## EEK RIVER SYSTEM HUC 30502, Zone 2, Kuskokwim River Region

# FINAL INTERIM SUMMARY REPORT

Prepared by Janine Dorsey, Ph.D., Historian I

Office of History and Archaeology Department of Natural Resources State of Alaska

Kuskokwim Assistance Agreement Phase II-B Submission

September 14, 2011

Office of History & Archaeology Navigable Waters Research Report No. 19

#### **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 of Alaska. 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 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 history of use of 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 research in the files of other state and federal agency files, 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, analysis 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. A list of the completed Navigable Waters Research Reports is included at the end of this report.

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### **Attachments** (in PDF format)

- Attachment 1. Master Title Plat (MTP) T. 1 N., R. 64 W., SM.
- Attachment 2. Robert E. Sorenson, Chief, BLM Branch of Lands and Minerals Operations, Letter to Mr. Peter Green, Village Land Selection Representative, Iqfijouag Company, May 15, 1975, BLM files, F-14854-A/1.
- **Attachment 3.** Robert E. Sorenson, Chief, BLM Branch of Lands and Minerals Operations, Letter to Calista Corporation, September 29, 1975, BLM Files, FF-14854-A/1.
- **Attachment 4.** Stanley H. Bronczyk, BLM Realty Specialist, Memorandum to Files re Easement Task Force Meeting on Eek, January 27, 1977, BLM files, F-14854-EE.
- **Attachment 5.** Curtis McVee, BLM State Director, Notice of Proposed Easement Recommendations for the Village of Eek, March 24, 1977, BLM files, F-14854-EE.
- Attachment 6. Peter P. Three Stars, Superintendent, Bureau of Indian Affairs, Bethel Agency, Letter to Joint Federal-State Land Use Planning Commission, Anchorage, April 14, 1977, source unknown but probably BLM files, F-14854-EE.
- Attachment 7. Russell J. Gallagher, Law Offices of Gallagher, Cranston & Snow, Anchorage, Letter to Joint Federal-State Land Use Planning Commission, May 16, 1977, BLM files, F-14854-EE.
- **Attachment 8.** Walter B. Parker, Federal-State Land Use Planning Commission, State Co-Chairman, Letter to Curtis V. McVee, BLM, June 17, 1977. BLM files, F-14854-EE.
- Attachment 9. Curtis McVee, BLM State Director, Memorandum to Chief, BLM Division of Technical Services, re Final Easements for the Village of Eek, April 4, 1978, BLM files, F-14854-EE.
- Attachment 10. Clifford D. Ells, BLM Realty Specialist, McGrath Resource Area,
  Transmittal memorandum re Final Easements for the Village of
  Eek, December 21, 1979, BLM files, F-14854-EE.
- Attachment 11. Robert E. Hiller Jr., BLM Realty Specialist, Trip Report for the Village Meeting Held with Iqfijouaq Company Concerning Lands in the Vicinity of Eek, April 5, 1983, BLM files, F-14854-EE.
- Attachment 12. Robert W. Faithful, BLM Assistant to the State Director for Conveyance Management, Memorandum to Chief, Division of ANCSA and State Conveyances re Final Easements for Iqfijouaq Company for the Village of Eek, June 9, 1983, BLM files, F-14854-EE.
- Attachment 13. Robert W. Faithful IV, BLM Deputy State Director for Conveyance Management, Memorandum to Deputy State Director for Conveyance Management re Final Navigability Determination for the Village of Eek, July 22, 1983, BLM files, F-14854-EE.

- Attachment 14. Ruth Stockie, BLM Section Chief, Branch of ANCSA Adjudication, Decision, Section 14(h)(1) Applications Rejected, Section 12(b)Application Rejected in Part, Lands Proper for Village Selection Approved for Interim Conveyance, Iqfijouaq Company and Calista Corporation, September 29, 1983, BLM files, F-14854-EE.
- **Attachment 15.** Ann Johnson, BLM Chief, Branch of ANCSA Adjudication, Interim Conveyance Nos. 799 and 800, February 29, 1984, BLM files, F-14854-A.
- Attachment 16. Ann Johnson, BLM Chief, Branch of ANCSA Adjudication, Interim Conveyance Nos. 1032 and 1033, April 19, 1985, BLM files, F-14854-A.
- Attachment 17. Krissell Crandall, BLM Chief, Branch of Adjudication I, Corrected Interim Conveyance Nos. 1980 and 1981, May 15, 2006, BLM files, F-14854-A.
- **Attachment 18.** Master Title Plats (MTPs), supplements, and U.S. Rectangular Survey (USRS) and U.S. Survey plats.
- Attachment 19. Robert W. Arndorfer, BLM Deputy State Director for Conveyance Management, Memorandum to Deputy State Director for Cadastral Survey, re Navigable Waters in Group Survey 253 (Window 1837), August 12, 1988, BLM files, F-14854.
- Attachment 20. Wayne A. Boden, BLM Deputy State Director for Conveyance
  Management, Memorandum re Navigable Waters on or along
  Small Tracts in Quinhagak (Window 1562), February 21, 1989,
  BLM files, F-14885-EE.
- Attachment 21. Mike Neimeyer, Calista Corporation Vice President for Land & Natural Resources, letter to Ann Johnson, BLM Chief, Branch of Calista Adjudication, September 21, 1990, BLM file F-14854-A.
- Attachment 22. Charlotte M. Pickering, BLM Lead Land Law Examiner, Branch of Calista Adjudication, letter to Iqfijouaq Company, December 03, 1990, BLM file F-14854-A.
- Attachment 23. C. Michael Brown, BLM Navigable Waters Specialist, Letter to Michael Rearden, Yukon Delta National Wildlife Refuge Manager, December 13, 1995, BLM files, 2628 (930).
- Attachment 24. Dennis R. Benson, BLM Realty Specialist, Amended Notice of Proposed Easements/Request for Nominations for Easements to be Reserved in the Title Documents Conveying Lands to the Iqfijouaq Company for the Native Village of Eek, August 28, 1997, BLM files, F-14854-EE.
- Attachment 25. Katherine L. Flippen, BLM Land Law Examiner, Decision, Lands
  Proper for Village Selection Approved for Patent, January 9, 1998,
  BLM files, F-14854-EE.
- **Attachment 26.** Terry R. Hassett, BLM Chief, Branch of 962 Adjudication, Patent Nos. 50-98-0235 and 50-98-0236, February 25, 1998, BLM files, F-14854-A2.

- Attachment 27. June McAtee, Calista Corporation Vice President, Land & Natural Resources, Letter to Terry Hassett, Branch Chief, BLM Division of Conveyance Management, April 30, 1997, BLM files, F-14854-A2.
- Attachment 28. William C. Johnston, Acting Chief, BLM Branch of Mapping Sciences, Memorandum to Chief, BLM Branch of Survey Preparation and Policy Interpretation, re 19 Additional Native Allotments in Survey Window 2700, June 17, 1998, and Laura J. Lagstrom, Navigability Report: Eek River in Native Allotment FF-17241, Sec. 18, T. 1 N., R. 63 W., SM and Kwethluk River in T. 1 N., Rs. 62 & 63 W., SM and T. 1 S., Rs. 62 & 63 W., SM, June 17, 1998, BLM files, Bethel-NA-FY'98.
- Attachment 29. Dominica VanKoten, Chief, BLM Navigability Section, Memorandum to Chief, Branch of Survey Planning and Preparation, re Navigable Waters within ANCSA-Selected and Interim-Conveyed lands in the Eek Village Project Area, January 12, 2006, BLM files, F-14854-A (2651).
- Attachment 30. Marla Carter, Habitat Biologist, Alaska Department of Fish and Game, Letter to the BLM re Notice of Proposed Easements and Request for Easement Nominations Iqfijouaq Comp. (F-14854), March 10, 2006, BLM Files F-14854-EE/3.
- Attachment 31. K. J. Mushovic, BLM Easement Coordinator, Memorandum to Chief, BLM Branch of Adjudication II, re Final Easement Review for Lands to be Patented to Iqfijouaq Company on behalf of the Native Village of Eek, June 13, 2006, BLM files, F-14854-EE.
- Attachment 32. U.S. Survey Nos. 10123 and 8321, Officially Filed on April 6, 1993 and October 17, 1986 respectively. U.S. Survey No. 10123 is a retracement of part of U.S. Survey 8321 and mentions tidal influence.
- Attachment 33. R. S. Spurlock, BLM Navigability Section, Memorandum to BLM Land Transfer, re Navigability Input for Inclusion in Decision to Issue Conveyance (DIC) Within Window No. 2835 for the Village of Eek, June, 25, 2008, BLM files, FF-14854-EE/B.
- **Attachment 34.** Charmain McMillan, BLM Land Law Examiner, Decision to Convey Lands, August 20, 2008, BLM files, F-14854-EE.
- **Attachment 35.** Richard Thwaites, BLM Chief, Land Transfer Adjudication II, IC Nos. 2154 and 2155, October 8, 2008, BLM files, F-14854-EE.
- **Attachment 36.** Frank A. Stefanich, Access Project Leader, Alaska Department of Fish and Game, Letter to Horace Sanders, BLM, May 9, 1977, BLM files, F-14854-EE.
- **Attachment 37.** U.S. Survey No. 10085, Officially Filed on October 8, 1992, mentions tidal sloughs.
- Attachment 38. Laura Lagstrom, BLM Navigability Specialist, Memorandum re Interviews for Native Allotment Selections added to Window 2700 which straddle Kwethluk and Eek River, March 13, 1998, BLM files, Bethel-NA-FY98 9600 (924).

- Attachment 39. Robert W. Arndorfer, BLM Deputy State Director for Conveyance Management, Memorandum to Chief, Branch of ANCSA Adjudication re Section 3(e) Determination for the Eek School Site at Eek, March 7, 1985, BLM file, FF014854 A/4; U.S. Survey No. 2021, approved March 2, 1935, showing U.S. School Reserve at Eek.
- **Attachment 40.** U.S. Survey Nos. 12301 and 12347, Officially Filed on July 2, 1999, showing Alfred Alexie's Native allotment and the Native allotment above and the two Native allotments below his on the North Fork Eek River.
- **Attachment 41.** Robert E. Hiller Jr., BLM Alaska State Office, Branch of Adjudication, Trip Report of River Usage and Easement Inspections of Rivers of the Kuskokwim Bay Area, July 25, 1978, BLM files, F-14854-EE.
- **Attachment 42.** Ed Swanson, President, Knik Kanoers & Kayakers, Anchorage, Letter to Dick Thompson, Associate State Director, BLM, Anchorage, September 18, 1975, BLM file F-14885.

#### EEK RIVER SYSTEM (HUC 30502, Zone 2, Kuskokwim River Region) II-B Interim Summary Report

#### I. Introduction

The Eek River System is located in the Kuskokwim Delta Region of Southwest Alaska, within Zone 2 of Hydrologic Unit Code (HUC) 30502 (Figure 1). The Eek River is the southernmost tributary of the Kuskokwim River.<sup>1</sup> It originates in the Eek and Ahklun mountains and meanders northwesterly for 165 miles to flow into Eek Channel Kuskokwim River at Eek Point.<sup>1</sup>

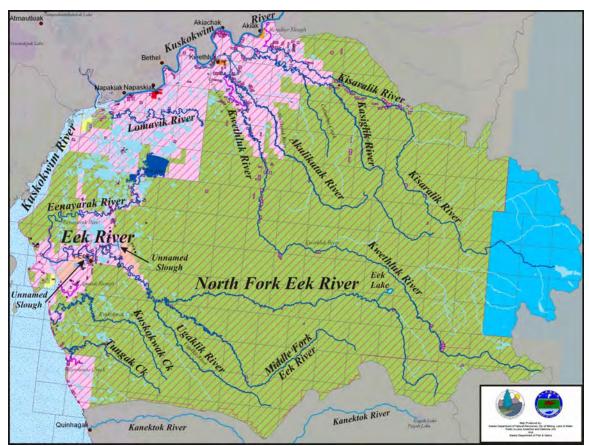


Figure 1. Map showing the location of the Eek River System within Zone 2 of HUC-30502 of the Kuskokwim River Region.

<sup>&</sup>lt;sup>i</sup> The overall length of the Eek River and the river mile markers used in this report are based on Geographic Information System (GIS) calculations using the National Hydrography Data Set which was derived from the U.S. Geological Survey quadrangle maps. The river mile marker system used in this report may differ from river mile markers found in BLM/ANILCA documents, which may be based on air miles between points rather than distances along the river bed of the main channel.

The Eek River enters the Kuskokwim River from the left bank about 45 miles southwest of Bethel, which is the nearest regional hub<sup>ii</sup>.

Seven water bodies make up the Eek River System (Figure 1). The North Fork Eek **River** is the main fork of two in the river's upper reaches. It originates at the outfall of a lake at an elevation of about 2,700 feet in the Ahklun Mountains in Sec. 7, T. 3 S., R. 62 W., SM. The North Fork drains the northwest flanks of the Ahklun and Eek mountains and flows 103 miles to its juncture with the Middle Fork Eek River in Sec. 34, T. 1 N., R. 71 W., SM, at river mile 62 of the Eek River. **Eek Lake** lies to the north of the North Fork and is 1.4 miles long by 1 mile wide. A four-mile-long channel connects the lake to the North Fork at river mile 125.2. The Middle Fork Eek River is the other fork of the Eek River. Locals reportedly refer to the Middle Fork as the "South Fork."<sup>2</sup> It originates in Sec. 32, T. 1 S, R. 65 W., SM. It drains the northwest flank of the Eek Mountains and flows 83 miles to join the North Fork. From the juncture of the two forks. the **Eek River** meanders 62 miles to enter the Eek Channel of the Kuskokwim River in Sec. 2, T. 1 N., R. 75 W., SM. The 62-mile-long **Ugaklik River** roughly parallels the Middle Fork and flows into the Eek River from the left at river mile 57.5. A 17-milelong unnamed rightbank stream joins the Eek River at river mile 27.4, in Sec. 26, T. 2 N., R. 73 W., SM. An unnamed leftbank slough about one mile in length leaves the Eek River at about river mile 17.<sup>3</sup>

The Eskimo name for the river was published as *Ik* on an 1826 map created by Lieutenant Sarichev. Russians referred to the river as *Reka Ik*, with *reka* meaning "river." The name of the river has been spelled "Eek" since 1880.<sup>4</sup>

The only permanent settlement on the Eek River is the Native village of Eek, which is situated on the left bank of the Eek River 18 miles upriver from Eek Point and 41 air miles southwest of Bethel. The Eskimo people called the village *Ik*, for the stream. Eek's population was 170 in 1939, 141 in 1950, and 200 in 1960.<sup>5</sup> In 2000, the population was 280.<sup>6</sup> The Eek Post Office was established in 1949.<sup>7</sup>

The Eek River System lies to the north of the Kanektok River and to the southwest of the Kwethluk River. The Bethel-Quinhagak Trail (RST-30) provides overland access to the Eek River in winter. In addition, the Eenayarak River and the Eenayarak-Kuskokwim Portage together provide a protected route for boat travel between Eek and the Bethel area.<sup>8</sup>

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

The Eek River System crosses the 36 townships listed below.

