyed to Iqfijouaq Village Corporation by IC No. 799 in 1984. The subsurface estate for these lands was conveyed to Calista Corporation in IC No. 800. None of these Native corporation lands have been patented, and they have not been surveyed yet by BLM.

Most of Kuskokwak Creek's lower reaches are located in the Yukon Delta NWR, with only a small portion of the lower river passing through village selection lands.

There are two Native allotments along Kuskokwak Creek. The first Native allotment, AA-37759-B, is located at the mouth of Kuskokwak Creek.[ii] The second Native allotment, FF-17479-C, is on the right bank of Kuskokwak Creek,[iii] between river miles 55 and 60, within the Yukon Delta NWR (Figure 3).

[ii] Certificate 50-91-0436, surveyed as United States Survey (USS) 9851.
[iii] Certificate 50-91-0141, surveyed as USS 9472.

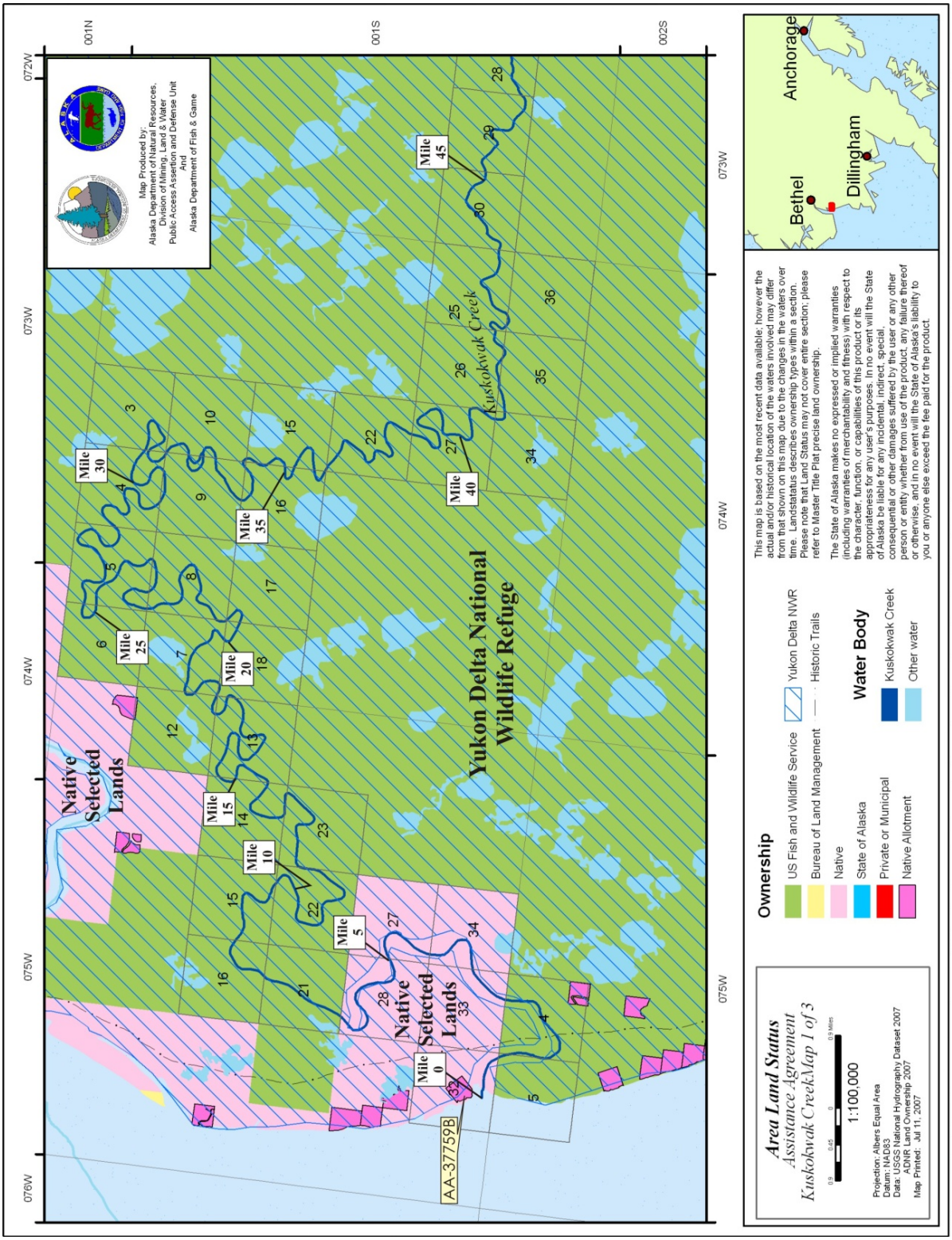

Figure 2. The lower portion of Kuskokwak Creek showing lands selected by Native corporations, Native allotments and federal lands.