#### Township (T), Range (R), Seward Meridian (SM)

## <u>Eek River/North Fork (including Eek Lake, unnamed rightbank stream, and unnamed leftbank slough)</u>

```
T. 3 S., R. 62 W., SM
                         T. 2 N., R. 64 W., SM
                                                   T. 1 S., R. 72 W., SM
T. 3 S., R. 63 W., SM
                         T. 1 N., R. 65 W., SM
                                                   T. 1 N., R. 72 W., SM
T. 2 S., R. 62 W., SM
                         T. 1 N., R. 66 W., SM
                                                   T. 2 N., R. 72 W., SM
T. 2 S., R. 63 W., SM
                         T. 1 N., R. 67 W., SM
                                                   T. 2 N., R. 73 W., SM
T. 2 S., R. 64 W., SM
                         T. 1 N., R. 68 W., SM
                                                   T. 2 N., R. 74 W., SM
                                                   T. 1 N., R. 74 W., SM
T. 1 S., R. 64 W., SM
                         T. 1 N., R. 69 W., SM
                                                   T. 1 N., R. 75 W., SM
T. 1 N., R. 63 W., SM
                         T. 1 N., R. 70 W., SM
T. 1 N., R. 64 W., SM
                         T. 1 N., R. 71 W., SM
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#### Middle Fork Eek River

T. 1 S., R. 65 W., SM	T. 3 S., R. 68 W., SM	T. 1 S., R. 70 W., SM
T. 1 S., R. 66 W., SM	T. 3 S., R. 69 W., SM	T. 1 S., R. 71 W., SM
T. 1 S., R. 67 W., SM	T. 2 S., R. 69 W., SM	T. 1 S., R. 72 W., SM
T. 2 S., R. 67 W., SM	T. 2 S., R. 70 W., SM	T. 1 N., R. 71 W., SM
T. 2 S., R. 68 W., SM		

#### II. -1-111- Di----

<u>Ugaklik River</u>		
T. 3 S., R. 68 W., SM	T. 2 S., R. 70 W., SM	T. 1 S., R. 71 W., SM
T. 3 S., R. 69 W., SM	T. 2 S., R. 71 W., SM	T. 1 S., R. 72 W., SM
T. 3 S., R. 70 W., SM		

#### **II. Land Status**

The Eek River is bounded by federal and Native lands. There are no state lands along the Eek River System. Most of the river system lies within the Yukon Delta National Wildlife Refuge (Yukon Delta NWR). Approximately the lower third of the Eek River flows through Native lands that are held by village and regional corporations under the Alaska Native Claims Settlement Act (ANCSA) of 1971 and by individual Native people under the Native Allotment Act of 1906 (Figure 2). Native allotments are clustered around the village of Eek. Others are located along the river to points well upstream of the confluence of the North and Middle forks. Iqfijouaq Company is the village corporation for Eek Village, and Calista Corporation is the regional corporation for Eek Village.

The Eek River flows through Yukon Delta NWR lands between river miles 48.6 and 145 (Figures 2-4). The uppermost stretch of the North Fork Eek River, from river miles 145 to 165, (Figure 4) lies within the Togiak National Wildlife Refuge (Togiak NWR). The

Yukon Delta NWR was withdrawn from unreserved public lands managed by the BLM on March 9, 1972, under Public Land Order 5184, and transferred to the federal refuge system under the Alaska National Interest Lands Conservation Act (ANILCA), PL 96-487 of 1980. The United States holds title to federal refuge lands in Alaska, and the U.S. Fish and Wildlife Service (USF&WS) manages the Yukon Delta NWR.

The origins of the Togiak NWR date from 1969, when the Secretary of the Interior withdrew 265,000 acres of land located south and west of the Eek River and designated it the Cape Newenham National Wildlife Refuge (Public Land Order 4583). Two years later the Secretary of the Interior withdrew additional lands that later became the Togiak Refuge under Section 17(d)(1) and 17(d)(2) of ANCSA. The Secretary of the Interior established the Togiak NWR on February 11, 1980 (Public Land Order 5703). Congress enacted ANILCA on December 2, 1980. The act designated all of the withdrawn land in the uppermost Kwethluk and Goodnews Bay areas, including the Cape Newenham National Wildlife Refuge, as the Togiak NWR. The Togiak NWR encompasses about 4.7 million acres of land, including 4.1 million acres of federal land, between Kuskokwim Bay and Bristol Bay in southwestern Alaska. The headwaters of the Eek River (North Fork) fall within the Togiak Wilderness, a nationally designated wilderness area that forms the northern half of the Togiak NWR. The United States holds title to refuge lands, and the USF&WS manages the Togiak NWR.

#### Eek River (river miles 0-62)

Native corporations hold title to most of the lands along the lower portion of the Eek River between river miles 0 and 48.6 (Figure 2). Between 1984 and 2008, the BLM made a series of interim conveyances (ICs), transferring the surface estate to Iqfijouaq Company and the subsurface estate to Calista Corporation. They were IC Nos. 799 and 800 issued on February 29, 1984 for lands along river miles 0 to 48.6 (except for river miles 16.8 to 18.3, 34.6 to 36, 37.4 to 37.7, 41 to 41.7, and 46.8 to 48); IC Nos. 1032 and 1033 issued on April 19, 1985 for river miles 17.2 to 18.3; and IC Nos. 2154 and 2155 issued on October 8, 2008 for river miles 34.6 to 36 of the Eek River; and Patent Nos. 50-98-0235 and 50-98-0236 issued on February 25, 1998 for river miles 16.8 to 17.2 of the Eek River.

Lands owned by Native corporations extend from river miles 0 to 48.6, with three gaps in which the land is part of the Yukon Delta NWR. Iqfijouaq Company and Calista Corporation own the lands along river miles 0 to 37.4. The river passes briefly through the Yukon Delta NWR between river miles 37.4 and 37.7. It flows through Native-owned lands between river miles 37.7 and 41. The river passes through the Yukon Delta NWR between river miles 41 and 41.7. It flows through Native-owned lands between river miles 41.7 and 46.7. It passes through the Yukon Delta NWR between river miles 46.7 and 48. It flows through Native-owned lands between river miles 48 and 48.6 (the upper end of the selection area). From river miles 48.6 to 62, the river flows through the Yukon Delta NWR.

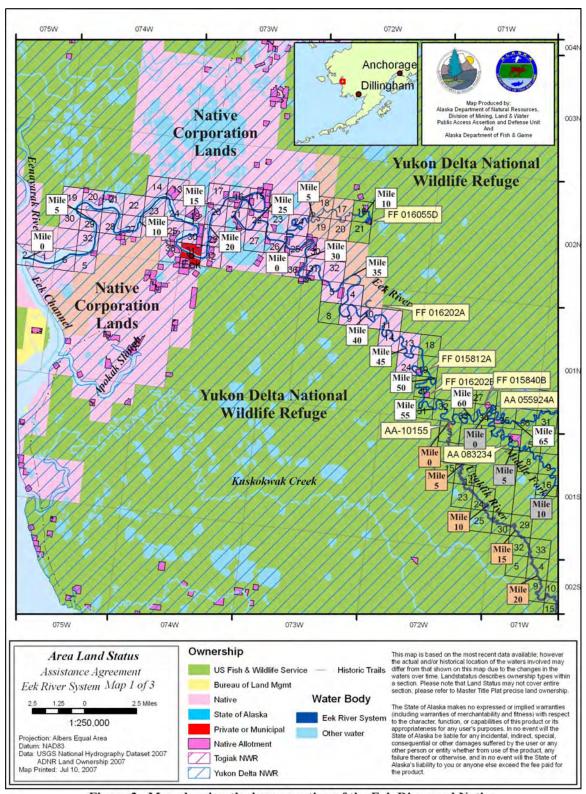


Figure 2. Map showing the lower portion of the Eek River and Native corporation lands, Native allotments and federal lands.

Thirty-five Native allotments are located along the Eek River between river miles 0 and 62. All have been certificated. Two were certificated in the 1970s, 27 were certificated in the 1980s, four were certificated in the 1990s, and five were certificated in the 2000s. The largest concentration of Native allotment parcels along the river occurs between river miles 16 and 32.

#### *Unnamed Leftbank Slough (river mile 16.9)*

The unnamed leftbank slough that joins the Eek River at river mile 16.9 is located within Native corporation lands. Most of the slough is in Sec. 36, T. 2 N., R. 74 W., SM. In 1997, Calista Corporation reallocated land under Section 12(b) of ANCSA to Iqfijouaq Company for the purpose of conveying Sec. 36, T. 2 N., R. 74 W., SM to Iqfijouaq Company as the preferred site for relocation of the Eek Airport. In 1998, the BLM patented the surface estate of that section to Iqfijouaq Company, under Patent No. 50-98-0235 and the subsurface estate to Calista Corporation under Patent No. 50-98-0236.

Two Native allotments line the unnamed leftbank slough from its mouth to river mile 1. One was certificated in 1989 and the other in 2006. The BLM conveyed the upper half of the slough (Secs. 25 and 26, T. 2 N., R. 74 W., SM) to Iqfijouaq Company (surface estate) and Calista Corporation (subsurface estate) in 1984 under IC Nos. 799 and 800 respectively.

#### *Unnamed Rightbank Stream (river mile 27.4)*

An unnamed rightbank stream joins the Eek River at river mile 27.4. iii The stream is 17 miles in length and is joined from the right at river mile 10 by a 4-mile-long tributary. The lower portion of the unnamed stream, between river miles 0 and 4.5, flows through Secs. 23-26, T. 2 N., R. 73 W., SM. The BLM conveyed the land in those sections to Iqfijouaq Company (surface estate) and Calista Corporation (subsurface estate) in 1984 under IC Nos. 799 and 800 respectively. The lands along the stream between river miles 4.5 and 9, in Secs. 17-20, T. 2 N., R. 72 W., SM, were conveyed to Iqfijouaq Company (surface estate) and Calista Corporation (subsurface estate) in 2008 under IC Nos. 2154 and 2155 respectively. In addition, those ICs conveyed to Iqfijouaq Company (surface estate) and Calista Corporation (subsurface estate) the lands in Sec. 7, T. 2 N., R. 72 W., SM, along the portion of the right tributary of the unnamed rightbank stream between river miles 3.2 and 4 of the tributary.

Seven Native allotments line the unnamed rightbank stream and its rightbank tributary. One Native allotment straddles the unnamed stream just above its mouth, another is between river miles 4.6 and 4.7, and a third straddles the stream between river miles 10.6 and 11.3. Four Native allotments line the unnamed tributary of the unnamed rightbank stream between river miles 0 and 4 of the tributary. All seven of these Native allotments have been certificated: five in the 1980s and two in the 1990s. The remaining lands

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iii The BLM has referred to this water body as both a slough and a stream. In addition, U.S. Survey No. 10123 refers to it as "Iiqaq River (local name)." U.S. Survey No. 8242 refers to it as an "unnamed creek." For consistency, the water body is called a stream in this report, except within direct quotations.

along the unnamed rightbank stream from river mile 9 to river mile 17 and along its right tributary from river mile 0 to river mile 3.2 are within the Yukon Delta NWR.

#### *Ugaklik River (river miles 0-62)*

The Ugaklik River enters the Eek River from the left bank at river mile 57.5 (Figures 2, 3 and 5). Calista Corporation holds Patent 50-2007-0698 to ANCSA Sec. 14(h)(1) lands along the Ugaklik River near its mouth, approximately between river miles 0 and 0.3, in Sec. 3, T. 1 S., R. 72 W., SM. Those are lands with recognized historical sites. The remaining land along the Ugaklik River between river mile 0.3 and 62 is federal land that is part of the Yukon Delta NWR. There are no Native allotments along the Ugaklik River.

#### North Fork Eek River (river miles 62-165)

The North and Middle forks of the Eek River join at river mile 62 to form the Eek River. The North Fork extends from river mile 62 to river mile 165 (Figures 2, 3 and 4). Between river miles 62 and 145, it flows through the Yukon Delta NWR. There are no Native corporation lands along those 83 miles of the river. There are ten Native allotments (12 parcels) along the North Fork between river mile 64.5 and 135. All ten of the Native allotments have been certificated: seven in the 1990s and three in the 2000s. An additional Native allotment parcel, FF-16966-C (Certificate No. 50-2000-0267), was returned to the federal government (USF&WS) in 2007 by means of a warranty deed. (Attachment 1)

The uppermost 20 miles of the North Fork Eek River (river miles 145-165) lie within the Togiak Wilderness, a nationally designated wilderness area that forms the northern half of the Togiak NWR. There are no Native corporation lands or Native allotments along that section of the river.

#### *Eek Lake (river mile 125)*

There are no Native corporation lands or Native allotments along Eek Lake or its outlet stream. The 4-mile-long outlet stream from Eek Lake joins the North Fork Eek River at river mile 125.2 (Figure 4). Eek Lake and its outlet stream lie entirely within Yukon Delta NWR lands.

#### Middle Fork Eek River (river miles 0-83)

The Middle Fork joins the Eek River at river mile 62. All 83 miles of the Middle Fork are within the Yukon Delta NWR (Figures 2, 3 and 4). There are no Native corporation lands along the Middle Fork Eek River. Seven Native allotments are scattered along the lower 45.5 miles of the river. All seven have been certificated: six in the 1990s and one in 2010.

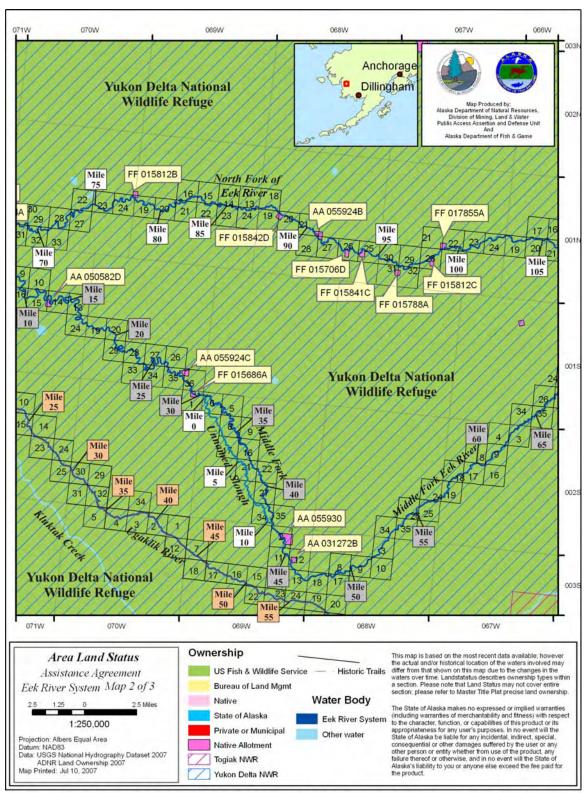


Figure 3. Map showing the middle portion of the Eek River and Native allotments and federal lands.

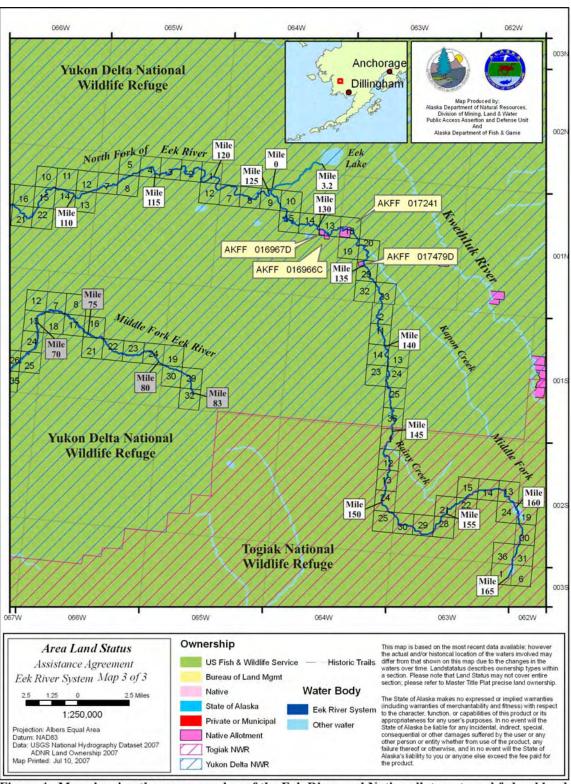


Figure 4. Map showing the upper reaches of the Eek River and Native allotments and federal lands.

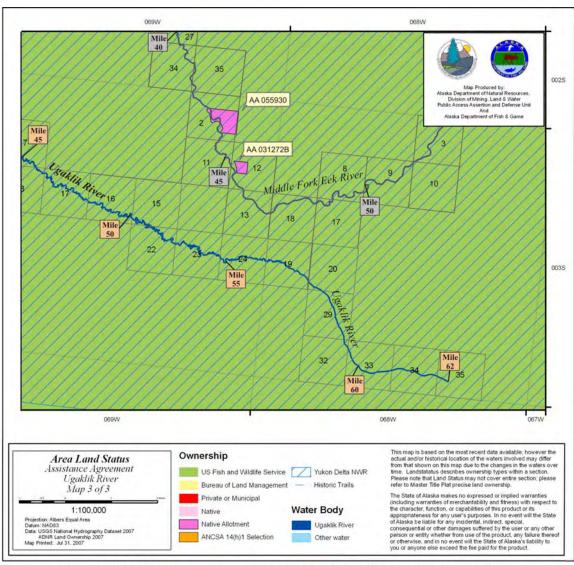


Figure 5. Map showing the upper portion of the Ugaklik River and the middle portion of the Middle Fork of the Eek River, along with Native allotments and federal lands.

#### III. BLM Navigability Determinations

In the 1970s, the Iqfijouaq Company selected lands along the lower Eek River under the provisions of ANCSA. The selection area extended from the mouth of the Eek River through Sec. 24, T. 1 N., R. 72 W., SM (river mile 48.6). The BLM began actively seeking information concerning navigable waters in the Eek River System in the 1970s as part of its adjudication of Native land selections.

On May 15, 1975, Robert E. Sorenson, Chief of the BLM Branch of Lands and Minerals Management, wrote to the Iqfijouaq Company informing them that their land selections

on behalf of Eek Village had improperly excluded a number of water bodies as being navigable. The excluded water bodies included the Kuskokwim, Eek, and Eenayarak rivers and various lakes and sloughs. The letter did not indicate the standards under which the Iqfijouaq Company had considered those water bodies to be navigable. Sorenson explained that "Although the main channels of the Kuskokwim and the Eek rivers are considered to be navigable, this consideration does not extend to every channel into which these rivers divide, or to the lakes and sloughs." His letter informed the Iqfijouaq Company that the BLM had deducted from the village corporation's total entitlement "only the areas covered by the main channels of the Kuskokwim and Eek Rivers, or for which a body of water comprised more than one-half of the total acreage of a section." The BLM urged the village corporation to submit evidence that the water bodies it had excluded from its selection as navigable "are chiefly valuable for travel, trade and commerce" and assured Iqfijouaq Company that any such evidence "will be used when a final determination on navigability is made." (Attachment 2) The BLM did not include a definition of its standards of navigability.

On September 29, 1975, Sorenson provided Calista Corporation with a list of approximate acreages for village land selections, including those for the village of Eek. Sorenson emphasized the potential significance of navigability determinations in ANCSA land conveyances, saying "all figures are approximate—navigability determinations could change some of the figures drastically in some cases, in addition to the fact that a large percent of the area is unsurveyed." (Attachment 3)

Formal discussions of navigability issues involving Eek Village land selections began with an Easement and Navigability Task Force meeting in November 1976. Stanley H. Bronczyk, a BLM Realty Specialist, reported on the meeting in a memorandum dated January 27, 1977. His report stated: "The Eek River is considered navigable to the village of Eek based on travel, trade and commerce, and tidal influence. The Eek River is considered navigable beyond the village and throughout the remainder of the selection area based upon susceptibility to travel, trade, or commerce." (Attachment 4)

Bronczyk provided two different descriptions of the navigability standard. In the first sentence, the basis is "travel, trade <u>and</u> commerce," as well as tidal influence. In the second sentence, the basis is "susceptibility to travel, trade, <u>or</u> commerce" [emphasis added]. No explanation was given for this discrepancy.

In a Notice of Proposed Easement Recommendations for the Village of Eek that Curtis McVee, BLM State Director, issued on March 24, 1977, two easements on the Eek River were recommended to accommodate boat traffic: a 25-foot streamside easement for both banks of the Eek River through the selection area (river miles 0-48.6) and a site easement on the left bank of the Eek River in Sec. 31, T. 2 N., R. 73 W., SM, near Eek village. A 25-foot continuous marine coastline easement on lands upland of and parallel to the mean high-tide line was also recommended. The 25-foot streamside easement along both banks of the Eek River was necessary because: "The Eek River has a highly significant present recreational use along this section of the river. It has runs of chum, pink, silver,

king salmon and arctic char." The BLM notice stated that the Eek River was navigable through the selection area based on: "travel, trade and commerce, and tidal influence" for the mouth of the river to the village of Eek (river miles 0-18) and "susceptibility to travel, trade, or commerce" for the area from the village to the upper limit of the selection area (river miles 18-48.6). <sup>13</sup> (Attachment 5)

The Bureau of Indian Affairs (BIA) protested the streamside, marine coastal, and site easements on the Eek River in a letter written by Peter Three Stars, superintendent of the Bethel Agency of the BIA, to the Joint Federal-State Land Use Planning Commission on April 14, 1977. (Attachment 6) Russell J. Gallagher, of Gallagher, Cranston & Snow—a law firm representing the Iqfijouaq Company—also opposed the three easements in a May 16, 1977, letter to the Joint Federal-State Land Use Planning Commission. Regarding the proposed campsite easement near Eek Village, Gallagher wrote that "this particular campsite easement probably angers the native community most of all....Access to public lands, which appears to be the rationale for the campsite, can be had from numerous other points on the coast, along the Kuskokwim, along Eek Channel, and along the Kuskokwak Channel." (Attachment 7)

On June 17, 1977, Walter B. Parker, State Co-Chairman of the Joint Federal-State Land Use Planning Commission, wrote a letter to the BLM in support of the streamside, marine coastline, and campsite easements. (Attachment 8) Handwritten remarks on a final easements memorandum from Curtis V. McVee of the BLM, dated April 4, 1978, suggested that the BLM was unsure whether a campsite easement so close to the village could properly be reserved. In the memo, the BLM also dropped the streamside easement (EIN 5), in part because "The continuous coastline Easement (#4) covers the majority of this river due to tidal influence." Another reason given for dropping the streamside easement (EIN 5) along the non-tidal portion of the Eek River was a lack of "documentation as to the existing uses." Without such documentation, "there is no justification for the streamside easement." (Attachment 9) There was no mention of any steps that had been taken to document existing uses of the river.

A BLM draft memorandum entitled "Final Easements for the Village of Eek," dated December 21, 1979, contains language regarding navigability and tidal influence that was not included in later final easement memorandums. This draft memorandum listed section 17(b) easement recommendations that had been conformed to new easement regulations issued on November 27, 1978. According to the draft memorandum, the Eek River was determined to be a "major waterway," and the Eek and Eenayarak rivers were described as "water highways connecting the village of Eek with other Kuskokwim River villages." The memorandum added that "These waterways also receive significant present use for access to public lands surrounding the village." It stated that "The Eek River is determined susceptible to travel, trade and commerce above Eek through the selection area [to river mile 48.6] in addition to having tidal influence below Eek village. All other tidal influenced waters are also deemed navigable." The "other tidal influenced waters" were not identified. The streamside easement (formerly EIN 5) was dropped from consideration. <sup>18</sup> (Attachment 10)

On March 17, 1983, BLM officials held a meeting in Eek with representatives of the Iqfijouaq Company and Calista Corporation to discuss the Draft Decision to Interim Convey (DIC), the Draft State Director's Memorandum, and the Navigability Memorandum addressing Iqfijouaq Company's land selections near Eek. On April 5, 1983, Robert E. Hiller Jr., a BLM Realty Specialist, issued a trip report summarizing the meeting. An attachment to the report summarized villagers' responses to questions about the waters they used in the Eek village selection area for access by boat travel. The villagers indicated that they used boats on the Eek River from the mouth upriver throughout the selection area, which ended at river mile 48.6. Representatives of the corporation agreed with the BLM that the Eek River was a "major waterway." Villagers told the interviewers that "intervillage travel during the summer is by boat," rather than overland on trails, such as the Bethel to Quinhagak Trail. They described the Eek to Quinhagak portion of that trail as "a winter use trail only." They said that the location of the channel between the Eek River and the Kuskokwim River had changed since 1954, when the USGS maps were drafted. In a summary of the discussions on the need for site easements along the Eek River, the report noted that "Motorized boats are the dominant means of transportation" and thus, "river travel is rapid." Calista Corporation officials at the meeting told BLM interviewers that "river travelers could stop on the river banks, therefore, no additional site easements are needed." (Attachment 11)

The BLM issued a final easements memorandum for Iqfijouaq Company for the village of Eek on June 9, 1983. In that memorandum, Robert W. Faithful, BLM assistant to the State Director for Conveyance Management, stated that the Eek River had been determined to be a major water body and that it was a water highway connecting the village of Eek with other Kuskokwim River villages. He described the Eek River as receiving "significant present use for accessing public land and resources surrounding the village." (Attachment 12) This memorandum did not address either navigability or tidal influence, which were discussed in the December 21, 1979 draft memorandum on final easements for the Village of Eek. <sup>21</sup> (Attachment 10)

On July 22, 1983, Robert W. Faithful, BLM Deputy State Director for Conveyance Management, issued a Final Navigability Memorandum that determined the Eek River navigable through the Eek Village selection area [to river mile 48.6]. All water bodies within the selected area that were not specifically listed as navigable were determined non-navigable. Drawing from Robert Hiller's summary of the March 17, 1983 meeting in Eek Village (Attachment 11), the memorandum stated: "The Kuskokwim, Eek and Eenayarak rivers continue to serve as major avenues of travel through and within the area." The memorandum included additional information on navigability and tidal influence from a January 28, 1983 draft final easements memorandum. A section with the heading "Draft Navigability" stated "The Eek River and its interconnected sloughs are determined navigable above Eek through the selection by reason of susceptibility to travel, trade and commerce." The term "interconnected sloughs" was not defined. Under the heading "Draft Tidal Influence," the memorandum stated that the Eek River was considered tidally influenced below the village. The memorandum explained that the

BLM was "no longer identifying tidal influence (mean high tide line) in the office. Instead these limits will be established by survey in the field." The July 22, 1983 memorandum addressed only "those water bodies that have been or could be used as highways of commerce." A map attached to the memorandum shows the Eek River as navigable from its mouth upstream to and through T. 1 N., R. 72 W., SM, whose eastern boundary crosses the Eek River at river mile 48.6.<sup>22</sup> (Attachment 13)

On September 29, 1983, Ruth Stockie, BLM Section Chief, Branch of ANCSA Adjudication, issued a DIC to the Iqfijouaq Company for Eek Village. Regarding lands underlying navigable waters, the DIC stated:

Excluded from the above-described lands herein approved for conveyance 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. All other water bodies not depicted on the attached maps within the lands to be conveyed were reviewed. Based on existing evidence, they were determined to be nonnavigable. (Attachment 14)

The DIC maps showed the Eek River to be navigable throughout the selection area from its mouth through T. 1 N., R. 72 W., SM (river miles 0-48.6), except for gaps in Sec. 36, T. 2 N., R. 74 W., SM (river miles 16.8-17.2); Sec. 33, T. 2 N., R. 72 W., SM (river miles 34.5-36); Sec. 8, T. 1 N., R. 72 W., SM (river miles 37.4-37.7); Sec. 15, T. 1 N., R. 72 W., SM (river miles 41-41.7); and Secs. 18-19, T. 1 N., R. 71 W., SM (river miles 46.8-48). The maps indicated that the portion of the Eek River that is below Eek Village was considered navigable and also was subject to a pending determination of tidal influence.<sup>24</sup> (Attachment 14)

The BLM issued IC Nos. 799 and 800 on February 29, 1984, conveying land along the lower 48.6 river miles of the Eek River to the Iqfijouaq Company (surface estate) and Calista Corporation (subsurface estate). Navigability maps attached to the DIC show the river navigable or pending tidal determination from its mouth through Sec. 24, T. 1 N., R. 72 W., SM. (Attachment 15) The portions of the Eek River from river mile 16.8 to 17.2, from 34.6 to 36, from 37.4 to 37.7, from 41 to 41.7, and from 46.8 to 48 were excluded because they were outside area conveyed in the IC.

On April 19, 1985, the BLM issued IC Nos. 1032 and 1033, which conveyed two additional parcels to the Iqfijouaq Company and Calista Corporation. Those sections—Sec. 6, T. 1 N., R. 73 W., SM, which borders Eek Village on the south, and Sec. 31, T. 2 N., R. 73 W., SM, which contains the Eek Village town site—were listed in the DIC of September 29, 1983, but were not included in IC Nos. 799 and 800. (Attachment 16) Of those two sections, only Sec. 31, T. 2 N., R. 73 W., SM encompasses lands abutting

Eek River. The BLM used the same maps used in IC Nos. 799 and 800 to identify the Eek River as navigable and exclude it from the conveyances in IC Nos. 1032 and 1033.

On May 15, 2006, Krissell Crandall, Chief, BLM Branch of Adjudication I, issued corrected IC Nos. 1980 and 1981, which excluded these Native allotments from lands that had been conveyed in IC Nos. 799 and 800. The excluded Native allotments were FF-16054-D and AA-50582-B, which are situated along the Eek River in Sec. 25, T. 2 N., R. 74 W., SM (river miles 16.6-16.8), and FF-15812-A, which is in Sec. 24, T. 1 N., R. 72 W., SM (river mile 48.5). (Attachment 17)

As of early 2011, the BLM had not issued patents to the Iqfijouaq Company or to Calista Corporation for the lands abutting the Eek River that were conveyed in IC Nos. 799, 800, 1032, 1033, 1980, and 1981. The riparian lands have been surveyed, however. The rectangular survey plats for the townships encompassing the ICd lands were officially filed in 1996. The Eek River was meandered on the survey plats using photogrammetric methods, and the submerged lands were segregated from the uplands. (Attachment 18)

On August 12, 1988, Robert W. Arndorfer, BLM Deputy State Director for Cadastral Survey, issued a memorandum that identified navigable waters in Group Survey 253 (Window 1837). The memorandum stated that "In general, the BLM considers nontidal water bodies navigable if at the time of Statehood, they were navigable for crafts larger than one-person kayaks." The memorandum listed as navigable under the one-man kayak standard three additional water bodies in the Eek River System: a lake outlet in Sec. 3, T. 1 N., R. 72 W., SM, an unnamed rightbank stream in Secs. 16-20, T. 2 N., R. 72 W., SM, and a leftbank slough from its junction with the Eek River in Sec. 36, T. 2 N., R. 74 W., SM through a tributary identified as "second tributary on the right (looking upstream)." Arndorfer stated: "I determine the described segments of the streams and sloughs navigable. These water bodies are sufficiently wide and deep for canoe navigation."<sup>29</sup> (Attachment 19) The memorandum did not address the navigability of the lower half mile of the one-mile-long lake outlet (the portion in Sec. 10, T. 1 N., R. 72 W., SM), the unnamed rightbank stream in Secs. 23-26, T. 2 N., R. 73 W., SM (river miles 0-4.5) and Secs. 21-23, 26-27, T. 2 N., R. 72 W., SM (river miles 11.3-17), and a four-mile-long unnamed right tributary of the unnamed rightbank stream in Secs. 7-9 and 16, T. 2 N., R. 72 W., SM.

On February 21, 1989, Wayne A. Boden, BLM Deputy State Director for Cadastral Survey, issued a memorandum that addressed the navigability of water bodies in an area of the Eek River that was scheduled for cadastral survey. The memorandum focused on areas upriver that contained Native allotments and did not address "water bodies along small tracts located in areas conveyed or selected under ANCSA or the Statehood Act." Applying the one-person kayak standard, the BLM determined the Eek River navigable "in or along small tracts located on the river to and through [Native allotment] F-15812-C in T. 1 N., R. 67 W., SM" (river mile 98.5). Boden noted that "There are few reports on the navigability of this river." In making the navigability determination, he considered U.S. Bureau of Mines reports dating from the 1940s and information from Native

allotments. Boden's navigability determination covered the middle and upper portions of the Eek, River, from the eastern boundary of Sec. 24, T. 1 N., R. 72 W., SM (river mile 48.6), upstream to and through Native allotment F-15812-C, which is located in Sec. 28, T. 1 N., R. 67 W., SM, between river miles 98.4 and 98.5. iv

In the February 21, 1989, memorandum, Boden also determined the Middle Fork Eek River "navigable in or along small tracts located on the river to and through T. 3 S., R. 69 W., SM" (river mile 46.8). This was the first BLM navigability determination for the Eek River's Middle Fork. The memo stated, "local residents with Native allotments reportedly boat the river to their land claims." The BLM determined the Middle Fork navigable as it flows past all of the Native allotments, including AA-31272-B, which is located farthest upstream, near the Great Ridge, in Sec. 12, T. 3 S., R. 69 W., SM, between river miles 45.2 and 45.5. Boden noted that "There is very little evidence of boat travel on the upper reaches of this river." Nonetheless, he determined the lower 46.8 miles of the Middle Fork navigable on the basis of information provided by Native allotment holders and the BLM field inspectors who had visited the allotments in the 1980s. Boden also considered aerial photographs showing "no obstructions or impediments" downriver of the area that BLM field inspector Carl Neufelder had observed (river mile 45.5). (Attachment 20)

The February 21, 1989, memorandum also addressed the navigability of the Ugaklik River within an ANCSA 14(h)(1) claim for an historical site, AA-10155, located on the left bank of the river about a quarter of a mile above its confluence with the Eek River, in Sec. 3, T. 1 S., R. 72 W., SM. Boden determined the Ugaklik River navigable to and through AA-10155. He based his determination on a "photograph of the river at this historical site [which] clearly shows a river susceptible to canoe navigation at ordinary high water stages." (Attachment 20)

After the U.S. District Court's decision involving the navigability of the Gulkana River in 1989, the BLM contacted Alaska Native village and regional corporations to inquire whether they wished to have the new standard of navigability—a boat larger than a one-man kayak—applied to waters over submerged lands that had already been conveyed to them. On September 21, 1990, Calista Corporation Vice President for Land & Natural Resources, Mike Neimeyer, informed Ann Johnson, Chief of the BLM Branch of Calista Adjudication, that Calista Corporation wished "that no new navigability redeterminations be made on previously conveyed lands within the Calista region." Neimeyer cited surveys showing that "the majority of Calista villages are opposed to the idea of navigability redeterminations being conducted on lands conveyed to them under the Alaska Native Claims Settlement Act. What control the village corporations have over their lands are more important than gaining additional upland acreage under the Gulkana River criteria." (Attachment 21)

iv Native Allotment Patent No. 50-94-0359.

On December 3, 1990, Charlotte M. Pickering, BLM Lead Land Law Examiner in the Branch of Calista Adjudication, wrote to the Iqfijouaq Company concerning an "Approval to Modify Navigability Determination on ICd Lands" that had been sent to the corporation. The letter stated: "If either corporation [regional or village] decides against or fails to request a navigability redetermination, BLM will meander only those nontidal water bodies less than the meanderable size that were determined navigable and excluded from the interim conveyance [and] the submerged lands will be segregated." Pickering wrote that since Calista Corporation had notified the BLM of its decision not to request redeterminations, "BLM will not segregate the beds of navigable waters that may have been inadvertently conveyed to the corporation at the time of interim conveyance." (Attachment 22)

In 1995, BLM Navigable Waters Specialist C. Michael Brown wrote to the manager of the Yukon Delta NWR in response to his request for information about the history and status of BLM navigability findings for rivers and streams in the refuge. In his letter, Brown stated, "The BLM has consistently held this river [the Eek River] to be navigable." He explained that this navigability determination extended "from its mouth to and through T. 1 N., R. 72 W., SM" (through the selection area). In 1988 the BLM found three additional water bodies navigable under "the U.S. District Court's standard of navigability as described in the Gulkana River case." Those navigable water bodies were: a lake and its outlet in Sec. 3, T. 1 N., R. 72 W., SM; a slough in Secs. 16-20, T. 2 N., R. 7 W., SM; and a slough in Sec. 36, T. 2 N., R. 74 W., SM to second tributary on right (looking upstream). Brown added that in 1989 the BLM "investigated the navigability of the river upstream of the village selection area, focusing on those river segments that crossed Native allotment claims." Those investigations led it to conclude "that the Eek River is navigable from its mouth to and through Native allotment F-15812-C in Sec. 28, T. 1 N., R. 67 W., SM" and that "the Middle Fork Eek River is navigable from Eek River to and through Native allotment AA-31272-B in Sec. 12, T. 3 S., R. 69 W., SM."<sup>35</sup> (Attachment 23)

On August 28, 1997, Dennis Benson, a BLM Realty Specialist, released an amended notice for easements that were to be reserved in the title document conveying Sec. 36, T. 2 N., R. 74 W., SM on the lower Eek River to the Iqfijouaq Company. (Attachment 24) That section had been selected by the Iqfijouaq Company on December 11, 1975, but it was not conveyed to the village corporation in either IC No. 799 or IC No. 1032. (Attachments 25, 14, 15, and 16) The August 28, 1997, BLM notice characterized the Eek River as "a major waterbody." An attached map does not address navigability of the river and the leftbank slough in Sec. 36, T. 2 N., R. 74 W., SM. The leftbank slough had been determined navigable in 1988. (Attachment 24)

A Decision to patent Sec. 36, T. 2 N., R. 74 W., SM, dated January 9, 1998, indicated that the section had been divided into two lots. <sup>39</sup> (Attachment 25) The Master Title Plat (MTP) for T. 2 N., R. 74 W., SM showed that the Eek River was segregated from Lots 1 and 2 in Sec. 36. <sup>40</sup> (Attachment 18) The DIC stated, "There are no inland water bodies considered to be navigable" in Sec. 36, Lots 1 and 2, T. 2 N, R. 74 W., SM. <sup>41</sup>

(Attachment 25) No mention was made of the unnamed leftbank slough in Sec. 36, T. 2 N., R. 74 W., SM, which had been determined navigable under the one-man kayak standard in 1988. 42 (Attachment 19) The land in Sec. 36, T. 2 N., R. 74 W., SM was never ICd. On February 25, 1998, the BLM patented the surface estate of the lots to Iqfijouaq Company, under Patent No. 50-98-0235, and the subsurface estate to Calista Corporation under Patent No. 50-98-0236. The patent made no mention of navigability. 43 (Attachment 26) This is the only section along the Eek River System that was patented to Native corporations as of early 2011. An April 30, 1997, letter from June McAtee, Calista Corporation Vice President of Land & Natural Resources, to the BLM explained that the conveyance came about as a result of Calista Corporation's reallocation of up to 640 acres of ANCSA 12(b) lands to the village of Eek to facilitate construction of a new airport. 44 (Attachment 27)

On June 17, 1998, William C. Johnston, BLM Acting Chief, Branch of Mapping Sciences, determined the North Fork Eek River non-navigable as it bisected Native Allotment FF-17241, in Sec. 18, T. 1 N., R. 63 W., SM (river miles 131.6-132.4). Johnston made this determination in a memorandum that addressed the navigability of 19 Native allotments in Survey Window 2700. He found no navigable waters within any of the 19 Native allotment selections on the Eek and Kwethluk rivers. (Attachment 28)

Johnston based his determination upon a navigability report for the Eek River prepared by Laura J. Lagstrom of the BLM Navigability Section. Lagstrom had interviewed Native residents of Eek about their experiences boating to the upper North Fork. She also considered Scott Guyer's 1998 photointerpretation of aerial photographs that had been taken in 1980 in July. Guyer noted that the North Fork appeared in the aerial photographs to be open to Sec. 11, T. 1 S., R. 64 W., SM (river miles 138.8), upstream of all of the Native allotments on the North Fork. Applying the Gulkana River Standard, Lagstrom stated,

I find the Eek River non-navigable within Native Allotment selection FF-17241 in T. 1 N., R. 63 W., SM [river miles 131.6-132.3]. A majority of the villagers of Eek use 18' Lunds with 30-90 horsepower jet units to enable them to boat upstream to the base of Breast Mountain and the mouth of Kapon Creek in Sec. 20, T. 1 N., R. 63 W., SM [river mile 134]. This can only be done after a significant amount of rain has fallen, usually in the fall during September. This high water period only lasts between 2-3 weeks. The river is only inches deep in the summer. They have reported that there are years when they are not able to reach this far because of the lack of rain. <sup>46</sup> (Attachment 28)

In a January 12, 2006, memorandum identifying navigable waters within ANCSA-selected and interim-conveyed lands in the Eek Village project area, Dominica VanKoten, the BLM Navigability Section Chief, reversed the August 12, 1988, navigability determination for the lake outlet in Sec. 3, T. 1 N., R. 72 W., SM (river mile 40 of the Eek River), and determined it non-navigable. The memorandum stated that in

1988, "these water bodies were determined to be navigable due to the fact that they were subject to overflow from the larger streams nearby." (Attachment 29) VanKoten noted that the August 12, 1988, determination had also been made on the basis of the outlet's size and the one-person kayak standard, having stated that "These water bodies are sufficiently wide and deep for canoe navigation." (Attachment 19) VanKoten determined that, on the basis of an analysis of aerial photos and previous navigability maps, Sec. 3, T. 1 N., R. 72 W., SM contained no navigable waters.

VanKoten's January 12, 2006 memorandum reaffirmed that the unnamed rightbank stream was navigable in Secs. 16-20, T. 2 N., R. 72 W., SM (river miles 4.5-11.3). The appendix to the memorandum listed navigable waters within certain village-selected and interim-conveyed lands in the Eek Village project area. For Secs. 6, 7, 17-20, 28, 29, 33 and 34, T. 2 N., R. 72 W., SM, the appendix named only the unnamed rightbank stream as navigable, citing the BLM's August 12, 1988, memorandum regarding navigable waters in Group Survey 253 (Window 1837). VanKoten noted that the 1988 memorandum determined the slough navigable in Secs. 16-20, T. 2 N., R. 72 W., SM. The appendix did not list as navigable either the unnamed right tributary of the unnamed rightbank stream, which flows through Sec. 7, T. 2 N., R. 72 W., SM (river miles 3.2-4 of the tributary), or the Eek River, which flows through Sec. 33, T. 2 N., R. 72 W., SM (river miles 34.6 to 36). In Sec. 36, T. 2 N., R. 74 W., SM, where a leftbank slough had been determined navigable on August 12, 1988, the appendix to the January 12, 2006 memorandum listed only the Eek River as being navigable.

On March 10, 2006, the ADF&G proposed six easements whose purpose was to ensure public access from the Eek River in Sec. 33, T. 2 N., R. 72 W., SM to a lake system on public lands to the north. (Attachment 30) The BLM reported the results of its final review of those six easements (EIN 31-36) in a June 13, 2006, memorandum written by K. J. Mushovic, BLM Chief of the Adjudication Branch. In the "Discussion" section for each of the six proposed easements, the memorandum stated,

the unnamed stream, from the eastern boundary of Sec. 17, T. 2 N., R. 72 W., Seward Meridian, Alaska [river mile 9], to its confluence with the Eek River in Sec. 26, T. 2 N., R. 73 W., Seward Meridian, Alaska [river mile 0] has been documented in the case file as being navigable. This stream provides alternate access to the same area. Therefore, this easement is not necessary to facilitate public access to isolated public land and is not being recommended.<sup>51</sup> (Attachment 31)

No documents were found that address the navigability of the portion of the unnamed rightbank stream in Secs. 23, 24, 25, and 26, T. 2 N., R. 73 W., SM (river miles 0 to 4.5). The MTPs show the stream as segregated throughout its 17-mile length (from Sec. 26, T. 2 N., R. 72 W. to Sec. 26, T. 2 N., R. 73 W., SM) and meandered in the Native allotments. (Attachment 18)

Tidal influence for this unnamed stream was addressed in U.S. Survey No. 10123, a retracement of a portion of U.S. Survey No. 8321 in Sec. 16, T. 2 N., R. 72 W., SM. A note on U.S. Survey No. 10123 states, "During the retracement of line 3-1 Lot 1, U.S.S. No. 8321, the original true point for meander cor. No. 3 was determined to fall 2.66 chs. inland from mean high tide. This was not due to accretion, but differences in determining the mean high tide line." (Attachment 32)

On June 25, 2008, R. S. Spurlock of the BLM Navigability Section signed a memorandum that provided navigability input to BLM Land Transfer for inclusion in the DIC within Window No. 2835 for the Village of Eek. The memorandum stated that with regard to Secs. 6, 7, 17-20, 28, 29, 33, and 34, T. 2 N., R. 72 W., SM, only the Eek River was navigable. Within those sections of T. 2 N., R. 72 W., SM, the Eek River flows only through Sec. 33. Spurlock noted that "All other named and unnamed water bodies within the above-described selection were reviewed and based on existing evidence determined non-navigable." (Attachment 33) Spurlock's memorandum did not offer any justification for not including in his list of navigable waters the portion of the unnamed rightbank stream that flows through Secs. 17-20, T. 2 N., R. 72 W., SM, which the BLM had determined navigable in 1988 and which Dominica VanKoten had listed as navigable on January 12, 2006.

On August 20, 2008, Charmain McMillan, BLM Land Law Examiner, issued a DIC for lands along portions of the Eek River System, including lands in Secs. 6, 7, 17-20, 28, 29, 33, and 34, T. 2 N., R. 72 W., SM. An unnamed right tributary of the unnamed rightbank stream that enters the Eek River at river mile 27.4 originates in Sec. 7, T. 2 N., R. 72 W., SM (river miles 3.2-4 of the right tributary). A portion of the unnamed rightbank stream flows through Secs. 17-20, T. 2 N., R. 72 W., SM (river miles 4.5-9). The Eek River flows through Sec. 33, T. 2 N., R. 72 W., SM (river miles 34.6 and 36). The six easements (EIN 31-36) that the ADF&G proposed in 2006 were not included in the DIC. The Decision stated that "Within the lands herein approved for conveyance, only the following water bodies have been determined to be navigable: Eek River, Eenayarak River, and Kuskokwim River." (Attachment 34) The DIC did not reference any portion of the unnamed rightbank stream as being navigable.

The DIC also included lands in Sec. 3, T. 1 N., R. 72 W., SM, where an outlet stream flows from a lake. (Attachment 34) In 1988, the one-mile-long outlet stream, which enters the Eek River at river mile 40, had been determined navigable in Sec. 3, T. 1 N., R. 72 W., SM (river miles 0.5-1) under the one-man kayak standard. That determination was reversed in 2006, and the BLM determined the outlet stream between river miles 0.5 and 1 non-navigable.

The 2008 DIC and Spurlock's navigability input reversed the 1988 determination that a 4.5-mile-long stretch of the unnamed rightbank stream (between river miles 4.5 and 9) was navigable under the one-man kayak standard. By 2008, that navigability determination had been in effect for 20 years. C. Michael Brown, BLM Navigable Waters Specialist, had cited the 1988 navigability determination

in a 1995 letter summarizing navigability determinations for the Eek River, and Dominica VanKoten, Chief of the BLM Navigability Section, had listed the unnamed rightbank stream in Secs. 16-20, T. 2 N., R. 72 W., SM as navigable in 2006 on the basis of the 1988 determination.<sup>57</sup> (Attachments 23 and 29) The 2008 DIC made no mention of U.S. Survey No. 10123, which reported the mean high tide line at river mile 10 of the unnamed rightbank stream in Sec. 16, T. 2 N., R. 72 W., SM.

The August 20, 2008, DIC did not list the unnamed rightbank stream as a navigable water body, reversing a June 13, 2006 decision that the navigable unnamed rightbank stream provided an alternative access route to the public lands in Secs. 28 and 33, T. 2 N., R. 72 W., SM, just north of the Eek River. (Attachment 34) The 2008 DIC excluded all lands beneath water bodies determined by the BLM to be navigable and those pending a tidal determination at time of survey. The navigable and potentially tidal water bodies were said to be identified on the "attached navigability maps," but no navigability maps were attached. (Attachment 34)

On October 8, 2008, the BLM issued IC Nos. 2154 and 2155 to Iqfijouaq Company and Calista Corporation for the lands that were part of the DIC of August 20, 2008. (Attachment 35) The conveyed lands included the following areas along the Eek River and its tributaries: Sec. 3, T. 1 N., R. 72 W., SM (the upper half of the lake outlet) and Secs. 6, 7, 17-20, 28, 29, 33, and 34, T. 2 N., R. 72 W., SM (including portions of the unnamed rightbank stream and its unnamed right tributary, and the Eek River between river miles 34.6 and 36). Submerged lands in Sec. 7, T. 2 N., R. 72 W., SM were conveyed to the Native allotment owner.