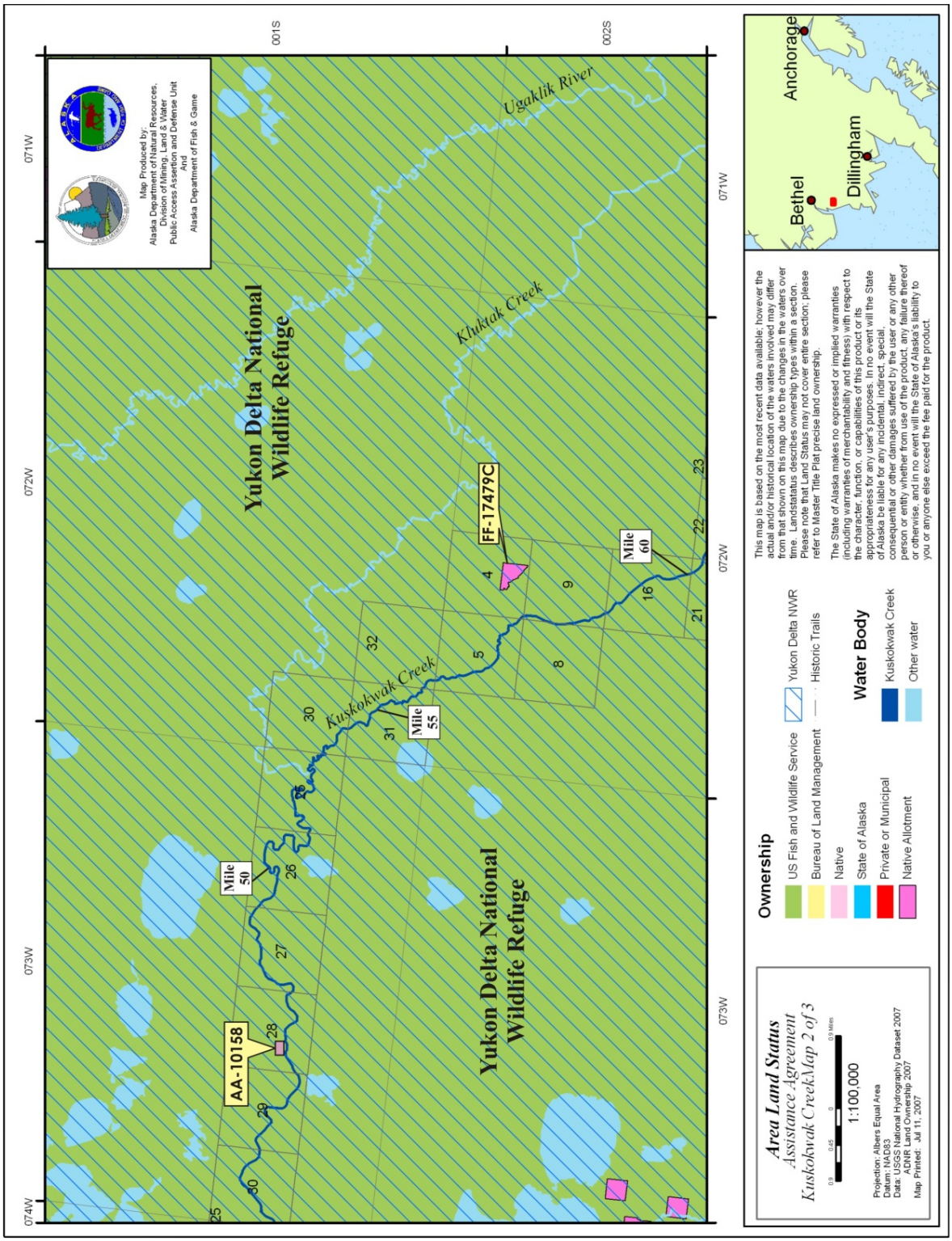

Figure 3. The middle portion of Kuskokwak Creek showing a Native allotment, a 14(h)(1) historical site, and federal lands.

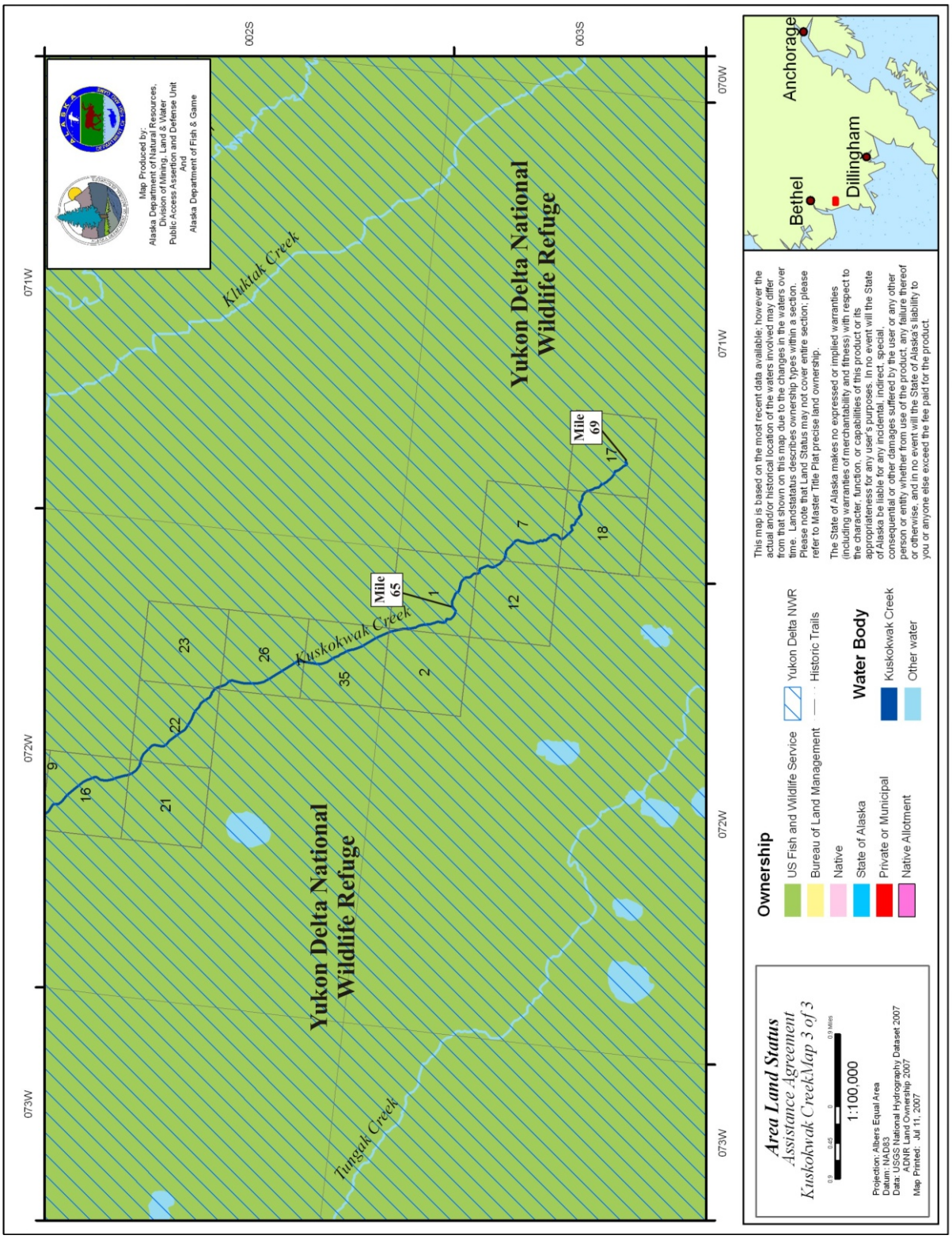

Figure 4. The upper portion of Kuskokwak Creek showing federal lands.

The middle and upper most portions of Kuskokwak Creek are located within the Yukon Delta NWR (Figures 2-5). The Yukon Delta NWR was withdrawn from unreserved public lands managed by the BLM in 1972 (Public Land Order 5184, March 9, 1972) and transferred to the federal refuge system under the Alaska National Interest Lands Conservation Act (ANILCA, PL 96-487) of 1980. Title to federal refuge lands in Alaska is held by the United States and the U.S. Fish and Wildlife Service (USF&WS) is the manager of the Yukon Delta NWR.

III. BLM Navigability Determinations

After Congress passed the ANCSA in 1971, Iqfijouaq Company, for the village of Eek, selected ANCSA lands along the lower portion of Kuskokwak Creek. The BLM began actively seeking information on navigable waters on Kuskokwak Creek in the 1970s as part of its adjudication of Native land selections.

The first BLM evaluation of navigability for Kuskokwak Creek occurred in an August 3, 1983 Amendment to Final Navigability Determination Memorandum for the Village of Eek. In the memo, the Deputy State Director for Conveyance Management Robert W. Faithful stated that Kuskokwak Creek served as a useful highway for watercraft and was navigable through Section (Sec.) 29, T. 1 S., R. 75 W., SM. [2] (Attachment 1) According to the USGS quadrangle maps (Baird Inlet A-1) Kuskokwak Creek passes through Sec. 28 of that same township and range, not Sec. 29. It is not known how this discrepancy arose.

Lands near the mouth of the creek were conveyed to the Iqfijouaq Company in IC No. 799 on February 29, 1984. The subsurface estate was conveyed to the Calista Regional Corporation in IC No. 800 on February 29, 1984. The ICs excluded navigable and tidal waters as follows:

> Excluded from the above-described lands herein conveyed are the submerged lands, up to the ordinary high water mark, beneath all water bodies determined by the Bureau of Land Management to be navigable because they have been or could be used in connection with travel, trade and commerce or are pending a tidal determination at the time of survey. Those water bodies are identified on the attached navigability maps, the original of which will be found in easement case file F-14854-EE.[3] (Attachment 2)

The attached "navigability maps" show that the creek crossed four sections of land; through which it was depicted by a "T" (meaning tidal). The submerged lands in Secs. 27, 28, 32, 33 and 34, T. 1 S., R. 75 W., SM (river miles 0 to 6.5) were excluded from the conveyance.