Several BLM documents considered the Eek River to be tidal below Eek Village (river mile 18). Other estimates of tidal influence extended farther upriver. In a May 9, 1977, letter to the BLM Easement Task Force, Frank A. Stefanich, Access Project Leader of the Alaska Department of Fish and Game (ADF&G) Habitat Protection Section, wrote, "Rae Baxter, fisheries biologist at Bethel provided me with the following information regarding the top of tide (I assume he meant tidal influence): 1. Eek River S25, T2N, R73W, S.M." (river mile 27.4 or 28.7). (Attachment 36) BLM historian C. Michael Brown wrote in 1983 that the BLM proposed to determine the Eek River to be tidally influenced to the point identified by Baxter. 62 Notations on navigability maps associated with a 1983 Decision to Interim Convey lands (DIC) indicated that tidal determinations were pending for the portion of the Eek River that is downstream from Eek Village.<sup>63</sup> (Attachment 15) In June 1991, U.S. Survey No. 10085 found tidal influence on the Eek River as far upstream as river mile 31.<sup>64</sup> (Attachment 37) In August 1991, U.S. Survey No. 10123 identified tidal influence to river mile 10 of the unnamed rightbank stream that joins the Eek River at river mile 27.4.65 (Attachment 32) No documentation has been found indicating that the reports of tidal influence in these surveys are reflected in an official BLM determination of tidal influence for the Eek River.

Summary of Navigability Determinations: Navigability determinations for the Eek River System are summarized in Table 1 and shown in Figures 6 and 7. The BLM has determined the Eek River navigable within the village selection area to river mile 48.6, the North Fork navigable in small tracts to river mile 98.5, and the Middle Fork navigable in small tracts to river mile 46.8. The three water bodies that were determined navigable in 1988 under the one-man kayak standard—the lake outlet in Sec. 3, T. 1 N., R. 72 W., SM; the unnamed rightbank stream in Secs. 16-20, T. 2 N., R. 72 W., SM; and the leftbank slough in Sec. 36, T. 2 N., R. 74 W., SM—are now considered to be non-navigable, except for Sec. 16, T. 2 N., R. 72 W., SM (river miles 9-11.3), which was not part of the 2008 DIC and IC Nos. 2154 and 2155. The Ugaklik River has been determined navigable within an historical site near the mouth of the river.

In areas where the uplands have been ICd to Iqfijouaq Company and Calista Corporation, the water bodies have been meandered and segregated from the ICd lands. Only one section has been patented to Iqfijouaq Company and Calista Corporation—Sec. 36, T. 2 N., R. 74 W., SM. The BLM certificated portions of the beds of water bodies in the Eek River System to two Native allotment holders. The bed of the unnamed right tributary of the unnamed rightbank stream in Sec. 7, T. 2 N., R. 72 W., SM (river miles 3.6-3.9 of the tributary) was certificated to Willie Green (FF-16054-D) under Native allotment certificate 50-96-0664. The bed of the Eek River in Sec. 18, T. 1 N., R. 63 W., SM (river miles 131.6-132.4) was certificated to Alfred Alexie's heirs (FF-17241) under Native allotment certificate 50-2000-0156. Other than the BLM's consideration in the late 1970s that the Eek River was tidal to Eek Village (river mile 18), no evidence was found of a BLM determination of tidal influence for the Eek River.

**Table 1: Eek River System Navigability Determinations** 

Date	Water Body	Type Decision and Substance	Criteria
1-27-77	Eek River	BLM Memo: Easement Task Force meeting. Eek River	Travel, trade
Att. 4	Lek Kivei	considered navigable to village of Eek [river miles 0-18].	and commerce;
Au. 4		considered havigable to vinage of Eek [liver limes 0-16].	tidal influence
"	Eek River	Eek River from Eek village through selection area,	Susceptibility to
	Lek Kivei	T. 1 N., R. 72 W., SM [river miles 18-48.6] considered	travel, trade, or
		navigable.	commerce
12-21-79	Eek River	Draft Final Easements for the Village of Eek. Eek River	Significant
Att. 10	Lek Kivei	determined to be "a major waterway."	-
Att. 10	Eek River	Eek River from mouth to Eek Village [river miles 0-18]	present use Tidal
	Eek Kivei	considered tidal. All other tidal influenced waters also	Tidai
		deemed navigable. Other tidal waters not identified.	
"	Eek River	Eek River from Eek village through selection area,	Susceptibility to
	Lek Kivei	T. 1 N., R. 72 W., SM [river miles 18-48.6] considered	travel, trade and
		navigable.	commerce
6 0 92	Eek River	BLM Final Easements Memorandum. Eek River	
6-9-83 Att. 12	Lek Kiver	determined "a major waterway."	Significant present use
7-22-83	Eek River	BLM Final Navigability Determination for Village of	Used or could
Att. 13	Eek Kivei	Eek. Eek River determined navigable through selection	be used as a
Att. 13		area (T. 1 N., R. 72 W., SM) [river miles 0-48.6]. Mean	highway of
		high tide line will be established at the time of survey.	commerce
8-12-88	Lake outlet	BLM memo: Navigable Waters in Group Survey 253	One-man kayak
Att. 21	Lake outlet	(Window 1837). Lake outlet in Sec. 3, T. 1 N., R. 72 W.,	Olie-iliali kayak
Att. 21			
"	Rightbank	SM [at river mile 40 Eek River] determined navigable.  Rightbank stream in Secs. 16-20, T. 2 N., R. 72 W., SM	
	stream	[river miles 4.5-11.3 of stream] determined navigable.	"
"	Leftbank	Leftbank slough in Sec. 36, T. 2 N., R. 74 W., SM to 2 <sup>nd</sup>	
	slough	tributary on right (looking upstream) [near mile 16.9 Eek	"
	slough	River] determined navigable.	
2-21-89	Eek River &	BLM Memo: Navigable waters on/along Small Tracts in	
Att. 22	North Fork	Quinhagak (Window 1562). Eek R. determined navigable	
Att. 22	North Fork	from mouth to/through Native allotment F-15812-C in	"
		Sec. 28, T. 1 N., R. 67 W., SM [to river mile 98.5].	
"	Middle Fork	Middle Fork determined navigable in small tracts from	
	Wilduic Fork	Eek River to and through T. 3 S., R. 69 W., SM, [river	"
		miles 0-46.8].	
	Ugaklik River	Ugaklik River determined navigable within 14(h)(1) area	
"	Ogaklik Kivei	near mouth of river [river miles 0-0.5].	"
1-9-98	Leftbank	DIC: Leftbank slough in Sec. 36, T. 2 N., R. 74 W., SM	Not stated
Att. 25	slough	to 2 <sup>nd</sup> tributary on right (looking upstream) determined	1 vot stated
1100. 20	biough	non-navigable, reversing 8-12-88 determination.	
6-17-98	North Fork	BLM Memo re navigable waters in Survey Window	Travel, trade &
Att. 30	1.01til I Olik	2700. Determined North Fork non-navigable within	commerce;
110.50		Native Allotment selection FF-17241 in T. 1 N.,	"Gulkana River
		R. 63 W., SM [river miles 131.6-132.4].	Standard"
1-12-06	Lake outlet	BLM Navigable Waters memo. Lake outlet in Sec. 3,	Not stated
Att. 31		T. 1 N., R. 72 W., SM [at mile 40 Eek River] determined	1.00 3.000
		non-navigable, reversing the 8-12-88 determination.	
8-20-08	Rightbank	DIC. Right bank stream in Secs. 17-20, T. 2 N., R. 72	
Att. 35	stream	W., SM [river miles 4.5-9 of stream] determined	"
		non-navigable, reversing the 8-12-88 determination.	

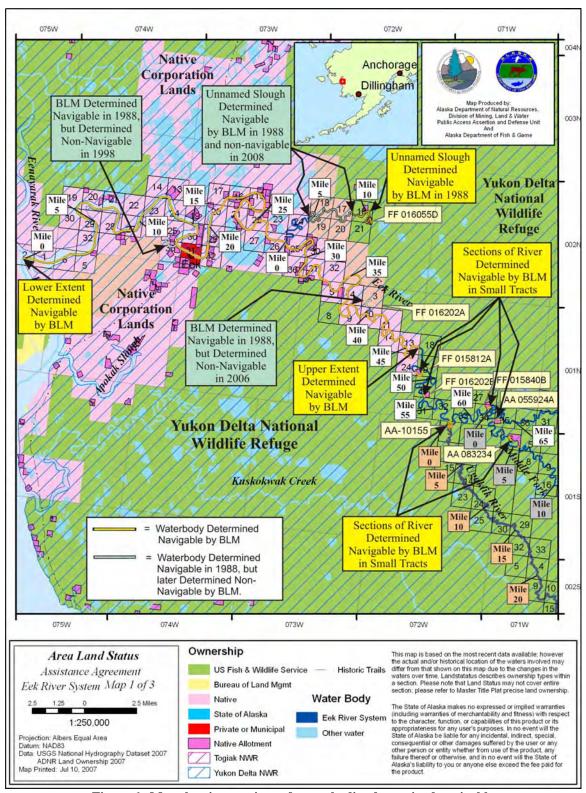


Figure 6. Map showing portions of water bodies determined navigable by BLM on lower portion of the Eek and Ugaklik rivers.

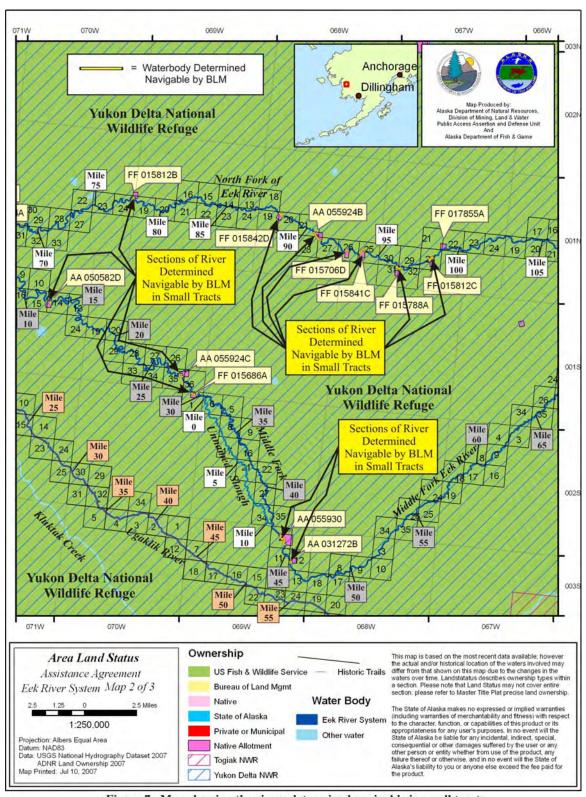


Figure 7. Map showing the rivers determined navigable in small tracts along middle portions of the North and Middle Forks of the Eek River.

#### IV. Physical Character of Waterway

From its headwaters in the Eek and Ahklun mountains, the Eek River flows generally west/northwest for a distance of 165 miles to the Eek Channel of the Kuskokwim River, which is located 45 miles southwest of Bethel. The Eek River System drains a watershed variously estimated at 1,456 to 2,080 square miles.<sup>66</sup>

The Eek River originates in a string of lakes at an elevation of about 2,700 feet on the northern flank of Mount Oratia, which separates the headwaters of the Eek River from the headwaters of the Kanektok River. The Eek flows through glaciated mountains and then through a wide valley in the uplands before emerging onto the tundra. <sup>67</sup> The Eek River's current is swift in its upper reaches but slows in the lowlands. Its channel meanders extensively below the confluence of the North and Middle forks at river mile 62. <sup>68</sup> Geologist Frank W. Holzheimer, who investigated mineral deposits along the Eek River in 1926, wrote: "The Eek valley is wide and there are many bends in the river." <sup>69</sup> The vegetation surrounding the Eek River is primarily dwarf shrub tundra. <sup>70</sup>

The Great Ridge, a 20-mile-long ridge exceeding 2,000 feet in elevation, forms a natural division between the uplands and lowlands within the Eek River basin. The North Fork flows past the Great Ridge between river miles 112 and 104 and the Middle Fork flows past it between river miles 71 and 45. In the uplands, vegetation consists mainly of moist to dry dwarf shrub tundra with shrub lands along the river and on protected hillsides. Trees grow in the area of the Great Ridge—on gravel islands and to elevations of 1,000 feet. To the west of the Great Ridge (river miles 0 to 104 of the North Fork and Eek River), the elevation does not exceed 500 feet, the terrain is flat (with numerous ponds and lakes), and the vegetation consists mainly of moist to wet sphagnum dwarf shrub tundra.<sup>71</sup>

The ADF&G described the North Fork and the Eek River to an unspecified point below the confluence of the Middle Fork for the benefit of rafters planning to float downriver: "Along most of its length, the river channel is defined and water is deep with few log jams to navigate." In the mid-section of the float, rafters could expect to encounter several locations with poorly defined channels. The current slows and the river meanders as it leaves the mountains and enters the Kuskokwim lowlands. In the lowlands, "stream banks are predominately tundra with patches of black spruce, birch, aspen, balsam poplar, and alders."

ADF&G fishery biologist Kenneth Alt, who studied the river in 1976, divided the Eek River into three sections. From Mile 0 to Mile 40 represents the portion of the river that he considered to be subject to tidal influence. From Mile 40 to Mile 62, the river extends from the upper extent of tidal influence to the juncture of the North and Middle forks. His last section includes the North and Middle forks from their junction to their headwaters, although Alt surveyed only the lower 6 miles of the North Fork and the lower 12 miles of the Middle Fork.<sup>73</sup>

#### North Fork

The North Fork extends from its headwaters at river mile 165 to its junction with the Middle Fork at river mile 62. Above river mile 158, the river has been described as steep and very rocky.<sup>74</sup>

Rainy Creek joins the North Fork from the right at river mile 146. The Rainy Creek area is not glaciated, and the creek (elevation about 1,600 feet) and its tributaries drain a rolling upland. Willow thickets line the stream, and the remaining vegetation is composed of tundra plants.<sup>75</sup>

A photointerpretation of aerial photographs taken in July 1980 reported that the North Fork appeared to be open as far upriver as Sec. 11, T. 1 S., R. 64 W., SM (river miles 138.8 to 140).<sup>76</sup> (Attachment 28)

Kapon Creek enters the North Fork from the right at river mile 134 in the area of the Sawtooth Mountains. Kenneth Henry, of Eek, who boats to that area every September, described the river in 1998 as 20-30 feet wide, and he noted that "the swift current and hidden boulders" can make the river dangerous. He said that larger rocks begin to appear in the river upstream of river mile 98. During rainy periods, the deeper areas can be six feet deep and shallow places one to two feet deep. In mid-September 1996, for example, the river was deep because of daily rain. Mr. Henry estimated that high water conditions in the fall lasted two to three weeks.<sup>77</sup> (Attachment 38)

Steven White of Eek described the North Fork Eek River in the vicinity of Kapon Creek in 1998 as highest in September, when the deepest sections are about three feet deep and the shallowest areas are 1½ feet deep. He estimated that the river stays high "a good 6-8 days" in the fall. Low water periods occur in June, July, and part of August, before the August rains. During that time, the shallowest areas are only six inches deep, and it is necessary to drag a boat. Mr. White said that during low water it is possible to go upstream to reach the first mountain (on the right bank near mile 93). Impediments in the river consist of strainers and sweepers (submerged and partially submerged fallen trees). (Attachment 38)

Photointerpretation of aerial photographs that were taken in July 1980 indicated that in Sec. 19, T. 1 N., R. 63 W., SM (river mile 133), the river was one chain (66 feet) wide and had more gravel bars than in stretches farther downstream (Figure 8). The photo interpretation report speculated that "shallowness from gravel bars may impede navigability." Between river miles 133 and 126.2, the river is mostly one chain wide and meandering—with oxbows and sloughs.<sup>79</sup> (Attachment 28)



Figure 8. View of the upper North Fork of the Eek River in the vicinity of river mile 130, August 1975. The view is looking northeast. BLM photo by Clifford D. Ells.

Fritz Petluska of Eek, who traditionally motored up the Eek River to hunt in September, characterized the shallowest areas as about two feet deep, and the deepest areas (normally around the bends of the river) as six to eight feet deep. He said that the river is 30-50 feet wide near Native allotments that are located between river miles 130 and 135. He said that rocks, boulders, strainers, and sweepers begin at the mountains or near the Great Ridge (between river miles 104-112 of the North Fork). (Attachment 38) According to Johnny Hawk, another resident of Eek, the North Fork upriver of the Great Ridge narrows to 15 to 20 feet and becomes "very deep" before widening again. (Attachment 38)

Johnny Hawk, who owns two Native allotment parcels on the North Fork, told a BLM interviewer in 1998 that above river mile 115, where an unnamed creek enters from the left, "the river begins to meander and become so shallow that you have to traverse it with a jet boat." Mr. Hawk described the river as "very deep" between river mile 115 and river miles 111.3-103. He said that the shallowest he had seen the river—during a dry spell—was one-foot or less. During September the river was between three and four feet deep. <sup>82</sup> (Attachment 38)

Photointerpretation of aerial photographs taken in July 1980 showed that in Sec. 19, T. 1 N., R. 66 W., SM (river miles 104-103), the river was one to two chains wide and clear except for occasional gravel bars and islands. (Attachment 28)

Johnny Hawk said that he had often boated upriver to the crescent-shaped mountain at river mile 98. The river narrows at that point and is three to four feet deep during September. Hawk said that upstream of river mile 98, the river meanders and becomes shallow, and a jet boat is necessary to traverse it. He said "high water occurs after spring breakup around the 2<sup>nd</sup> or 3<sup>rd</sup> week of May and again during the latter part of August until freeze-up which occurs during the 2<sup>nd</sup> or 3<sup>rd</sup> week of October." He described the river bottom as gravel and said that there are no beaver dams on the Eek River because it is too swift. <sup>84</sup> (Attachment 38)

Alt described the lower six miles of the North Fork as larger and less turbid than the Middle Fork. At about river mile 67, which is five miles above the junction, Alt measured the North Fork's average width at 100 feet, average depth at 1.94 feet, velocity at four feet per second (fps), and flow at 776 cubic feet per second (cfs). He noted that the river in that section "had many deep pools, eddies, riffles and submerged willows in the stream," which provided good habitat for grayling, pike, char and salmon. The river bottom was composed of 20% sand and silt, 40% fine gravel and 40% medium gravel. The North Fork is mostly clear above the confluence with the Middle Fork. A BLM official described the North Fork Eek River in 1989 as about 120 feet wide just above the mouth of the Middle Fork. (Attachment 20)

### Eek Lake & Outlet

Eek Lake is located in the foothills between the Eek and Kwethluk rivers. It has been described as "a large, shallow tundra pond on a relatively flat plateau about 1000 feet above sea level." The lake is 1.4 miles long and one mile wide. Its depth is mostly six feet or less, with a maximum depth of eight feet. Alt described the water as brown in color and the lake bottom consisting of mud and ooze. Submerged vegetation and pondweed grow to the center of the lake. A gravel beach surrounds the lake, and tundra vegetation, grass, and willows grow along the fringes. A four-mile-long outlet channel connects Eek Lake with the North Fork Eek River at river mile 125.2. Alt described the outlet stream as "very boggy," with "virtually no flow."

#### Middle Fork

From its headwaters in the Eek Mountains, the Middle Fork flows 83 miles to join the North Fork at river mile 62 of the Eek River. On USGS quadrangle maps Goodnews D-6 and Bethel A-6 and A-7, the Middle Fork Eek River is double-lined for most of its length. <sup>90</sup> (Attachment 20)

The Middle Fork parallels the southeastern flank of the Great Ridge for a distance of 25 miles (river miles 71-46) before turning northwesterly to flow across an upland plain. There are sandbars or gravel bars at river bends. In the mountains, the Middle Fork flows in a single channel. As the Middle Fork rounds the Great Ridge (between river miles 48 and 46), its width is about 80 feet and its gradient about 13 feet per mile (fpm). (Attachment 20)

A BLM realty specialist who visited a Native allotment parcel near the Great Ridge on July 14, 1984, recalled that the river just above river mile 45 was two to three feet deep with a few riffles. <sup>92</sup> (Attachment 20) Aerial photographs showed "no obstructions or impediments" downriver from river mile 45.5. At river mile 44, the river meanders through lowlands next to foothills (Figure 9). Below the Great Ridge (between river miles 42.8 and 30.8), the gradient is lower than in the mountains, and the river flows in several meandering channels. <sup>93</sup> (Attachment 20)



Figure 9. View of the Middle Fork of the Eek River at river mile 44, June 26, 1987. The view is looking east. BLM photo by Richard S. Stephenson.

Below river mile 30.8, the Middle Fork flows in a single meandering channel through the lake-dotted tundra lowlands to the Eek River (Figure 10).

Alt described the lower 12 miles of the Middle Fork as having a fine gravel bottom similar to that of the Eek River in the area of river miles 62-40. He reported that the Middle Fork at mile 10 was 90-feet wide, with an average depth of 1.67 feet, a velocity of 3 fps, and a flow of 491 cfs. The river meandered considerably in that section and was somewhat silty. Its banks were heavily covered with willows. Near its mouth, the Middle Fork is reported to be as large as the Eek River but slower moving. Attachment 20)



Figure 10. View of the Middle Fork of the Eek River at river mile 28, June 26, 1987. The view is looking northwest. BLM photo by Richard S. Stephenson.

### Eek River

The North and Middle forks join at river mile 62 (Figure 11). Below that point, the Eek River meanders through the tundra to Eek Point, where it enters Eek Channel Kuskokwim River. From river miles 62 to 40, the Eek River is slow moving (Figure 12). Its silt and fine gravel bottom is mostly covered with a mat of algae. The water is very murky below the confluence of the two forks. The river banks are mud and lined with a narrow band of willows that extends as far downstream as river mile 24.

Between river mile 40 and the river mouth, the Eek River is reportedly subject to tidal influence. Alt described this portion of the river as deep and excessively meandering, with "slow moving and silty water." Most of the river bottom is covered with mud, although the bottom of the part from river miles 62 to 40 has some fine gravel on it. In the vicinity of Eek village (river mile 18), the river is more than 300-feet wide and more than five-feet deep.<sup>99</sup>



Figure 11. View of the juncture of the North and Middle forks at river mile 62 of the Eek River, August 1975. The North Fork (foreground) is joined from the left by the Middle Fork to form the Eek River. The view is to the west. BLM photo by Clifford D. Ells.



Figure 12. View of the Eek River near river mile 48, facing southeast, August 19, 2004. The lands in the lower half of the photo are in the village selection area. Those in the upper half are beyond the selection area. BLM photo by Kathy A. Stubbs.

BLM documents refer to Eek Village (river mile 18) as the upper extent of tidal influence on the Eek River (Figure 13). In a memorandum issued on July 22, 1983, the BLM Deputy State Director for Conveyance Management stated, "The Eek River is tidally influenced below the village of Eek," but added that "The Mean high tide line will be established at the time of survey." (Attachment 13) Other estimates of tidal influence have ranged upstream as far as river mile 40, which was Alt's estimate. Rae Baxter, an ADF&G fishery biologist in Bethel who floated down the Eek River from above river mile 150, estimated that the Eek River was tidally influenced to or through Sec. 25, T. 2 N., R. 73 W., SM, (river miles 27.4-29.8). (Attachment 36) C. Michael Brown cited Rae Baxter's estimate in the Kuskokwim Region history and stated: "the BLM proposed to determine the river to be tidally influenced to the point identified by Rae Baxter." In 1918, the Reverend John Kilbuck, Assistant Superintendent of the Western School District in Alaska, wrote that, "There is a rise of about 4 feet of tide at the [Eek] village."



Figure 13. View of the Eek River and Eek Village, at river mile 18, August 19, 2004. The view is looking southeast. BLM photo by Kathy A. Stubbs.

Two U.S. Surveys have made note of the presence of tidal influence above river mile 30. On U.S. Survey No. 10085 of Native allotment parcel AA-055927-A, which is located on the left bank of the Eek River between river miles 30.6 and 31, the surveyor stated that the meanders were "along a well-defined bank, 4 ft. high at the line of mean high tide." The surveyor also identified two tidal sloughs on the parcel. U.S. Survey No. 10123, a retracement of a portion of U.S. Survey No. 8321, also identified tidal influence well upriver from Eek village. That survey concerns a parcel located at river mile 10 of an unnamed rightbank stream that joins the Eek River at river mile 27.4. A note on the survey states that the discrepancy between the two surveys in positioning a meander

corner "was not due to accretion, but differences in determining the mean high tide line." <sup>104</sup> (Attachment 32)