The BLM determined Kuskokwak Creek to be navigable within small tracts five years later in a memo dated February 21, 1989. The criteria used to determine waters as navigable in this case were craft larger than a one-man kayak. The report also stated that the creek was tidally influenced in tracts below river mile 47, where a historical site was located. The memo stated:

> Heading in small lakes southwest of Ugaklik River, this creek flows northwest and thence southwest to Kuskokwim Bay. On USGS Baird Inlet A-1 and Bethel A-8 maps, the creek is double-lined for forty-one miles. At [BLM] mile 37, in Sec. 28, T. 1 S., R. 73 W., SM, the creek forks. Here on the north bank of the creek, a historical and cemetery site (AA-10158) is located [river mile 47]. In addition, Native allotment F-17479-C is located in Secs. 4 and 5, T. 2 S., R. 72 W., SM [river mile 58]. All remaining small tracts below the historical site are on tidewater. The stream is almost certainly over three chains wide below this site...
>
> I determine Kuskokwak Creek navigable in or along small tracts located on the creek to and through Native allotment F-17478-C [Sic. F-17479-C] in Secs. 4 and 5, T. 2 S., R. 72 W., SM. Aerial photographs, both low and high-level, of the creek and an interview with Frank Brown support this finding. Brown travels to his allotment every year in a twenty-foot boat. [4] (Attachment 3)

Summary of Navigability Determinations: BLM Navigability determinations for Kuskokwak Creek are summarized below in Table 1 and shown in Figure 7. The BLM determined Kuskokwak Creek navigable in 1983 through the area selected by Iqfijiouaq Company for the village of Eek. Later, the BLM determined Kuskokwak Creek tidal through the village selection in Secs. 27, 28, 32, 33 and 34, T. 1 S., R. 75 W., SM (river miles 0-6.5), and the submerged lands were excluded from the conveyances. In 1989, the BLM determined Kuskokwak Creek navigable within small tracts in Native allotments in Secs. 4 and 5, T. 2 S., R. 72 W., SM (river mile 58), using the one-man kayak standard. No determinations have been made since 1989.

Table 1. Summary of Navigability Determinations on Kuskokwak Creek.

Dates	River Section	Type Decision and Substance	Navigability Criteria
8/3/83 Attachment 1	Lower	Navigability Determination Review: Kuskokwak Creek determined navigable through Sec. 29[28] T. 1 S., R. 75 W., SM (river mile 6.5)	Travel, Trade, and Commerce
2/29/84 Attachment 2	Lower	IC Nos. 799 & 800: Kuskokwak Creek shown as Tidal through river mile 6.5 in the village selection area on attached maps.	Tidal
2/21/89 Attachment 3	Lower-Middle	Navigable Waters Memo: Kuskokwak Creek determined navigable in small tracts through Secs. 4 and 5, T. 2 S., R. 72 W., SM (river mile 57). The creek is mentioned as tidal up to river mile 47.	One-man kayak and tidal.