## Ugaklik River

The Ugaklik River is a major Eek River tributary that flows 62 miles in a generally northwesterly direction before entering the Eek River from the southeast at river mile 57.5. The Central Yup'ik name for the Ugaklik has been given as the *Qelutaq* or *Qelutag* River. On USGS quadrangle maps Bethel A-7 and A-8, the river appears as a single line. (Attachment 20) According to Alt, the mouth of the river is 75 feet wide and about 2.5 feet deep, with a mud-covered bottom. He described the Ugaklik as a "slow moving, silty river," with a gradient of less than five feet per mile. A BLM interpretation of aerial photographs taken in August 1984 indicated that the Ugaklik is a "continuous dark thread of water about fifty to sixty feet wide—narrower than the Middle Fork Eek River—flowing through the tundra-covered lowlands. No impediments or obstructions in the river were visible." The same report described the Ugaklik as deep, clear, and flowing in a single channel between moderately high banks. (Attachment 20)

## Unnamed Rightbank Stream and Its Unnamed Right Tributary

A 17-mile-long unnamed stream enters the Eek River from the right at river mile 27.4. A four-mile-long unnamed tributary joins the unnamed rightbank stream at river mile 10 of the stream (Figure 14). U.S. Survey No. 10803 describes the unnamed tributary as a slough interconnecting between ponds where it crosses Native allotment F-16054-B (river miles 3.9-3.7). The survey depicts the tributary as 20 links (13.2 feet) wide on the northern boundary of the Native allotment, near the northeast corner, and as 75 links (49.5 feet) wide on the eastern side. 110 Where the direction of flow of the tributary is noted on U.S. Survey 8320 at river miles 1.9-1.7 and on U.S. Survey No. 8321 at river miles 0.4-0, the tributary flows toward the unnamed rightbank stream. U.S. Survey No. 10123 notes the existence of tidal influence at the confluence of the tributary and the unnamed rightbank stream at river mile ten of the stream. A BLM photo of river miles 10.7-11.7, where Native allotment F-16055 is located, shows the character of the river and shows a boat with an outboard motor on the unnamed rightbank stream (Figure 15).<sup>111</sup> The unnamed tributary and the unnamed rightbank stream flow through lands that have been described as covered with tundra, mosses, forbs and berry bushes. Small trees and brushy vegetation, including willow and alder, are found along the banks of the unnamed rightbank stream. 112

<sup>&</sup>lt;sup>v</sup> A link equals 7.92 inches.



Figure 14. View of the unnamed right tributary of an unnamed rightbank stream that joins the Eek River at river mile 27.4, August 9, 1990.

The view is looking southeast from the vicinity of river mile 1 of the tributary. BLM photo by Robert P. Rinehart.



Figure 15. View of the unnamed rightbank stream in the vicinity of river mile 11, August 2, 1975. BLM photo by William M. Peake.

No in-depth hydrologic information on the Eek River System was found and there are no known gaging stations. The Eek River's flow undergoes the seasonal fluctuations of a typical Alaska stream as described by the Alaska Department of Natural Resources (ADNR):

A typical Alaska stream experiences low flows from December through March, peak flows during breakup in May-June, lower summer flows in July and August, secondary peak flows produced by rainfall in September-October, and declining flows in November. 113

The Eek River is located in a transitional climatic zone between continental and maritime climates. Precipitation in the Eek Village area averages 22 inches annually. Annual average snowfall is 43 inches. 114

In 1983, Native residents of Eek reported to BLM personnel that the channel where the Eek River meets the Kuskokwim River had changed from that depicted on the USGS Baird Inlet A-1 Quadrangle map. They said that the usable channel now runs through Secs. 3 and 4, T. 1 N., R. 75 W., SM and the other channels are silted. 115

## V. Evidence of Use of the Waterway

Early Native Use of the Eek River System

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. Permanent occupation of the interior Kuskokwim Delta with chronological continuity began about AD 600. Their descendants, 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. The Central Yup'ik Eskimos inhabited the southwest coast, and the *Caninermiut* subgroup occupied the land on the eastern side of Kuskokwim Bay, including the Eek River drainage. The Central Yup'ik Eskimos established permanent villages that formed a base from which they traveled in an annual round of subsistence activities, following seasonal abundance of resources. Their way of life centered on fishing for salmon and freshwater fish, hunting land mammals, sea mammals, and waterfowl, and gathering berries.

In 1978, archaeologist Robert Ackerman conducted an archaeological survey of a corridor extending up the Goodnews River to Goodnews Lake and north through the Ahklun Mountains to the foothills between the Eek and Kwethluk rivers. He searched for data on settlement patterns of prehistoric peoples. He wrote that "the major occupations

such as seasonal camps would probably have been along the rivers and streams," where erosion would have taken its toll on them. 121

Ackerman focused his efforts on Kagati Lake, a headwaters lake of the Kanektok River. Kagati Lake is located in an intermountain basin that afforded access for people and animals moving from the Kuskokwim River flat by way of the Kwethluk, Eek, and Kanektok rivers and from Goodnews and Togiak Bays by way of the Goodnews and Kemuk river valleys. Oral histories and the discovery of a drive fence led Ackerman to conclude that Kagati Lake was on a caribou migration route. The "trail of flake scatters" that he found between Kagati Lake and the headwaters of the Eek River and down the Eek River valley led Ackerman to conclude that "travel between the Eek River valley and Kagati Lake was fairly extensive in the past." His research indicated that the headwaters area of these rivers had served as a thoroughfare for people and animals.

Ackerman found a rectangular housepit on the western shore of Eek Lake that he described as a winter camp of the historic period. He also discovered an assemblage of artifacts at a lookout site on a low hill south of the Kwethluk River and concluded that the site was occupied between 4,000 and 2,000 years ago. 124

Within the historic period, households in the area of the lower Kuskokwim River and Kuskokwim Bay produced a high volume of subsistence fish and game each year. Traditional harvest areas for subsistence products were extensive. Anthropologist Robert J. Wolfe wrote that subsistence-based economies, such as that of the Yup'ik people of southwestern Alaska, "require access to a wide area of land and water in the yearly procurement of resources which support the society and economy." Native people moved about within "a clearly circumscribed area" in order to efficiently harvest the various resources as they became available. Certain groups were recognized as having developed traditional areas of land and water usage over time.

During the summer, the Native people of the lower Kuskokwim Region dedicated their efforts to salmon fishing. Salmon were a key resource for human consumption and for feeding dog teams. In the late summer and fall, the Natives traditionally hunted waterfowl and harvested large quantities of berries, which they froze for later use in making *akutaq*, a whipped mixture of berries, sugar, and shortening or fat. In the fall, residents of Eek and other communities set blackfish traps in the smaller lakes and hunted rabbits. They also hunted brown bear and moose. Moose were just beginning to come into the area in the first few decades of the twentieth century. During the winter, people of the Eek area hunted ptarmigan and trapped beaver. In the early 1900s, Native people of the region engaged in more intensive fur trapping as the price of mink rose dramatically. In late winter and early spring, Native people dispersed to seasonal camps for hunting and trapping. Some traveled toward the mountains to trap parka squirrels. In the spring, residents of the lower Kuskokwim River hunted marine mammals in Kuskokwim Bay. Kwethluk men usually hunted marine mammals with residents of Eek and other Kuskokwim Bay communities. Other spring subsistence activities included waterfowl hunting and brown bear hunting.

Anthropologist Michael Coffing described how Native people from Kwethluk used skinboats to float down area rivers, including the Eek River, from traditional spring hunting camps in the mountains. At these spring camps, men hunted brown bear, moose, caribou, and feral reindeer, while women and families trapped squirrels and snared small game. After the harvest, the families went to the Kwethluk, Kisaralik, Eek, or Kanektok rivers where they joined other families to build skin covered, wooden framed boats (angyaqatet). They lashed together spruce or cottonwood to make boat frames and covered them with skins of caribou, reindeer, moose, brown bear, or seal that had been sewn together. These boats carried several people, their gear, and their harvest of dried meat and furs. In a BLM navigability report prepared in 1998, on traditional uses of the Kwethluk River, Laura J. Lagstrom included an excerpt from Coffing's Kwethluk subsistence study concerning the use of skin boats to descend the Eek River from spring camps. (Attachment 28)

Yup'ik people traditionally distributed and exchanged subsistence products on a community-wide basis. Anthropologist Ann Fienup-Riordan noted that individual economic production was undertaken in order to fulfill community social obligations. Traditional values of respect, hospitality, and reciprocity underlay a system of sharing and exchange between households, within the community, and between communities. Fienup-Riordan noted that Yup'ik people believe that "what comes freely must be given freely in order to ensure that it will return." <sup>140</sup>

Historically, trading networks linked people along the Kuskokwim River, and resource harvests were distributed widely. <sup>141</sup> Trading relationships existed between the people of the Yukon-Kuskokwim delta and those of the tundra and rivers farther inland. Sea mammal products from the coast were exchanged for furs and dried fish from upriver. <sup>142</sup> According to Coffing, historically "furs were important for trade, barter, and cash." <sup>143</sup>

Even before direct contact occurred between Russians and Alaska Native people, European goods, such as iron tools, tobacco, and beads, were traded across Bering Strait. This Siberian trade continued throughout the Russian era in Alaska and effectively cut into the trading operations of the Russian-American Company. In a subsistence report on Quinhagak and other southwestern Alaska Native communities, anthropologist Robert J. Wolfe and other scholars stated that parka squirrels and marmots from the Kuskokwim area were important components of this Siberian trade. They were traded "north to the Yukon River for caribou and domestic reindeer skins from Siberia via Bering Strait and Norton Sound traders."

The population of Eek had come into early contact with Russian traders. <sup>147</sup> By 1818, Russian fur traders had built Alexandrovski Redoubt on Nushagak Bay. Within a few years of 1818, the Russians established trade directly with the Native people of the Kuskokwim River area. Native trappers traded furs to the Russian traders for "cloth; wool blankets, metal products such as knives, flint, spears, needles, pots, cups, mirrors, copper rings; and personal adornment, such as clothing, earrings, bracelets, and the like."

In 1841, the Russian American Company established Kolmakovski Redoubt, a trading station along the central Kuskokwim River. 148

Hutchinson, Kohl, and Company (later the Alaska Commercial Company) purchased the assets of the Russian American Company after the United States purchased Alaska from Russia in 1867. The company continued the Kuskokwim River trade from the former Russian post at Kolmakovski Redoubt. Alaska Commercial Company trading posts on Nushagak Bay and the Kuskokwim River carried on what anthropologists described as "a flourishing business in furs." In the early 1870s, they moved their operations downriver to Bethel and established that community's first trading post. In the 1880s, Eskimos from the lower Kuskokwim River traded at Bethel for "tobacco, tea, drilling, needles, powder and lead, knives and axes, hardtack, twine for fish nets, sugar and flour, and cooking utensils." They also traded for muskets. Sheldon Jackson reported in 1886 that as early as 1884, the Alaska Commercial Company traded netting twine to residents of the lower Kuskokwim River for squirrel skins. After the Americans shifted the center of the Kuskokwim River fur trade to Bethel, the Natives' long-standing trade with Siberia declined. Sheria declined.

In the early 1900s, independent traders built stores and warehouses in Bethel and bartered with the Eskimos for furs. Other villages had their own local traders. Quinhagak elder Kenneth Cleveland told an interviewer that "Furs and occasionally fish were...used as a form of currency for basic trade items such as tea, coffee, sugar, flour, rifles, ammunition, pots and pans, some clothing, and occasionally milk." Money was not used until much later, after people began working for wages and fishing commercially. 154

The people of the lower Kuskokwim dried surplus salmon for use as dog food for their own teams and to sell or trade. Salmon for dog food was in high demand in the early 1900s by gold prospectors, mail, freight, and passenger carriers, and Moravian missionaries. At mission stations along the Kuskokwim River, missionaries traded informally and formally with the Yup'ik people of the region for fish, firewood, and other supplies. Moravian missionaries opened stores at Ogavik and Bethel during the first decade of the twentieth century and operated them into the late 1920s. Quinhagak elder Kenneth Cleveland told an interviewer that selling dried salmon to the minister for his dog team "was one of the few ways to get cash income at that time." Anthropologist Wendell Oswalt wrote that the peak of salmon fishing for dog food occurred around 1930. 157

In 1878, E. W. Nelson of the U.S. Signal Service reported an Eskimo village at the mouth of the Eek River on Eek Point. The village was called by a variety of names, including *Aklut, Ahguliagamiut, Akooligamute, Aklukwagamut, Akulik*, and Eek Fish Camp. The village appeared as *Akooligamute* in the 1880 Census, with a population of 162 and as *Ahguliagamiut* in the 1890 Census, with a population of 106. <sup>158</sup> It became known as Eek at the turn of the twentieth century. According to the State of Alaska, Eek Village was originally located on the Apokak River and moved to its present location in the late 1920s, after flooding and erosion caused the people to relocate. <sup>159</sup> The present-day

village of Eek is located on the left bank of the Eek River at river mile 18. The U.S. Cadastral Engineer who surveyed the Eek school site in August 1931 noted the locations of the Native village of Eek, the church, and the Northern Commercial Company complex, consisting of a house, store, and warehouses, as well as the school site, with its teacher's house, workshop, and school. The surveyor described the school buildings as "good substantial wooden structures, painted and well kept up." (Attachment 39)

The Native people of Eek came in contact with Moravians missionaries after a Moravian mission station was established at Bethel in 1885. <sup>161</sup> In 1906, The Reverend G. Adolph Stecker of the Moravian Church baptized 24 people at the Eek River. About three years later, the church transferred Helper Neck, a renowned Native lay pastor and teacher, from Bethel to Eek Village. There he helped the people to build above-ground cabins and trained young men to become future church leaders at Eek. People moved into Eek from nearby settlements, and by 1911 a new village was developing there. By 1915, a Moravian chapel had been constructed with profits from reindeer herding. <sup>162</sup> The Bureau of Indian Affairs (BIA) established a school at Eek in 1916. <sup>163</sup> (Attachment 39) In 1933, the people of Eek built a new Moravian chapel with support from the Women's Missionary Society in Bethlehem, Pennsylvania. <sup>164</sup>

A non-Native trader, Gil McIntyre, began operating a trading post at Eek in 1919. Twenty families lived at Eek in the late 1920s, and the population totaled 106. <sup>165</sup> People living in remote camps were drawn to permanent villages after churches and schools were built there. <sup>166</sup> They were attracted to larger communities by the availability of improved medical care, formal education, and other public services there. <sup>167</sup> Coffing noted that Eek, as well as Quinhagak and Kwethluk, saw an influx of people, but that despite this population shift, "people continued to use traditional hunting and fishing areas and the camps associated with them."

By the 1930s, diseases such as measles, influenza, and tuberculosis had reduced the region's population to half of its estimated size at the time of Russian contact. An influenza epidemic that struck in the summer of 1900 proved especially devastating. Some communities lost half of their residents. <sup>169</sup>

A mail trail between Bethel and the communities along the southern coast of Kuskokwim Bay connected Moravian churches and village trading stations in winter by dog team. The Bethel-Quinhagak Trail (RST 30) was a 90-mile-long RS 2477 historic winter trail that passed through Eek Village. In 1921-1922, the Alaska Road Commission authorized the marking of the trail with beacons, tripods, and stakes. Where the trail crossed lakes, it was marked with stakes that needed to be replaced each winter. Further work was done on the trail in 1926-1927.

The headwaters of the Eek, Kwethluk, Arolik, and Kanektok rivers are much closer to one another than are their mouths. The people of Eek, Kwethluk, and Quinhagak engaged in hunting and other seasonal subsistence activities in the mountainous areas of the headwaters of those rivers. For example, a 1991 subsistence study documented that,

between 1920 and 1987, Kwethluk residents hunted small game and trapped in a large area that included the upper Eek River drainage. 173

Traditionally the Eskimo people of the lower Kuskokwim region used kayaks, canoes, and poling boats for river transportation. After the turn of the twentieth century, they began to use plank boats of a type introduced by prospectors. Outboard motors did not become popular among Native people until after World War I, although a few non-Natives used them as early as 1914. Innovations such as plank boats and outboard motors enabled people to tend their nets from their home village, but required a source of money for fuel and maintenance. 174

In the early twentieth century, some Native people of Eek engaged in commercial activities such as reindeer herding or commercial fishing, in addition to subsistence activities. Reindeer herding was introduced into the Kuskokwim drainage in the early 1900s. A Bureau of Mines official who investigated coal outcrops on the North Fork Eek River at river mile 125 in 1926 noted the existence of a reindeer camp near the outcrops. These reindeer herders had reported finding coal deposits on the Middle Fork Eek River. Between the early 1900s and 1951, former reindeer herders resided at a year-round hamlet located in Sec. 22, T. 1 N., R. 67 W., SM (river miles 99-100.2 of the North Fork). Natives also occupied a fall and winter village in Sec. 18, T. 1 N., R. 71 W., SM (river miles 46.7-47.2 of the Eek River), but they abandoned that site by 1926.

In order to protect salmon stocks and the interests of subsistence fishermen in the Kuskokwim region, the federal government placed limits upon commercial fishing operations prior to 1913. A small commercial harvest began in Kuskokwim Bay in 1913 and continued for a few years. Chinese labor dominated cannery work in the region during early twentieth century. Few Native people were employed in canneries until World War II. 179

Prospecting did not seem to have directly affected the smaller coastal or riverine communities of the lower Kuskokwim River area, nor did mining significantly affect the local economy. Mines were not located near Native villages, and few Native people were involved in mining. Bethel served as a major transfer point for early prospectors in the region. <sup>180</sup>

#### Non-Native Use Prior to Statehood

Miners prospected for gold in the Eek River drainage during the first half of the twentieth century. They found gold and other minerals on the North Fork, on its tributaries Kapon and Rainy creeks, and on Arsenic Creek, a tributary of Rainy Creek. Kapon Creek is about eight miles in length and joins the North Fork at river mile 134. Rainy Creek is five miles long and flows into the North Fork at river mile 146. Miners extracted gold, coal, cinnabar (a source of mercury), and realgar (a source of arsenic). The mining operations were small and employed only a few miners.

According to BLM historian C. Michael Brown, "The historic record suggests that miners may have ascended Eek River in boats before the advent of aviation." In 1910, prospectors who had come into the Kuskokwim River drainage from the Innoko River area discovered gold on the Eek River. USGS geologist Alfred G. Maddren, who investigated mineral resources of the lower Kuskokwim River in 1914, wrote that prospecting parties descended the Kuskokwim River in 1911 and ascended the Eek and other lower Kuskokwim tributaries in search of gold. They discovered placer gold prospects on the upper Eek River in Rainy and Kapon creeks. Prospectors worked on Rainy Creek between 1911 and 1914, but Maddren reported little gold had been produced in that time. Two men were engaged in "ground-sluicing through a small flume" on Kapon Creek in the summer of 1914, and a small amount of low-grade coarse gold was groundsluiced on the creek that summer. Placer gold mining took place in 1915, but production was small.

In 1920, Neal Corrigal of Bethel re-discovered gold on Rainy Creek. Using hand methods, he took out \$4,500 in gold from two claims between 1920 and 1924. Later some Natives mined on a claim above the discovery claim and took out \$600. <sup>185</sup> Only a small number of men worked the placer ground on Rainy Creek during the 1920s and 1930s. <sup>186</sup>

Maddren did not visit the Eek River in 1914, but relied on information provided by local people. Frank Joaquin of Bethel informed him that the diggings on the Eek River were best accessed via the Kwethluk River. By going about thirty miles up the Kwethluk River, it was possible to reach an overland trail leading to the Eek River diggings. <sup>187</sup>

Gold prospecting on the Eek River led to discoveries of other minerals. Cinnabar was discovered on Rainy Creek between 1910 and 1920, probably by Ed McCann of Bethel. Neal Corrigal staked and explored cinnabar deposits on Rainy Creek in the 1920s. Realgar was found to be present with the cinnabar of the Rainy Creek deposits. In the larger deposits, realgar was more abundant than cinnabar. Lode mercury mineralization was also found on Arsenic Creek.

In 1914, Maddren reported local references to coal outcrops "in the foothills along the northwest flanks of the Kuskokwim Mountains on Eek and Kuethluk rivers," but little was known of them and they had not been developed. A newspaper reported in the summer of 1912 that three prospectors named Macpherson, McDonald, and Bush "discovered coal of reported high grade in a canyon on Eek River." The newspaper stated that "coal outcrops were quite common along the Eek and Kwethluk rivers." The same newspaper stated in the summer of 1914 that two prospectors had arrived in Iditarod "with samples of platinum found on a tributary of Eek River" and that they planned to return that summer with "a force of men" to work the property. The specific locations of the Eek River coal and platinum deposits were not reported.

Alaska Territorial Department of Mines geologist Frank W. Holzheimer credited gold prospectors Herman Oman, Butch Smith, Ed McGan, Gil McIntyre, and D. McPherson with making the first discovery of coal on the Eek River in 1920. 194 One of these men, Gil McIntyre, may have been the same Gil McIntyre who had a trading post in Eek Village from 1919 to 1958. 195 The prospectors staked coal-bearing ground and transported coal to Bethel in a poling boat. In 1920, they shipped seven sacks of coal by dog team to gold mining operations on Canyon Creek, a tributary of the Kwethluk River, where it was used successfully in blacksmithing. The coal deposits on the North Fork were located on the right bank of the river near river mile 125. Holzheimer noted that reindeer herders had reported the existence of coal deposits on the Middle Fork of the Eek River, but he did not know the location of the deposits. 196

Holzheimer investigated the Eek River coal outcrops in the summer of 1926. He reported that miners had the option of using boats on the Eek River, and he created a sketch map of his route to the coal outcrops (Figure 16). He stated that the Eek River "is navigable by gas boat to the forks [river mile 62]...and by poling boat to the head [river mile 165]." He described other possible transportation methods in an area where "there are no trails on the tundra or along the banks of the Eek River." Having seen "great herds of reindeer" in the vicinity of the Eek and Kwethluk rivers, he considered the use of reindeer teams to transport coal from the outcrops to the forks or to the mouth of the Eek River in winter. Reindeer could carry 50 pounds each and obtain their food from the tundra, but they averaged only 15 miles per day and had "the habit of lying down on the job." Holzheimer estimated the purchase price of a reindeer at \$10-15 and a herder's services at \$75-100 per month with expenses. 197 In a 1926 report on the quicksilver resources of the Kuskokwim River district, Holzheimer wrote that Rainy Creek could be reached overland (a distance of 90 miles over tundra with no trails) from the second fish camp on the Kwethluk River, at about river mile 70. He also stated that "Rainy Creek [river mile 146] may be reached by poling boat on Eek River during high stages of water but, owing to slow progress, this method of travel is impractical." 198

When Holzheimer investigated the coal deposits in 1926, he did not travel by boat on the Eek River. Instead, from Kwethluk Village, he traveled about 70 miles up the Kwethluk River by poling boat. A guide then led him on foot across 50 miles of tundra to a reindeer camp on the right bank of the Eek River. Holzheimer examined three coal outcrops. Then he hiked upstream along the right bank of the Eek River to a point below Breast Mountain [approximately river mile 133]. From there, he portaged several miles back to the Kwethluk River. He reported that his hike from the reindeer camp on the Eek River to Saw Mountain [approximately river mile 130] proceeded without difficulty. His cross-country trip was facilitated by the fact that a recent fire had dried out the tundra. He admitted that in wet weather, "progress across the tundra would be slow." <sup>199</sup>

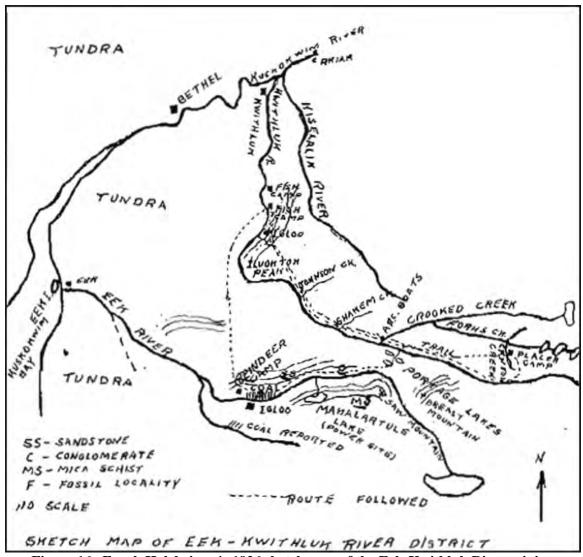


Figure 16. Frank Holzheimer's 1926 sketch map of the Eek-Kwithluk River mining district. Map reproduced from The Occurrence of Coal on Eek River, Lower Kuskokwim Region, Alaska, MI-091-01 (1926), p. 3.

Holzheimer wrote that the Eek River coal deposit has "the fascination of isolation in that it is located many miles from any habitation." Despite the remote location of the coal deposits, any local coal discovery was potentially valuable because of the difficulty and expense of shipping fuel to the Lower Kuskokwim. Three parties had announced their intentions to prospect the Eek River coal: Moravian missionaries in Bethel, the New York Alaska Gold Dredging Company, and a dredging company that was prospecting in the Arolik River drainage. Holzheimer suggested that if the Eek River coal proved commercially valuable, it might warrant building "some sort of a road along the timber line of Eek River to water transportation."

J. C. Roehm, another Alaska Territorial Department of Mines geologist, investigated placer gold prospects on Rainy Creek in August 1937. He reported that the Eek River Mining Company, which had been formed by Al Jones of Anchorage, had been using an airplane drill on its holdings on the Eek River above the mouth of Rainy Creek, which enters the North Fork at river mile 146. Roehm reported that old workings had been restaked on Rainy and Kapon creeks during the previous winter and that new discoveries had been made on the Eek River. He considered Rainy Creek to be the most promising of the placer gold prospects. He also noted that realgar deposits had been found at the head of Rainy Creek. Roehm did not specify his method of transportation to Rainy Creek but did mention that he had planned to fly out after finishing his work there.

Roehm returned to the area two years later and reported that the Rainy Creek Mining Company was not operating on Rainy Creek that season. Norman Stines secured an option on the Rainy Creek Mining Company claims and planned to have a dragline on the creek that fall. In 1940 Al Jones of the Eek River Mining Company began developing the placer ground on Rainy Creek with two bulldozers and "enjoyed considerable success, recovering nearly two thousand pounds of high-grade cinnabar concentrates during the gold-mining operation." Roehm reported that Jones was using two bulldozers to push material into steel boxes that summer. His production was reported to be at least \$14,000. Place of the Rainy Creek Mining Company Stines and Planned to have a dragline on the creek that fall.

In 1942, the federal government closed gold placer operations, which it considered non-essential to the military effort of World War II. Gold mining equipment was to be redirected to wartime construction projects. However, strategic minerals—such as cinnabar—continued to be mined on Rainy Creek during the war. One ton of cinnabar and six flasks<sup>vi</sup> of mercury were produced from Rainy Creek prior to 1962.<sup>206</sup>

Prospectors and miners, including Al Jones, alerted the U.S. Bureau of Mines to the mercury deposits and realgar-cinnabar lodes, and in 1944 Burr S. Webber conducted a preliminary investigation of the Rainy Creek mercury prospect for the U.S. Bureau of Mines. <sup>207</sup> In 1947, Webber, along with Franklin A. Rutledge, conducted a more thorough investigation. Bureau of Mines personnel cut 1,500 linear feet of trenches and excavated ore using hand methods and a bulldozer, which they had brought in overland in July 1947 on the "dozer trail" from Cripple Creek. That dozer trail was part of a more extensive trail over which two tractors (a D-2 and a D-6) were reported to have gone from Goodnews Bay to Bethel via Rainy Creek, Canyon Creek, Cripple Creek, and Aniak in 1945 and 1946. <sup>208</sup> The Rainy Creek cinnabar deposit was one of only seven known cinnabar occurrences in southwestern Alaska. <sup>209</sup> A ton of high-grade concentrate was produced from Rainy Creek below the mouth of Arsenic Creek and shipped out in the 1940s. <sup>210</sup> Placer mine workings extended along Rainy Creek for about three-quarters of a mile. <sup>211</sup>

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vi A flask is a unit of weight for mercury equal to 76 pounds. *Webster's Third New International Dictionary*, Unabridged, 1981.

By the 1940s, the miners on the Eek River had established a winter tractor trail, about 120 miles long, between Bethel and Rainy Creek. According to C. Michael Brown, miners "transported supplies and equipment to their placer ground" on Rainy Creek over the winter tractor trail from Bethel at rates averaging \$40 per ton. According to Brown, the exact route of that trail "is not definitely known" and "may have included either a part of the Akiak-Canyon trail or the Aniak-Marvel Creek trail." The trail was known to have extended from Canyon Creek south to Rainy Creek." No information was found regarding how Webber and Rutledge reached Rainy Creek. Both wrote about the winter tractor trail from Rainy Creek to Bethel and the cost of shipping supplies and equipment over that route. They also described air travel between Bethel and Rainy Creek.

In the early 1940s, miners constructed a landing strip for small airplanes to the east of the North Fork (river mile 150) about four miles above the mouth of Rainy Creek. After that, miners normally used airplanes to access Rainy Creek. A four mile-long tractor trail connected the landing strip and the mining camp. 215 Webber and Rutledge mentioned the landing strip in their reports of 1947 and 1948. They said that a four- to six-passenger airplane could be chartered from Bethel to Rainy Creek for a minimum of two hours flying time at the rate of \$60-\$75 per hour. Al Jones, who operated placer workings on Rainy Creek in the 1940s, owned Al Jones Airways of Bethel and may have used aircraft to gain access to the area. In 1976, when Rae Baxter floated down the North Fork and the Eek River from above the mouth of Rainy Creek, he observed that a prospector was making use of one of the cabins at the Rainy Creek placer gold mining camp, which was no longer in operation. The air strip had been abandoned, but Baxter considered it suitable for short take-off and landing (STOL) aircraft in dry weather (during July and August).

No evidence was found to indicate that the mining engineers themselves used canoes or poling boats on the North Fork or its tributaries. Mining engineers Holzheimer, Webber, and Rutledge, who had conducted field inspections in the region, considered it possible to travel by canoe and poling boat to mining sites on the North Fork and its tributaries as far upstream as river mile 146 and to the head of the river at river mile 165. Webber wrote: "It would be possible to reach this area during stages of high water by ascending Eek River from the Kuskokwim, yet it would not be practicable because of the time required and the necessity of using a canoe or small poling boat on the upper reaches of the river." He and Rutledge estimated the length of the Eek River to the head of the North Fork at "not less than 200 miles." In 1914, Maddren had noted the effects of time constraints on the transportation methods chosen by mining engineers who investigated mineral resources and mining activities in the lower Kuskokwim area. He wrote: "It was not possible to cover the whole region in the time available by boating up the swift tributaries of the Kuskokwim to the mountains and then man-packing with light equipment to the several mining camps." 221

At least one tug and barge operated on the lower Eek River prior to statehood. The U.S. Army Corps of Engineers visited Eek on July 15, 1958, and reported that Eek Village trader Gil McIntyre used a 6-ton barge and tug to transport supplies to his trading

post at Eek Village (river mile 18). Little evidence has been found to suggest that miners used Eek Village as a supply point, but Eek River gold prospector Gil McIntyre may have used the trading post at Eek Village to supply miners on Rainy Creek.

Native Use of the Eek River System Just Prior to Statehood (1930-1959)

The three decades just prior to Alaska statehood were a period of transition for people living in the Eek River drainage. Further consolidation of Eek Village took place as people moved into the village from outlying communities. Native people adopted more efficient boats with outboard motors for use in their subsistence activities. They also began working for wages in salmon canneries in the region. Fur trapping and reindeer herding declined.

A post office was established at Eek in 1949.<sup>223</sup> According to historian C. Michael Brown, Eek in the late 1950s consisted, "of two stores, a Bureau of Indian Affairs school, forty houses, and a Moravian church." Air deliveries of mail and perishables arrived weekly.<sup>224</sup>

In the late 1930s and early 1940s, the trend toward concentration of Native people into permanent, year-round villages such as Eek began to accelerate. This process continued in the 1950s and 1960s, when improved technology, including boats with outboard motors and snow machines, made it possible for hunters to make day trips from the village to traditional subsistence sites instead of having to set up camps. Enforcement of mandatory school attendance, along with other factors, prompted families residing in smaller settlements to move to larger villages. <sup>226</sup>

One village that lost population to Eek was Apokak, which was located at the mouth of Apokak Slough on Eek Channel. Apokak was abandoned in about 1935 after flooding and erosion drained nearby lakes and sloughs, causing Apokak Slough to become shallow and the community's fresh water source to dry up. Most of the families that relocated from Apokak during that time went to Eek. They included the family of Quinhagak elder Kenneth Cleveland, who was born in Apokak in 1920, but later moved with his family to Eek and then to Quinhagak. By the early 1950s, some people from Eek had moved to Kwethluk. 229

Several upriver settlements and camps along the Eek River that had been used prior to the early 1950s were abandoned during this period. For example, between the early 1900s and 1951, former reindeer herders resided at a year-round hamlet located in Sec. 22, T. 1 N., R. 67 W., SM (river miles 99-100.2 of the North Fork). In the 1940s, a family from that settlement resettled to a site located about 38 miles down the Eek River, near the confluence of the North and Middle forks of the Eek River (approximately river mile 62). There was an old village or camp in Sec. 33, T. 1 N., R. 71 W., SM (between river miles 57.8 and 60.3). Near the mouth of the Ugaklik River at river mile 57.5 of the Eek River, there was a large reindeer corral complex dating from about 1934 to the early

1940s. A fall camp near the corral was occupied for several years in the late 1940s. A nearby summer and fall camp was abandoned in the 1930s. An Eskimo village located at the mouth of the Eek River on Eek Point was listed in the 1890 Census as *Ahguliagamiut*, with a population of 106. It was abandoned prior to 1949. The village moved to river mile 18 by the 1930s.

More efficient forms of transportation adopted during this period enhanced the ability of Native people to provide meat and other resources for their families and communities. <sup>232</sup> By about 1930, more people in the region were able to purchase outboard motors. As early as 1935, Kenneth Cleveland recalled, small boats with sails and simple outboard motors at Eek, although they may have been in use earlier. <sup>233</sup> In the 1940s and 1950s, upriver travel was slow, because outboard motors were bulky and not very powerful (5-22 horsepower). <sup>234</sup>

The concentration of population in fewer villages, such as Eek, made it necessary for individuals to travel farther afield to reach their trap lines. In order to cover the longer distances, they needed larger dog teams. The larger teams required greater numbers of salmon as "fuel." During this period, people fished more intensively to harvest enough salmon for their teams. Native people used furs and fish "as a form of currency for basic trade items such as tea, coffee, sugar, flour, rifles, ammunition, pots and pans, some clothing, and occasionally milk." They used little cash until they began working at canneries during World War II. 236

Fur trapping declined during this period. In 1924, Southwestern Alaska produced furs valued at more than \$250,000. Fur trapping for commercial sale remained highly productive into the 1930s, but declined after more Native people found work in the commercial salmon-fishing industry. After World War II, fur markets fluctuated and prices fell, resulting in a decline in commercial fur trapping in southwest Alaska. Furs continued to be a major trade item into the 1950s, however. Mink were historically abundant in the area north of Eek. <sup>239</sup>

In the early 1930s, 43,000 reindeer grazed along the Kuskokwim River system. Their numbers declined precipitously in the early 1940s. As the reindeer population fell, moose moved into the upper Eek River drainage from the Bristol Bay area. By the mid-1940s, moose were seen more commonly in the lower Kuskokwim River drainage. <sup>241</sup>

Native people from the lower Kuskokwim area became involved in the commercial fishing industry between 1930 and 1954. After 1930, commercial operators processed small numbers of salmon in the Kuskokwim Bay area. Few Native people worked for wages until World War II, when a lack of available Asian workers for salmon cannery jobs prompted the hiring of Native workers. After the war ended, airplanes came into greater use in the region, and new airfields in the villages facilitated travel from lower Kuskokwim villages to the canneries. The commercial fishing industry in the

Kuskokwim drainage was largely undeveloped before 1960. The Kuskokwim had relatively few salmon and lacked infrastructure and proximity to established markets.<sup>246</sup>

Between 1955 and 1979, disposable income from commercial fishing allowed Native people to purchase aluminum boats, outboard motors and snowmachines. Kayaks, oar boats, and sail boats also continued to be used. Snowmachines were introduced as early as 1955, but did not begin to replace dog teams until the late 1960s and early 1970s. The use of snowmachines reduced the need to harvest large numbers of fish for use as dog-team "fuel," but increased the need for cash with which to purchase fuel for snowmachines. 247

Boats with outboard motors and snowmachines streamlined subsistence activities.<sup>248</sup> Native people continued to travel to seasonal camps in the course of subsistence fishing, hunting, and berry picking.<sup>249</sup> Certain set net and fish camp sites along the rivers were "recognized as traditional use areas of particular kinship groups or clusters of kinship groups in each community," and they later served as the basis for Native allotment selections.<sup>250</sup>

### Recent Use of the Eek River System Documented in Native Allotment Files

The BLM began gathering information in the 1970s to adjudicate applications for Native allotments filed by local Native people from Eek and other villages who have fished, hunted, trapped, and picked berries along the Eek River. Each year, the Natives used small boats powered by outboard motors to access favorite spots along the river for those activities, and those favorite spots developed into exclusive use areas. The federal government recognized many of those exclusive use areas as Native allotments under the provisions of the Native Allotment Act of 1906 and transferred title to the sites to the applicants. The maximum size of an allotment is 160 acres, and it may be divided into as many as four separate parcels.

Native allotment parcels are located on the Eek River between river mile 3.4 and river mile 62 and along the North Fork to river mile 135. There are Native allotment parcels on the Middle Fork as far upstream as river mile 45.5, along an unnamed rightbank stream that joins the Eek River at river mile 27.4, and along the unnamed stream's right branch. There are no Native allotments on the Ugaklik River. Some Native allotments are located away from the Eek River's main channel, on sloughs or tributary streams.

## Eek River Mouth to Upper Limit of Eek Village Selection Area (river miles 0 to 48.6)

There are 70 Native allotment parcels along the Eek River between river mile 3.4 and the upper extent of the Eek Village selection area at river mile 48.6. The BLM has determined the Eek River navigable throughout this stretch of the river. Most of the allotments are clustered in a 15-mile-long stretch between river miles 16.5 and 31.5. A review of the Native allotment files for 22 of the 70 parcels provided information on use

and access. The claimants first used the parcels in the 1930s, 1940s, and 1950s. Use of the parcels is documented into the 1970s, the 1980s, and the 1990s, and, in one case, to 2004. Seasonal subsistence use of the parcels is documented over the course of decades and, in some cases, across generations. The allotment parcels were used primarily for fishing, although many were also used for hunting, berry picking, trapping, egg gathering, or wood gathering. They were used mainly from May to October—during the open-water season. Boats were listed as the means of access in every case in which access was mentioned. Three parcels were also claimed for winter use for hunting, trapping, or ice fishing. Snowmachines were listed as the means of access in winter. Some parcels were used as camping sites; others were used on a day-use basis. Powerboats that were used to access the parcels carried loads that included people, fuel, tents, stoves, equipment, supplies, and harvested resources.

Photographs taken during BLM field inspections depict boats at three parcels along this stretch of the Eek River between river miles 9 to 48.6. The first Native allotment is Frank Brown Sr.'s 40-acre parcel (FF-17479-A) on the left bank of the Eek River between river miles 3.4 and 3.5, in Sec. 32, T. 2 N., R. 74 W., and Sec. 5, T. 1 N., R. 74 W., SM (Figure 17). The second Native allotment is Willie Green's 40-acre parcel (FF-16054-D) on the left bank of the Eek River between river miles 16.8 and 16.9, one mile downstream from Eek Village, in Secs. 25 and 36, T. 2 N., R. 74 W., SM (Figure 18). The third Native allotment is Elena McIntyre's 40-acre parcel (AA-55927-A) on the left bank of the Eek River between river miles 30.6 and 31, in Sec. 36, T. 2 N., R. 73 W., SM (Figure 19). These three parcels were first used during the 1930s, 1940s, and 1950s during the open season for fishing. Hunting also took place on the parcels of Frank Brown and Willie Green. Elena McIntyre also used her parcel for ice fishing, berry picking, and gathering eggs. Access to all three parcels was by boat during the open season and, for two of the three, by dogsled or snowmachine in winter. 251

# Unnamed Rightbank Stream that joins the Eek River at River Mile 27.4

Seven Native allotment parcels are on an unnamed rightbank stream that joins the Eek River at river mile 27.4, including four parcels on an unnamed right tributary of that stream. Four of the seven parcels straddle the stream or its tributary. In three of those cases, the stream or its tributary divides the parcel into lots, and the stream is meandered and segregated from the uplands. However, in one case, the slough that flows through the parcel is not meandered and segregated, and the bed of the water body was certificated to the claimant's heirs. Three of the parcels are located along the portion of the unnamed rightbank stream that was determined navigable in 1988 (river miles 4.5 to 11.3). Four are located along portions of the unnamed rightbank stream and its tributary which the BLM did not determine navigable (river miles 0 to 4.5, and 11.3 to 17 of the rightbank stream and river miles 0.7 to 4 of the right branch). (Attachment 19)