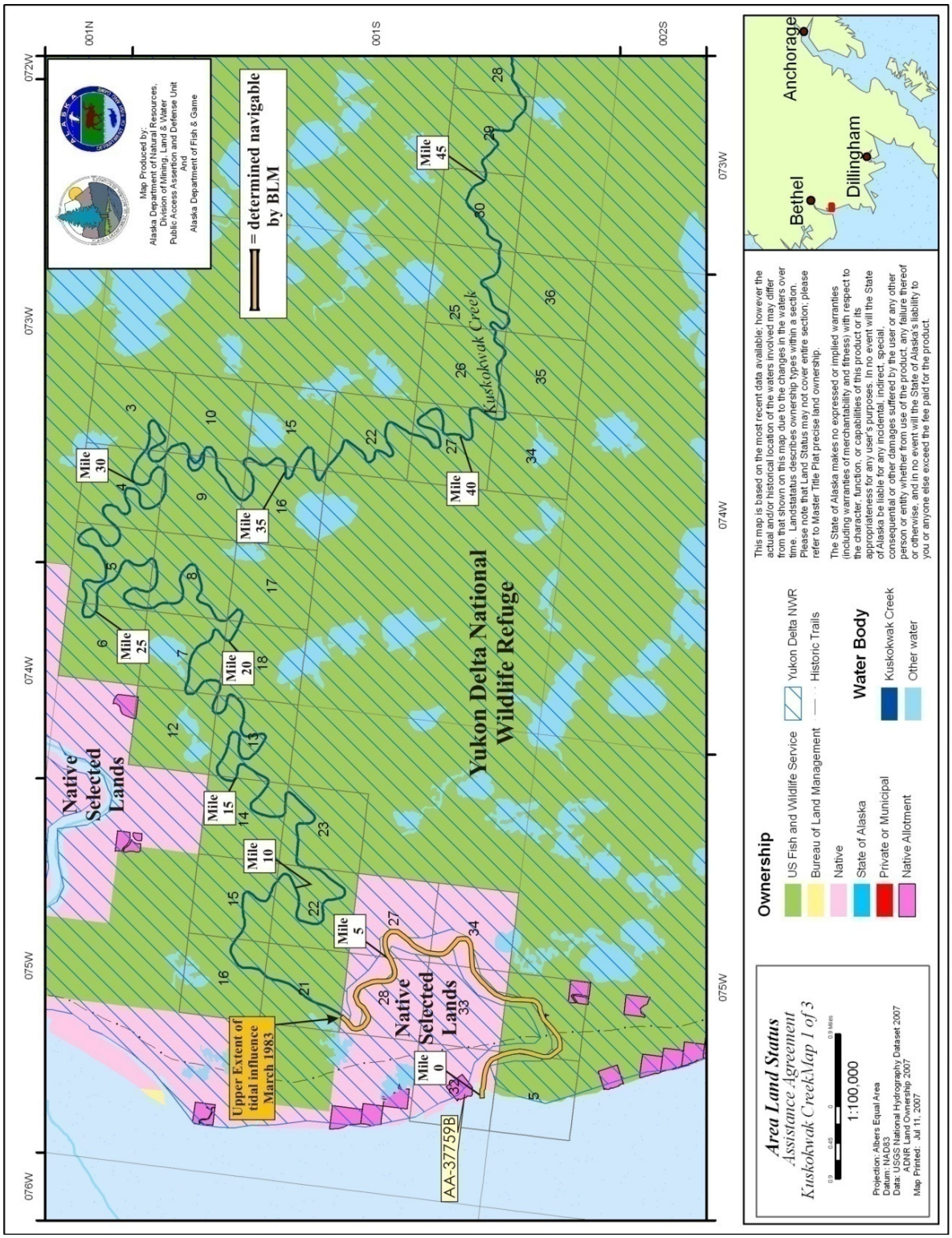

Figure 5. The portion of lower Kuskokwak Creek determined tidal by BLM.