Figure 17. View of a fish camp at Native allotment FF-17479-A and several boats with outboard motors, at river mile 3.4 of the Eek River, July 25, 1975.

The view is looking southeast. BLM photo by Wayne R. Dawson.



Figure 18. View of an overturned kayak at Native allotment FF-16054-D, river mile 16.9 of the Eek River, August 1, 1975. BLM photo by William M. Peake.



Figure 19. View of a fish camp building and a canoe at Native allotment FF-15629-A, river mile 30.5 of the Eek River, August 19, 2004. BLM photo by Kathy A. Stubbs.

Claimants reported first using the seven Native allotment parcels along the unnamed rightbank stream and its right tributary in the 1930s, 1940s, 1950s, and 1960s, with most of the first use occurring in the 1940s and 1950s. Documented use of five of the parcels continued into the mid to late-1970s. Two parcels have documented use into the 1990s. The parcels were used mainly from May to October, during the open-water season. Some were also used in winter. Photographs show the physical features of the water bodies and adjacent lands, as well as the use of motorboats for access. Motorboat use is documented in the Native allotment files to at least river mile 11 of the unnamed rightbank stream and to river mile 3.9 of the right branch.

James Henry of Eek filed an application in 1971 for a Native allotment (FF-15660) split into four parcels. Parcel B consists of 40 acres that straddle the unnamed rightbank stream between river miles 0 and 0.5, in Secs. 25 and 26, T. 2 N., R. 73 W., SM. Parcel B abuts the Eek River between river miles 27.4 and 27.6, along a portion of the river that has been determined navigable by the BLM. Mr. Henry began using the lands the parcel in 1949 on a seasonal basis between May and October for subsistence fishing. During the field examination of Parcel B on July 24, 1975, Mr. Henry accompanied the examiner to the site and described his use of the land. The May 12,

1976 field report stated that Mr. Henry claimed Parcel B for fishing. It also noted the presence of an old spring camp on the site.<sup>254</sup> In an affidavit filed in 1979, Mr. Henry stated that he began using his allotment lands in 1949 for the purposes of fishing, hunting, and berry picking. He stated that his family also used the land.<sup>255</sup> No indication of access to this parcel was found in the Native allotment records. U.S. Survey No. 8242, which was officially filed on October 17, 1986, shows Parcel B divided into two lots by the unnamed stream.

Minnie Petluska (now deceased) of Eek filed an application in 1971 for a Native allotment (FF-15786) divided into four parcels. Parcel C consists of 40 acres located on the right bank of the unnamed rightbank stream between river miles 4.6 and 4.7. Parcel C is in Sec. 18, T. 2 N., R. 72 W., SM. Mrs. Petluska began using her Native allotment in 1952 on a seasonal basis from May to October for berry picking. During the field inspection of the parcel on July 21, 1975, James Petluska, husband of Minnie Petluska, accompanied the examiner to the site and described his wife's use of it. Minnie Petluska had died in June, 1975. The Native Allotment Field Report indicated that the lands were claimed for fishing and berry picking and found a spring camp on the parcel. Statement of Witness forms filed in 1978 by two of Minnie Petluska's friends and a nephew indicated that she had used the land in the spring for hunting muskrats and in the summer and fall for berry picking. They stated that Mrs. Petluska's husband and sons continued to use Parcel C for those purposes. Use of the parcel took place during the open-water season, but no indication of how Mrs. Petluska or her husband and sons accessed the parcel was found in the Native allotment file.

John C. Alexie of Eek applied in 1971 for a Native allotment (FF-29876) divided into four parcels. Parcel B consists of 40 acres at river mile 10 of the unnamed stream that flows into the Eek River from the right at river mile 27.4. Parcel B is in Sec. 16, T. 2 N., R. 72 W., SM. The right branch of the unnamed stream bisects the parcel, forming two lots, as shown on U.S. Survey No. 8321. Mr. Alexie began using the lands in 1953 on a seasonal basis, between May and October for fishing, and from June to September for berry picking.<sup>259</sup> During the field inspection of the parcel on July 19, 1975, the BLM field examiner found physical evidence of use of the parcel, including an old outboard motor, tent stakes, and other signs of camping activity. Mr. Alexie told the examiner that he had been using the land for about 20 years and that he usually went to the parcel in the spring and fall to fish for whitefish. He normally returned to the village at night rather than camping on the parcel. The examiner took photographs during his visit to Mr. Alexie's Parcel B on July 19, 1975. Grass hummocks that appeared in the photographs were subsequently interpreted as possible indicators of old campsites or dwellings. The field examiner noted in his report that a portion of the parcel had been filed upon by Regional Selection AA-10383 as an historical place. 260 That site was selected on November 11, 1975, by Calista Corporation under ANCSA Sec. 14(h)(1). The site has two parts: Amakcuayarmiut and Maaguniirmiut. Both are listed as seasonal camps and are indicative of historical use of the area. 261 Mr. Alexie did not state how he reached Parcel B, but he claimed use of it during the open-water season, and the old outboard motor indicates boat use (Figure 20).



Figure 20. View of an old outboard motor on Native allotment parcel FF-29876-B, river miles 0-0.5 of the right tributary of the unnamed rightbank stream that flows into the Eek River at river mile 27.4, July 19, 1975. BLM photo by Garold McWilliams.

U.S. Survey No. 10123 (a retracement of a portion of U.S. Survey No. 8321 in the vicinity of Native allotment FF-29876-B) refers to the unnamed rightbank stream as the "*Iiqaq* River (local name)." A note on the survey plat mentions mean high tide, stating: "During the retracement of line 3-1 Lot 2, U.S.S. No. 8321, the original true point for meander cor. No. 3 was determined to fall 2.66 chs. inland from mean high tide. This was not due to accretion, but differences in determining the mean high tide line." (Attachment 17)

William F. Brown of Eek filed an application in 1971 for a Native allotment (FF-16055) divided into four parcels. Parcel D consists of 40 acres located at river mile 11 of the unnamed stream that enters the Eek River from the right at river mile 27.4. This unnamed stream crosses the parcel a number of times, dividing it into three lots. He are lots and Mr. Brown began using these lands in 1964 on a seasonal basis between May and October for fishing and fish camp and from September to December for hunting. During the field inspection of the parcel on August 2, 1975, Mr. Brown claimed he used the land for fishing and hunting. The BLM field examiner found a discarded muskrat fur stretching board on the site, which Mr. Brown identified as his property. On a

Statement of Witness dated May 22, 1978, Mr. Brown wrote that he had selected Parcel D mainly for camping and muskrat hunting during the spring. He stated that he had camped there with his grandparents when he was a small boy and that he went to the area each season. He stated that he began using the land in 1956 and that he used it in the spring for hunting, trapping, and fishing; in the summer for berry picking; in the fall for hunting, berry picking, trapping, and fishing; and in the winter months for hunting and trapping. Peter Green stated in 1978 that when Brown was a small boy, his grandparents took him to their muskrat camp at Parcel D every spring and that Brown still went to Parcel D for hunting and trapping activities. In an affidavit filed in 1979, Mr. Brown stated that he first began using his allotment in 1964 for hunting, trapping and berry picking. He did not indicate how he accessed Parcel D, but he claimed use in the open-water season. Photographs taken from a helicopter near the site on August 2, 1975, show an outboard-powered motorboat under way and leaving a wake on the unnamed stream (Figure 21). Page 1975.

In 1978, Mr. Brown and two friends, Peter Green and John Beebe, filed Statement of Witness forms indicating that "other villagers" also used the land of Mr. Brown's Native allotment Parcel D. They stated that the other villagers used the land in spring, fall, and winter for the purposes of hunting, trapping, and berry picking.<sup>270</sup>



Figure 21. View of a boat underway at Native allotment FF-16055-D, river mile 11 of the unnamed rightbank stream that flows into the Eek River at river mile 27.4, August 2, 1975. BLM photo by William M. Peake.

Elena McIntyre (now deceased) of Eek filed an application in 1985 for a Native allotment (AA-55927) divided into four parcels. Parcel C consists of 40 acres located between river miles 1 and 1.4 along the right branch of the unnamed rightbank stream that joins the Eek River at river mile 27.4. Parcel C is in Sec. 9, T. 2 N., R. 72 W., SM. Mrs. McIntyre began using the parcel in 1955 in April and May for fishing (hooking pike) and in November and December for fishing (ice fishing for pike). <sup>271</sup> In a Statement of Witness, Richard McIntyre wrote that she used the land in spring for hunting and trapping and in fall for berry picking and trapping. He also mentioned that she gave birth to a son in that area. 272 Mrs. McIntyre's husband, Tom McIntyre, described the land in Parcel C as being in the *Amakcuuyalek* area, located upriver of Eek River, on a slough next to a lake called At'citrutet Qagatiit, and next to a hill called Qengagaq. Mr. McIntyre said that he had taken his wife, Elena, and his family to *Amakcuuyalek* in the spring for hunting beaver, in the summer for gathering eggs, and in the fall for picking berries and fishing. He said that he and his wife had also trapped fish at that site. 273 In an affidavit filed on August 17, 1988, Mrs. McIntyre said that she and her family used Parcel C in the spring for hunting muskrats and gathering eggs and in the fall for berry picking.<sup>274</sup> During a field inspection of Parcel C on August 9, 1990, Mrs. McIntyre's husband represented her. The Native Allotment Field Report stated that "Mrs. McIntyre has used the area regularly for 40-45 years, every year to trap whitefish, burbot, and muskrat. Also uses the area to hunt birds, to gather eggs, and to pick berries." The field report stated that she accessed Parcel C by boat. 275 (See Figure 14 on Page 35.)

Ella Andrew of Eek applied in 1971 for a Native allotment (FF-15839) split into three parcels. Parcel B consists of 40 acres located between river miles 1.6 and 1.8 on the right bank of the unnamed right tributary of the unnamed rightbank stream that flows into the Eek River at river mile 27.4. Ms. Andrew began using the parcel in 1945 from May to October each year for berry picking. During the field inspection of the parcel on July 31, 1975, Ms. Andrew discussed her use of the land for berry picking. She did not indicate how she accessed the parcel, but she did claim use of it during the open-water season.

Willie Green (now deceased) of Eek filed an application in 1971 for a Native allotment (FF-16054) divided into four 40-acre parcels. Parcel B is located at river miles 3.7-3.9 of the right tributary of the unnamed stream that enters the Eek River from the right at river mile 27.4 in Sec. 7, T. 2 N., R. 72 W., SM (Figure 22). Mr. Green began using the land in 1930. He stated that he used it on a seasonal basis for subsistence hunting and from May to October for fishing. During the field inspection of Parcel B on August 9, 1990, Willie Green's son Peter Green accompanied the BLM field examiner to the parcel. Peter Green told the examiner that he remembered his father going regularly to the site, beginning in the early 1950s. He said that the site was used as a summer and spring camp for fishing (by net), and for gathering eggs, picking berries, trapping muskrat, and hunting ducks and geese. The presence of an old stove constructed from an oil drum

provided evidence of use of the site. Peter Green told the examiner that the stove was always left there. <sup>279</sup>

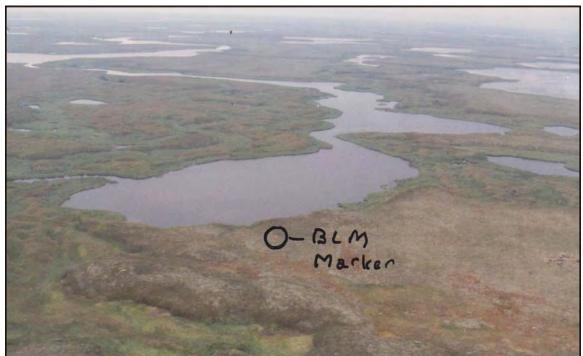


Figure 22. View of the unnamed right tributary at Native allotment FF-16054-B, river miles 3.7-3.9 of the tributary, August 9, 1990. BLM photo by Robert P. Rinehart.

In 1987, members of Willie Green's family filed affidavits indicating how Parcel B was used. Willie Green's wife, Bertha Green, wrote: "I remember my husband and I used to travel for spring camp near where the bluffs are located in Section 7, T. 2 N., R. 72 W., Seward Meridian, Alaska." She recalled "We set up our fish nets in that area and hunted geese and ducks during spring. We also collected some wood, willow trees, for fire wood in that area." <sup>280</sup> A son, Moses Green, stated, "When I was still in grade school we used to go up there in April to trap musk rats. We also set up our fish net near that location. We also hunted waterfowl there."<sup>281</sup> In a letter to the Bureau of Indian Affairs, Willie Green's son Peter Green wrote that people from the village who used land around his father's allotment parcel FF-16054-B "know what land he used and think of it as my father's spring camp."<sup>282</sup> On a Statement of Witness filed in 1978, Moses Green wrote that Willie Green used Parcel B during all seasons of the year, beginning in the 1910s until his death in 1972. During the spring months, the land was used for hunting and trapping. In the summer, it was used for berry picking. In the fall, it was used for hunting, berry picking, trapping, and fishing. In the winter, it was used for hunting and trapping. 283 Moses Green stated that the parcel had been the family's main muskrat spring camp for years, and he remembered going there every year to hunt muskrats, beginning when he was a small boy.<sup>284</sup> On a Statement of Witness filed in 1978,

Peter Green wrote, "although we do not go muskrat spring camp anymore, we still go camping overnights during spring months. Here we trap fur animals, hunt and also fish for white fish during spring and fall times." The Native Allotment Field Report stated that access to Parcel B was "by boat and by dogsled." <sup>286</sup>

The BLM determined the interconnecting slough between ponds that flows through the northeast corner of Willie Green's parcel FF-16054-B to be non-navigable, and the slough was not meandered through the parcel. The survey plat (U.S. Survey No. 10803) does not show the slough flowing across the parcel, but notations on the survey document indicate where the slough crosses the parcel's northern and eastern edges. The slough is 13.2 feet wide at the northern edge of the parcel and 49.5 feet wide at the eastern edge of the parcel. For the other Native allotments along the unnamed slough, the BLM either meandered the slough along the edge of the parcels (FF-15839-B and AA-55927-C) or meandered the slough which divided the parcels into lots (F-29876-B).

The Native allotment parcels located along the unnamed rightbank stream that enters the Eek River at river mile 27.4 and along the four-mile-long unnamed right tributary that enters the unnamed rightbank stream at river mile 10 were used for a variety of purposes, including fishing, berry picking, hunting and trapping muskrats, hunting waterfowl, egg gathering, and wood gathering. All seven Native allotments along this stretch of the river were used during the open-water season. The parcels were used mainly between May and October (during spring, summer, and fall, when the water was open). Allotment holders traveled to their parcels during each of the open-water seasons to harvest a variety of subsistence resources. Boat access is specifically mentioned for two of the seven parcels. For two other parcels, BLM photographs show active boat use or a discarded outboard motor indicating boat use. Boat access was claimed by the allottee whose Native allotment parcel, FF-16054-B, is located farthest up the right branch of the unnamed rightbank stream. Boat use was depicted in a photograph of an outboard motorboat under way and leaving a wake at Parcel FF-16055-D, the Native allotment parcel that is located farthest up the unnamed rightbank stream.

### River mile 48.6 of the Eek River to river mile 98.5 of the North Fork Eek River

This portion of the Eek River and its North Fork extends from river mile 48.6—the upper limit of the Eek Village selection area—to river mile 98.5. The BLM has determined this 50-mile-long stretch of the river to be navigable in small tracts. There are eleven Native allotment parcels along the Eek River and the North Fork between river miles 48.6 and 98.5. Three are located below the confluence of the North and Middle forks (at river mile 62), and eight are located on the North Fork above the confluence.

Daniel Foster of Eek filed an application in 1971 for a Native allotment (FF-15812) split into four parcels. Parcel A consists of 40 acres on the right bank of the Eek River between river miles 48.4 and 49.4 (Figure 12 on Page 32). Parcel A is located in Sec. 24, T. 1 N., R. 72 W. and Sec. 19, T. 1 N., R. 71 W., SM. A small portion of the parcel is within the Eek Village selection area, and the remainder lies just upriver from the

selection area. According to his Native allotment application, Mr. Foster began using the allotment lands in 1950 and used them seasonally between May and October for subsistence fishing and between September and December for hunting. During the field inspection of Parcel A on August 2, 1975, Mr. Foster claimed the parcel for trapping, hunting, and fishing for grayling. On a Statement of Witness for Parcel A filed on April 23, 1978, Mr. Foster wrote that he began using Parcel A in 1960 as a camp site for hunting in the fall and winter and for trapping in the winter. A BLM Environmental Preliminary Analysis and Certificate of Inspection and Possession Report of October 14, 2004, stated that Mr. Foster used the property for trapping, hunting, and fishing. No information was found in the Native allotment file concerning the means of access.

Peter Carter of Eek applied in 1971 for a Native allotment (FF-16202) divided into four 40-acre parcels. Parcel B is located on the right bank of the Eek River, between river miles 53.3 and 53.5, in Sec. 30, T. 1 N., R. 71 W., SM. Mr. Carter began using this land in 1945 on a seasonal basis from May to September for fishing and from May to October for hunting. During the field inspection of Parcel B on July 25, 1975, Mr. Carter accompanied the examiner to the site and claimed he used the parcel for hunting and fishing. On a Statement of Witness filed in 1978, Mr. Carter wrote that he had used the parcel every year since 1952 during the fall months for day hunting only. Although Mr. Carter used Parcel B during the open-water season, no indication was found in the Native allotment file regarding how he accessed the parcel.

Evon Andrew of Eek filed an application in 1971 for a Native allotment (FF-15840) divided into four parcels. Parcel B consists of 40 acres on the right bank of the Eek River between river miles 61.7 and 62, in Secs. 27 and 34, T. 1 N., R. 71 W., SM. This parcel is situated just below the confluence of the North and Middle forks of the Eek River. Mr. Andrew began using the parcel in 1930 from May to October for fish camp and from September to December for hunting.<sup>296</sup> During the field examination of the parcel in August 1975, Mr. Andrew's son accompanied the examiner to the site and claimed his father used the lands for trapping mink, otter, and fox, for picking berries, and for harvesting salmon. The examiner found evidence of use consisting of a barrel stove, cut alder and a tent frame site.<sup>297</sup> On a Statement of Witness submitted in 1978, Mr. Andrew stated that he had used the land since childhood in summer for fishing and in winter for hunting foxes, mink, and ptarmigan.<sup>298</sup> Two of Mr. Andrew's friends mentioned additional ways in which Parcel B was used during various seasons of the year: in the spring for hunting and trapping; in the summer for hunting and wood cutting; in the fall for hunting, trapping, wood cutting, berry picking, and fishing; and in the winter for trapping, fishing, and wood gathering. They stated that Mr. Andrew fished for pike and grayling and hunted and trapped beaver. They also indicated that there was a graveyard on the parcel.<sup>299</sup> In an affidavit filed in 1979, Mr. Andrew wrote that he first began to use his allotment in 1930 for the purpose of hunting. 300 He claimed use of Parcel B during the open-water season, as well as during the winter months. No information was found regarding access.

Johnny T. Hawk of Eek applied in 1983 for a Native allotment (AA-55924) split into three parcels. Parcel A consists of 40 acres located in Sec. 35, T. 1 N., R. 71 W., SM. Parcel A is situated between the Middle and North forks just upriver from their confluence (Figure 23). The parcel abuts the left bank of the North Fork at river miles 63.5 and 64.5 and the right bank of the Middle Fork at river mile 1.2. Mr. Hawk began using his Native allotment parcels in 1963 and used them yearly thereafter for hunting and trapping furbearers in January and February.<sup>301</sup> In an affidavit dated July 1, 1983, Mr. Hawk described his use of the parcels in the fall, as well, stating:

During the Fall time...I would travel to parcel "A" by boat and camp. The next day I would travel up one of the two forks of the river looking for moose. During these hunting trips I would be sure to check the area in parcels "B" and "C" to see which had the largest population of beaver. In this way I could plan for the trapping season. I would also store nonperishable supplies, such as gas and oil at parcel "A" so I would have some during trapping season. 302



Figure 23. View of the North and Middle forks in the vicinity of Native allotment AA-55924-A, just above the confluence of the two forks at river mile 62 of the Eek River, June 26, 1987. The view is looking north. BLM photo by Richard S. Stephenson.

During the field inspection of Parcel A on June 26, 1987, the examiner observed a tent camp site. On the Native Allotment Field Report, the examiner noted that the applicant claimed use of the land for subsistence hunting, fishing, and trapping and that he accessed the parcel by boat in fall and snowmachine in winter.<sup>303</sup>