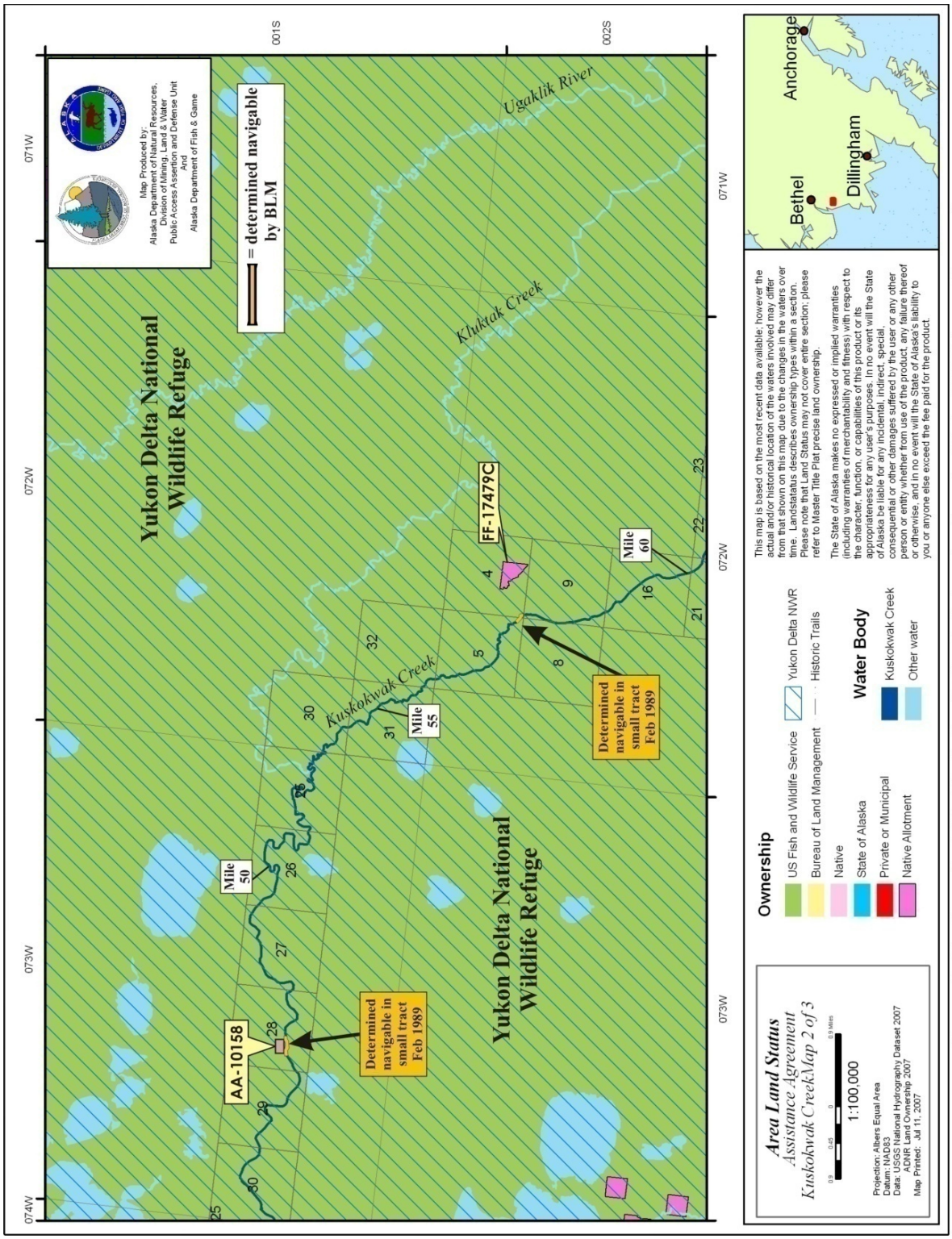

Figure 6. Portion of middle Kuskokwak Creek determined navigable by BLM in small parcels.

IV. Physical Character of the Waterway

Kuskokwak Creek, not to be confused with the nearby Kuskokuak Slough, which is an anabranch of the Kuskokwim River above Bethel, drains westerly to the Kuskokwim Bay (via the Kuskokwak Channel) below the village of Eek.

Kuskokwak Creek is 69 miles long[iv] and drains an area of approximately 240 square miles. The creek heads in the Kuskokwim Flats in Sec. 17, T. 3 S., R. 71 W., SM., approximately 50 feet above sea level. There are no lakes or glaciers that head Kuskokwak Creek. The creek flows generally northwest into Kuskokwim Bay in Sec. 32, T. 8 N., R. 69 W., SM., 54 air miles south of Bethel. Kuskokwak Creek varies in width, ranging from 20 feet to over 198 feet wide. The creek's depth varies from shallow in its upper reaches to six feet at its middle, depending on the location measured and the season. Kuskokwak Creek has an average gradient of one foot per mile. It is a meandering creek over most of its course, which lies within the Kuskokwim Flats.[5]

There is no information available pertaining to the vegetation along the length of Kuskokwak Creek. The creek has no major tributaries. There was no information found pertaining to the upper river, from Miles 69-60. Only limited details are available for miles 60-45. Local resident and Native allotment holder Frank Brown reported Kuskokwak Creek as being 20 to 30 feet wide and six feet deep through Secs. 4 and 5, T. 2 S., R. 72 W., SM (river miles 58 to 56).[6] (Attachment 4) A BLM memorandum describes the lower portion of Kuskokwak Creek (river miles 45 to 0) as over three chains wide.[7] (Attachment 2)

The BLM determined Kuskokwak Creek tidal from its mouth (river mile 0) upstream through Sec. 29, T. 1 S., R. 75 W., SM,[v] (river mile 6.5) in 1984 and the mean high tide line will be established at the time of survey.[8] (Attachment 1)

Kuskokwak Creek is within the transitional climate zone, which is between the maritime and continental climatic zones. This transition zone in the Yukon-Kuskokwim Delta area extends 100 to 150 miles inland.[9] No weather-gathering stations are located along or near Kuskokwak Creek. The nearest station is at Bethel, about 16 miles from the river. The average annual precipitation in the Bethel area is 16 inches.[10]

No hydrological data on Kuskokwak Creek is available. There have been no reported major obstructions or avulsive events along Kuskokwak Creek.

[iv] Different sources estimate the length of the river at 60 to 111.5 miles. The length of Kuskokwak Creek and the river miles used in this report are based on GIS calculations using the National Hydrography Data Set derived from U.S. Geological Survey quadrangle maps.

[v] As previously mentioned on page 7, Kuskokwak Creek does not pass through Sec. 29 T. 1 S., R. 75 W., SM.

V. Evidence of Use of the Waterway

Early Native Use of Kuskokwak Creek

Human occupation of the Kuskokwim area goes back 11,000 years to nomadic hunters of Pleistocene animals. These hunters were supplanted about 1,900 B.C., when Eskimos from the north moved into the lower Kuskokwim drainage, bringing with them the so-called Arctic Small Tool tradition.[11] Permanent occupation of the interior Kuskokwim Delta with chronological continuity began about AD 600.[12] Their descendents, the *Kusquqvagmiut* (also known as Yup'ik Eskimos or mainland southwest Alaskan Eskimos), have inhabited the Kuskokwim River and its tributaries down to the present as far inland as the village of Aniak. By 1880, their population was estimated at 3,100.[13]

There is one historical site (AA-10158, Patent No. 50-2007-0697) along Kuskokwak Creek at Sec. 28, T. 1 S., R. 73 W., SM. (river mile 47). A Bureau of Indian Affairs (BIA) ANCSA report from 1989 indicated that this historical site was a small camp and grave site.[14] The report describes the site as a "fall and winter camp occupied from the mid-1800s through the early 1900s. Cultural remains included one house depression, a small pit, a pile of reindeer antlers and a grave. Reported subsistence activities included hunting and trapping."[15] Further north along Kuskokwim River tributaries, such as the Kwethluk and Kisaralik rivers, evidence exists that local Natives traditionally used such riverside camps for hunting and then constructed large shallow-draft skin boats to return to their village downriver.

These large shallow-draft skin boats, known as *angyaqatiit* (bearskin boat), were made for a single journey and disassembled at the end of the trip. This broad raft-like craft was well suited for shallow, fast-moving streams. "They called it *angyaqatak* [from *angyaq*, 'open skin boat,' plus *qatak*, 'about to be'] because they were building them only to return home," according to Kwethluk elder Paul John. "They went up to the mountains in spring without boats, but their plan was to come back down river after breakup. While they were up there hunting, they tried to catch enough caribou or bears to make a boat with their skins."[16] The *angyaqatiit* were almost as wide as they were long, and often carried a family group. Their broad beam promoted safe travel in the fast-moving waters of shallow mountain streams. The boat was almost round and did not easily capsize in rapids. The vessel was made so it would not easily get crosswise with the current and fill with water. The wide beam enabled the boat to carry a heavy load (Figure 7). The raft-like hull shape gave it equal stability in all orientations. In rapids and turbulent currents, the *angyaqatiit* was much more stable than a kayak, but harder to steer, as the added stability meant that it resisted changing positions. Two people, one in the front and one in the back, used wide paddles to guide the boat away from rocks or logjams as they floated down stream.[17]

Some men also made *angyaqatiit* to return from fall camp in September, when they again hunted for caribou, moose, and bear in the mountains. They went to fall camp in mid-

August, walking beside the river and carrying their provisions in backpacks slung on wooden yokes. After the fall hunt, the travelers returned home using the skin boats. Then they disassembled the boats and used the wood frame and skins covering the boats for other things.[18]

Figure 7. *Angyaqatak*, skin boat built in 2007 on the upper Kwethluk River and exhibited at the Anchorage Museum of History and Art for the Yupik Science Exhibit. Photo from http://www.yupikscience.org/4rivsspring/4-1.html

Recent Native Use of Kuskokwak Creek Documented in Native Allotment Files

The BLM began collecting information in the 1970s to adjudicate Native allotment applications filed by local Natives that have fished, hunted and picked berries along Kuskokwak Creek. The Natives accessed favorite spots along the river for hunting, trapping, fishing and berry picking. These favorite spots, through customary use over many years, developed into exclusive use areas. The federal government recognized many of these allotments and transferred title to the sites to the applicants. Two individuals filed Native allotment applications for parcels along Kuskokwak Creek. The parcels have been surveyed (USS 9851 and USS 9472) and certificated (50-91-0436 and 50-91-0141).

Abraham Cleveland of Quinhagak filed his application on December 5, 1979 for a Native allotment (AA-37759) split into two parcels. The parcel along Kuskokwak Creek (AA-37759-B) is 39.95 acres. The allotment lies in Sec. 32, T. 1 S., R. 75 W., SM, on

the right bank of the mouth of Kuskokwak Creek. Cleveland claimed seasonal use of the land since August 1950 for berry picking and the hunting of waterfowl. The field report for this Native allotment specifically stated that Cleveland reached the allotment by boat.[19]

Frank Brown (deceased) of Eek filed an application on April 3, 1972 for a Native allotment split into three parcels. The parcel, C, on Kuskokwak Creek is 39.98 acres (FF-17479-C). The allotment lies in Sec. 4, T. 2 S., R. 72 W., SM, on the north side of Kuskokwak Creek between river miles 57 and 58. Brown claimed use of the land since May 1941 for seasonal use in the late spring, summer, and fall. The primary uses were fishing, hunting, and trapping. There was no mention in the Native allotment application or the BLM allotment field report of how Brown accessed his allotment.[20]

In a 1989 interview by BLM Land Law Examiner Carl E. Neufelder, Frank Brown stated that he traveled to and fished at his allotment every summer. As recently as the fall of 1988, Brown had travelled up Kuskokwak Creek to his parcel using a 20-foot river boat with a 90-horsepower motor. William Peake, who examined Brown's parcel, was later interviewed by the same Neufelder. According to the interview memorandum, Peake stated that "He couldn't specifically remember the stream and parcel location; however, he [Peake] mentioned that if one of the uses was fishing… that he [Brown] no doubt accessed the parcel by boat." [21] (Attachment 4) Peake added that "Natives in that vicinity took boats up streams that were longer [the boat] than the stream was wide. Sometimes the biggest difficulty was turning the boat around."[22]

Government Studies and Use of Kuskokwak Creek since 1959

State and federal employees began gathering data in the mid-1970s on Kuskokwak Creek, including traveling on the creek by boat. Dennis Stromm, a USF&WS biologist familiar with streams in the region, stated in an interview in 1989 that Kuskokwak Creek was "navigable at least as far as Frank Brown's parcel," and that, "tidal influence is commonly ten to fifteen miles" up the creek.[23] (Attachment 4)

VI. Summary

The BLM first determined Kuskokwak Creek navigable in 1983 from the mouth of the creek (river mile 0) through the area selected by Iqfijouaq Company for the village of Eek (river mile 6.5). In 1984, the BLM determined Kuskokwak Creek tidally influenced through the village selection in Secs. 27, 28, 33 and 34, T. 1 S., R. 75 W., SM, (river mile 6.5), and excluded the submerged lands from IC Nos. 799 and 800. In 1989, the BLM determined Kuskokwak Creek navigable within small tracts upstream to Secs. 4 and 5, T. 2 S., R. 72 W., SM (river mile 57), under the standard of water craft larger than a one-man kayak. There have been no other navigability determinations since 1989.

Kuskokwak Creek has no whitewater or obstructions as it meanders west toward the sea. Water levels range from a few inches to a few feet and fluctuate during the summer, with the highest levels occurring early and late in the season. No major obstructions or avulsive events have been reported along Kuskokwak Creek.

There was one type of use of Kuskokwak Creek during the historic period prior to Statehood. The type of use prior to statehood involved Native people accessing a historical site (AA-10158) at river mile 47 for fall and winter hunting and trapping activities from the mid-1800s through the early 1900s. The presence of reindeer antlers at the site also indicates the site was used in the 1920s or 1930s.

There has been one type of use of Kuskokwak Creek during the period since statehood. The type of use since to statehood involves Frank Brown accessing his Native allotment parcel (FF-17479-C) by boat as recently as 1988. It is not known when Brown began accessing his parcel by boat.

Endnotes

[1] Donald J. Orth, *Dictionary of Alaska Place Names*, Geological Survey Professional Paper 506. United States Geological Survey, Washington, D.C.: U.S. Government Printing Office, 1971, p. 555.
[2] Robert W. Faithful, Memorandum on Amendment to Final Navigability Determination for the Village of Eek, August 3, 1983, BLM files, F-14854-EE.
[3] Ann Johnson, Interim Conveyances 799 and 800, February 29, 1984, BLM files, F-14854-A.
[4] Wayne A. Boden, Navigable Waters on or along Small Tracts in Quinhagak (Window 1562), February 21, 1989, p. 6, BLM files, F-14885-EE,
[5] Roger Clay, *A Compilation of Hydrologic Data on the Kuskokwim Region*, Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys, Water Resources Section, Navigability Project, Anchorage, December 1983, pp. 212
[6] Carl E. Neufelder, Memorandum on Interview Report for Navigability on Kuskokwak Creek Native Allotment F-174979-C, February 14, 1989, BLM files, F-17479.
[7] Boden, Navigable Waters on or along Small Tracts in Quinhagak (Window 1562), February 21, 1989, BLM files, F-14885-EE, p. 6.
[8] Johnson, Interim Conveyances 799 and 800, February 29, 1984, BLM files, F-14854-A.
[9] Harza Engineering Company, *Bethel Area Power Plan Feasibility Assessment*, Appendix B, December 1982.
[10] *http://www.citytowninfo.com/places/alaska/bethel*
[11] James W. Vanstone, "Mainland Southwest Alaska Eskimo," in *Handbook of North American Indians, Volume V, Arctic*, David Damas, editor, Smithsonian Institute, Washington, D.C., 1984, pp. 227-229.
[12] Robert D. Shaw, *Cultural Resources Survey Preceding Construction of a Water and Sewer System in Kwethluk, Alaska*, a report done under contract to the Alaska Native Tribal Health Consortium, Anchorage, 2002, p. 10.
[13] Vanstone, "Mainland Southwest Alaska Eskimo," pp. 227-229.
[14] Report for Historical Site AA-10158, August 1, 1989, BIA ANCSA Office, ANCSA Sec. 14(h)(1) files. Copy also available in AHRS files, Office of History and Archaeology, Alaska Division of Parks and Outdoor Recreation.
[15] *Ibid.*

[16] Ann Fienup-Riordan, *Yuungnaqpiallerput, The Way We Genuinely Live: Masterworks of Yup'ik Science and Survival*, University of Washington Press, Seattle, 2007, pp. 159-160.
[17] *Ibid*., p. 160.
[18] *Ibid.*, pp. 163-164.
[19] Abraham Cleveland, Alaska Native Allotment Application and Evidence of Occupancy, August 20, 1986, BLM files, AA-37759, located at the National Archives and Records Administration (NARA), Anchorage.
[20] Frank Brown, Alaska Native Allotment Application and Evidence of Occupancy, April 3, 1972, BLM files, FF-17497, NARA, Anchorage.
[21] Neufelder, Memorandum on Interview Report for Navigability on Kuskokwak Creek Native Allotment F-17479-C, February 14, 1989, BLM files, F-17479.
[22] *Ibid*.
[23] *Ibid*.