Daniel Foster of Eek applied in 1971 for a 160-acre Native allotment (FF-15812) consisting of four 40-acre parcels. Parcel B is located on the right bank of the North Fork at river miles 77.8 to 78. Parcel B is in Secs. 13 and 24, T. 1 N., R. 70 W. and Secs. 18-19, T. 1 N., R. 69 W., SM. Mr. Foster began using this land on a seasonal basis in 1950 from May to October for fishing and from September to December for hunting. During the field inspection of Parcel B in August 1975, Mr. Foster accompanied the examiner to the site and claimed use of the parcel for fishing for salmon and grayling, hunting, and berry picking. On a Statement of Witness filed in 1978, Mr. Foster noted the existence of a campsite and trails on Parcel B. He indicated that he began using the land in 1960 in the fall and winter months for hunting and trapping. He camped on Parcel B when hunting and trapping. No explanation was found in the file for the one-decade discrepancy in the year of first use as listed on the Native Allotment Application (1950) and the Statement of Witness form (1960). No information was found regarding how Mr. Foster accessed Parcel B, although he claimed use of it in the fall, during the open-water season, as well as during the winter.

Joseph Joshua of Eek filed an application in 1971 for a Native allotment (FF-15842) divided into four parcels. Parcel D consists of 40 acres on the left bank of the North Fork at river miles 88.3 to 88.5, in Secs. 19 and 20, T. 1 N., R. 68 W, SM. Mr. Joshua began using the land in 1950 from May to October for fish camp and from September to December for hunting. During the field inspection of Parcel D in August 1975, Mr. Joshua claimed the site for "trapping beaver and mink hunting" and noted that "he camps in the nearby wooded area when needed." BLM photographs of Parcel D show a grove of cottonwood trees along the bank of the river. BLM photographs of Witness filed on January 9, 1978, Mr. Joshua indicated that there was a tent frame on the site and that he went to the site in winter for hunting mink, foxes, and land otters. No information was found regarding means of access.

Johnny T. Hawk filed an application in 1983 for a Native allotment (AA-55924) divided into three parcels. Parcel B consists of 60 acres on the right bank of the North Fork between river miles 90.5 and 91.1, in Secs. 21, 22, 27, and 28, T. 1 N., R. 68 W., SM (Figure 24). Mr. Hawk began using the parcel in 1963 and used it yearly in January and February for trapping. Mr. Hawk stated on his application, "We use the land to hunt fur bearing animals yearly for about 1 month in January and February." During a field inspection of the parcel on June 26, 1987, Mr. Hawk claimed "subsistence use of the land for trapping, fishing, and hunting" and stated that he accessed the parcel by boat in the fall and by snow machine in the winter. In the fall, he traveled by boat 26 miles upriver from his Parcel A to Parcel B to hunt for moose and also to scout for beaver in preparation for his winter trapping season. In early winter, after freeze-up, he traveled to Parcel A by snowmachine (formerly by dog sled) and set up a camp there. From that

camp, he traveled by snowmachine to Parcel B (and to his Parcel C on the Middle Fork), where he set traps and snares for beaver, rabbits, fox, wolves, mink, wolverine, and otter.<sup>312</sup>



Figure 24. View of the North Fork at Native allotment AA-55924-B, river mile 91, June 26, 1987. The view is looking south. BLM photo by Richard S. Stephenson.

On April 16, 1998, Johnny Hawk talked to a BLM interviewer about his experiences boating the Eek River and the North Fork. He told Laura Lagstrom that he had boated the Eek River the previous September in an 18-foot Woolridge [sic] with a 150-horsepower jet unit to hunt and fish. He took two other people, 150 gallons of gas, a tent and food. Their trip lasted a week. During that time, he saw about six other boaters with 16-foot to 18-foot Lunds with 40 to 50-horsepower propeller motors. Mr. Hawk mentioned his desire to establish a fly-fishing/eco-tourism business and to build a lodge at one of his allotment sites. He envisioned that such a business would have a "window of opportunity" of 90-120 days a year during July, August, and September. Mr. Hawk told Lagstrom that "one could use a propeller driver boat during the summer if you wanted to go 'all the way' if you wanted to get out and walk your boat." He said that he has seven 18-foot boats with 40-horsepower propeller outboards and that he planned to take Association of Village Council Presidents (AVCP) and USF&WS personnel up the Eek River in the summer of 1998 to compile an "index of the fish population." 313

Steven White of Eek applied in 1971 for a Native allotment (FF-15706) divided into four parcels. Parcel D consists of 40 acres located near the left bank of the North Fork at river mile 93, in Sec. 26, T. 1 N., R. 68 W., SM. Mr. White stated on his Native Allotment Application that he began using the lands in 1950 seasonally from May to October for

fishing and berry picking and from September to December for hunting.<sup>314</sup> During the field inspection of Parcel D, on July 30, 1975, Mr. White accompanied the examiner to the site and claimed use of the land for hunting and trapping.<sup>315</sup> In a Statement of Witness filed in 1978, Mr. White wrote that he used the parcel in fall and winter for hunting and trapping. He stated that a campsite, traps, and trails could be found on Parcel D and mentioned that he camped at the site in a tent while hunting. He had traveled to the site by dog team before snowmachines were available. He stated that in the fall, before freeze-up, he accessed Parcel D by boat.<sup>316</sup>

Adolph Carter of Eek filed an application in 1971 for a Native allotment (FF-15841) consisting of four 40-acre parcels. Parcel C is on the left bank of the North Fork at river miles 93.6 to 94.2, in Sec. 25, T. 1 N., R. 68 W., SM. Mr. Carter began using his Native allotment lands in 1946 from May to October for fishing and from September to December for hunting.<sup>317</sup> During the field inspection of Parcel C, Sam Alexie, the applicant's representative, accompanied the examiner to the site. The Native Allotment Field Report stated that Mr. Carter claimed Parcel C for grayling and trout fishing, moose hunting and beaver trapping.<sup>318</sup> On a Statement of Witness completed in 1978, Mr. Carter stated that he used Parcel C, beginning in the 1930s, for hunting in the spring, fall, and winter and for trapping in the winter and spring. He mentioned that he trapped beaver at Parcel C and also engaged in hunting there each year. He also noted that he had not used the land from 1971 to 1978 because he was disabled.<sup>319</sup> On a Statement of Witness filed in 1978, Peter Green, a friend of Mr. Carter, stated that Mr. Carter used Parcel C in the spring for hunting, trapping, and wood cutting; in the fall for hunting and wood cutting; and in winter for hunting, trapping, and wood cutting. Mr. Green added, "A while back I noticed this person goes to this area by dog team and spends days there hunting and trapping."<sup>320</sup> In an affidavit filed on August 28, 1979, Mr. Carter stated that he first began using the parcel in 1946 for hunting. <sup>321</sup> The file contained no indication of how Mr. Carter accessed Parcel C during the spring and fall, when the river was open.

Joshua White of Eek filed an application in 1971 for a Native allotment (FF-15788) split into four 40-acre parcels. Parcel A is located near the left bank of the North Fork between river miles 96.3 and 96.6, in Secs. 31 and 32, T. 1 N., R. 67 W., SM. Mr. White began using his Native allotment lands in 1958 from May to September for fishing, and from May to October for hunting. During the field inspection of Parcel A in August 1975, Mr. White accompanied the examiner and stated that he used Parcel A for moose hunting and mink and beaver trapping. On a Statement of Witness completed in 1978, Mr. White stated that he used Parcel A, beginning in the 1950s, for hunting and trapping in the spring, fall, and winter months and for fishing in the summer and fall and that he camped on the land. Mr. White claimed to use the parcel in the spring, summer, and fall months, when the river was open, in addition to the winter months. No mention was found in the file regarding how he accessed the parcel.

Daniel Foster of Eek filed an application in 1971 for four Native allotment parcels, including a 40-acre parcel, FF-15812-C, on the left bank of the North Fork between river miles 98.4 and 98.5, in Sec. 28, T. 1 N., R. 67 W., SM (Figure 25). That parcel is the

farthest upriver Native allotment where the BLM has determined the Eek River to be navigable in small tracts. (Attachment 20) According to his Native Allotment Application form, Mr. Foster began using his Native allotment lands in 1950 for fishing between May and October and for hunting between September and December. During the field inspection of Parcel C in August 1975, Mr. Foster accompanied the examiner to the site and claimed the lands for hunting moose, fishing for salmon, picking berries, and trapping beaver. In Statements of Witness filed in 1978, Daniel Foster and two of his friends, Peter Green and Jim White, indicated that Foster began using the land in the 1960s and used it during the fall and winter months for hunting and trapping. The type of access during the open season is not evident from the BLM Native allotment file.



Figure 25. View of the North Fork at Native allotment FF-15812-C, river mile 98.5, looking southwest, August 1975. This allotment forms the upper limit of the BLM's determination of the Eek River's navigability in small tracts. BLM photo by Clifford D. Ells.

Some applicants stated that they began using their Native allotment parcels along the North Fork as early as the 1930s and others as late as the 1960s. Ten of the 11 parcels were used before statehood. All 11 parcels have been used since statehood, with

documented use occurring into the late 1970s, the late 1990s, or as recently as 2004. All claimants used their parcels during the open-water season. One parcel was used only during the open-water season, but the other ten were used in winter, after freeze-up, as well. Means of access, if specified, was by boat in spring, summer, and fall. Snowmachines (formerly dog sleds) were mentioned in several cases as the means of winter access. During the open-water season, the claimants used their allotments for fishing (salmon, grayling, and pike), picking berries, hunting moose, and scouting for the winter trapping season. Camping took place on 8 of the 11 parcels.

## North Fork Eek River between river miles 99 and 135

This 36-mile section of the North Fork Eek River has not been determined navigable by the BLM. There are four Native allotments in this section. One (FF-17855) is located six-tenths of a mile above the portion of the North Fork that the BLM determined navigable in small tracts on February 21, 1989. (Attachment 20) The other three Native allotment parcels are clustered 30 miles farther upriver in an area that is five miles upriver from the Eek Lake outlet (river mile 125.2) and within one to three miles of Breast Mountain (river miles 133-134) and the mouth of Kapon Creek (river mile 134). A fifth Native allotment in this section, FF-16966-C, was returned to the federal government (USF&WS) in 2007 by means of a warranty deed. Native allotment FF-16966-C is described in this section because the Native allotment file yielded information about use. The information in this section was derived from Native allotment files and from BLM interviews and analyses conducted in 1998 in connection with an assessment of the navigability of the North Fork as it flows through a Native allotment that straddles the river at river miles 131.6 to 132.4.

James A. Charles of Tuntutuliak filed an application in 1970 for a Native allotment (FF-17855) in four parcels. Parcel A is located on the right bank of the North Fork between river miles 99 and 99.3, in Secs. 21 and 22, T. 1 N., R. 67 W., SM (Figure 26). He began using his Native allotment parcel in 1955 and made seasonal use of it between May and March for fishing, hunting, and trapping. He stated on his Native Allotment Application, "I have been moose hunting and subsistence fishing every year. I have been seal hunting, trapping mink, fox, and other furred animals." Mr. Charles accompanied the BLM examiner to the site for the field inspection of Parcel A on August 18, 1976 and claimed the land for fishing and hunting moose. The examiner wrote: "The applicant takes his outboard motorboat to the parcel and he said boats can go another thirty (30) miles to Eek Lake." The Eek Lake outlet stream joins the North Fork at river mile 125.2, which is 25 miles upriver from Mr. Charles's Parcel A.



Figure 26. View of the North Fork at Native allotment FF-17855-A, river mile 99, August 18, 1976. This allotment is half a mile upriver from the area in which the BLM determined the Eek River navigable in small tracts. BLM photo by Rhett S. Wise.

Carlie White (now deceased) of Eek filed an application in 1971 for a Native allotment (FF-16967) divided into four parcels. Parcel D consists of 40 acres on the left bank of the North Fork between river miles 130.1 and 130.5 (Figure 27). Parcel D is about three river miles below Breast Mountain, in Sec. 13, T. 1 N., R. 64 W., SM. Mr. White began using his Native allotment lands in 1935 on a seasonal basis from May to October for fishing and hunting. During the field inspection of the parcel on July 23, 1975, Mr. White accompanied the BLM examiner and stated he used the land for hunting and trapping. The examiner found physical evidence of a camp area on the parcel. Mr. White stated that he used his allotment lands between May and October (during the open-water season), but no indication was found in the Native allotment file regarding how he accessed Parcel D.

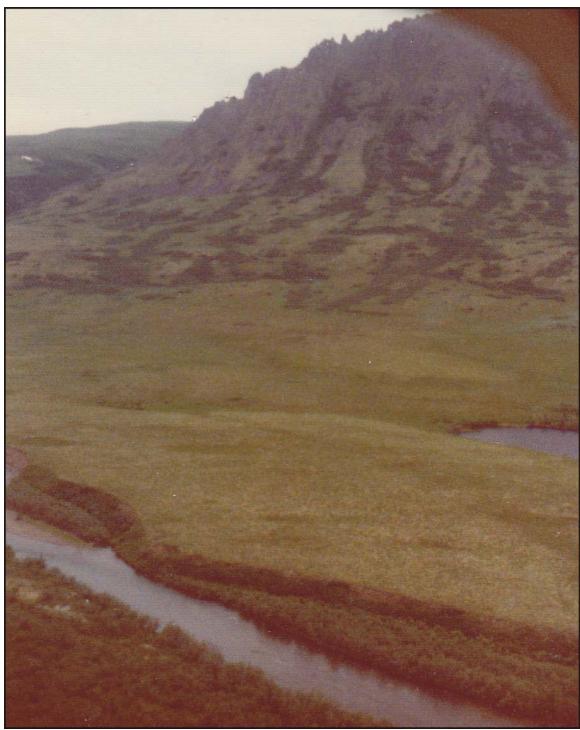


Figure 27. View of the North Fork at Native allotment FF-16967-D, river mile 130, July 23, 1975. BLM photo by Wayne R. Dawson.

Carlie White died in 1990. On April 20, 1998, Laura Lagstrom of the BLM's Navigability Section interviewed his younger brother Steven White concerning the

navigability of the North Fork as it flows through a Native allotment (FF-17241) located 1-1½ river miles above Carlie White's Native allotment parcel FF-16967-D. Steven White stated in the interview that the last time he boated to Breast Mountain (river mile 133 of the North Fork) was in September, four or five years prior to Lagstrom's interview. He stated that he used to go subsistence hunting every year during the second week of September with Carlie in an 18-foot Lund with a 40-horsepower propeller motor. The boat carried the two men and their camping gear, which they transported in each year because supplies and equipment left at the site were susceptible to destruction by bears. 334

Fritz Beebe Sr. of Eek applied in 1971 for a Native allotment (FF-16966) divided into four parcels. Parcel C, consisting of 40 acres, is located on the left bank of the North Fork between river miles 130.5 and 130.8, in Secs. 13 and 24, T. 1 N., R. 64 W., SM. (See Figure 8 on Page 28.) He began using this parcel in 1952 on a seasonal basis from May to October for fishing and hunting. <sup>335</sup> During the field inspection of Parcel C in August, 1975, Mr. Beebe accompanied the BLM field examiner to the site and said he used Parcel C for a trapping and hunting camp, and that he targeted mink, fox, and wolverine. <sup>336</sup> Mr. Beebe claimed use of the parcel during the open-water season, but no information was found in the Native allotment file concerning how he accessed the site. This parcel was returned to the federal government (USF&WS) in 2007 by means of a warranty deed. <sup>337</sup> (Attachment 1)

Alfred Alexie (now deceased) of Kwethluk filed an application in 1971 for a 160-acre Native allotment (FF-17241), which straddles the North Fork between river miles 131.6 and 132.4, in Sec. 18, T. 1 N., R. 63 W., SM (Figure 28). This allotment is located approximately 59 miles southeasterly of the village of Kwethluk and about three miles below Breast Mountain at a place called *Kwignayupok* in the Central Yup'ik language. Mr. Alexie began using this land in 1935 from May to September for fishing, from September to December for hunting, and from November to April for trapping. His Native Allotment Application includes this statement: "I hunt and trap beaver, squirrels, moose and otter for my family's food. I have used this land all my life and will continue to use this land. My children go with me to hunt and fish." During the field inspection on August 3, 1974, Alfred Alexie's son Alexie Alexie accompanied the examiner to the site and said that he had been to the allotment when he was a small child and his family had camped there. The examiner characterized it as "a good location for a winter camp." 340

In an affidavit filed on July 23, 1975, Alfred Alexie stated that he first used this land in 1938 with Kwethluk residents Evan Kopuk, Nicolai K. Nicolai, and Paul J. Nicolai. Native Allotment Statement of Witness forms identify Evan Kopuk as Alfred Alexie's father and Nicolai K. Nicolai and Paul J. Nicolai as his uncles. Alfred Alexie also stated that he used the land with Phillip Angelan and Wassillie Kopuk. Alexie's use of the land included hunting and trapping "fox, mink, and otter each winter when the season opens." He stated that his son Alexie Alexie had used the land from the time he was 13 years of age to hunt ptarmigan each winter and spring. <sup>341</sup>



Figure 28. View of the North Fork at Native allotment FF-17241, river miles 131.7-132.3, June 10, 1998. The river bed was conveyed to the allotment holder along with the uplands. BLM photo by Steven G. Schmitt.

On a Statement of Witness filed on May 29, 1975, Alfred Alexie's father, Evan Kopuk, stated, "My son Alfred Alexie and his uncles have used this land since 1936 for beaver hunting and trapping fox." Mr. Kopuk stated that other people from Kwethluk also went to the land in winter for beaver hunting and trapping. On Statement of Witness forms, Nicolai K. Nicolai and Paul G. Nicolai stated that they and their nephew Alfred Alexie used the land for hunting beaver and fox beginning in 1936 until 1942 or 1943 when Alfred Alexie went into the army. They stated that people from Kwethluk used the land in the winter for hunting and trapping and that wood cutting and wood gathering also took place there during the winter months. Alfred Alexie did not specify the means by which he accessed his allotment. He claimed that he used it during the summer and fall, as well as in the winter.

In 1997 and 1998, the BLM interviewed a number of Natives about their use of the North Fork. BLM employee Laura Lagstrom interviewed two sons of Alfred Alexie. They described the use of skin boats to float downriver from spring camps. Lagstrom reported that they said:

traditionally, families would leave the villages near the end of January or February and travel by dog team to their 'spring camps' situated in the mountains where they would hunt, trap and fish. Shortly after the ice went

out and the rivers were high from snow run off, they would build wooden framed skin boats and drift downstream.<sup>344</sup> (Attachment 28)

Alexie Alexie said that he had never boated up the Eek River to his father's Native allotment because of the long distance that needed to be traveled downstream from Kwethluk and then up the Eek River.<sup>345</sup>

Lagstrom also interviewed Kenneth Henry and Fritz Petluska about their experiences boating on the North Fork. Kenneth Henry told Lagstrom that "he normally boats to the Sawtooth Mountains in the area of these allotments every September to hunt for moose." However, he did not do that in September 1997 "because he didn't have another boat tagging along with them." In mid-September 1996, Mr. Henry and another person boated to the area of Kapon Creek [river mile 134 of the North Fork] in an 18-foot Lund with 90-horsepower Evinrude jet. The boat carried two people and their gas, tent, food, sleeping bags, and rifles. <sup>346</sup>

Fritz Petluska told Lagstrom that he "has been up Eek River hunting moose and caribou many times." He explained that he usually went upriver in the middle of September with one or two other people and stayed for one or two weeks. Traveling with at least one person, he said, is important in the areas where the current is swift. He used an 18-foot Lund with a 55-horsepower jet unit, but other Eek residents used 18-foot Lunds with 30 to 90-horsepower jet units. He knew three people who traveled up the river in 'Roughnecks' (flat-bottomed boats) that were 15 feet or 17 feet in length, with 40 or 70-horsepower jet units. Mr. Petluska said that in September 1995 he boated to the area of the Native allotments to hunt caribou and moose. His boat transported three people, including himself, 80 gallons of gas, tents, and camping gear. He and his companions stayed for more than a week. Mr. Petluska said, "Eek residents boat the river to reach subsistence areas, not to just sightsee or for any other reason." 347

Lagstrom asked Mr. Petluska "if one can use a boat, canoe or raft on the creek carrying about 1,000 pounds for travel, trade and commerce." He responded that "he wouldn't recommend using any unmotorized boat such as canoes or rafts. But one could reach these allotments with a 18' aluminum boat with a jet unit loaded with 1,000 pounds if there is sufficient water." Without rain, there would not be sufficient water. Mr. Petluska told Lagstrom that "if BLM wanted to survey the allotments in the spring by boat they could make it but they needed to take a cordless drill and some patches in case they hit boulders and tore the boat." He said that there are no commercial activities on the river. Lagstrom concluded that the North Fork was not navigable in Mr. Alexie's Native allotment. (Attachment 28)

Survey plats show the North Fork as meandered and segregated from the Native allotment parcels along the river immediately below and above Mr. Alexie's allotment. Native allotment parcels FF-16967-D and FF-16966-C (Lots 1 and 2 respectively on U.S. Survey No. 12301) are located 1½ river miles below Mr. Alexie's allotment. Native allotment parcel FF 17479-D (U.S. Survey No. 12347) is located 2½ river miles above

Mr. Alexie's allotment.<sup>350</sup> (Attachment 40) Alfred Alexie's allotment was surveyed in 1998, and the survey plat (U.S. Survey No. 12301) does not depict the North Fork within Mr. Alexie's allotment (Lot 3) or the points where the river crosses the edges of the allotment. Photointerpretation of this stretch of the North Fork by Scott Guyer in 1998 estimated the width of the river at one chain wide in the area of Mr. Alexie's allotment.<sup>351</sup> (Attachment 31) The survey field notes do not mention the North Fork with regard to Lot 3. Mr. Alexie died in 1995, and his Native allotment—including the bed of the North Fork Eek River as it flows through the property—was certificated to his heirs on September 5, 2000.<sup>352</sup>

Frank Brown Sr. (now deceased) of Eek applied in 1971 for a Native allotment (FF-17479) divided into four parcels. Parcel D consists of 40 acres located on the left bank of the North Fork between river miles 134.8 and 135, in Sec. 29, T. 1 N., R. 63 W., SM. Mr. Brown began using the four parcels in 1941 on a seasonal basis from May to October for fish camp, fishing, and hunting. During the field inspection of Parcel D in August 1975, Mr. Brown said that he used the land for fall hunting and trapping for mink. This parcel is the farthest upriver on the North Fork. No indication was found in the Native allotment file as to how Mr. Brown accessed Parcel D.

Those who filed for Native allotments along this stretch of the North Fork began using their lands in the 1930s, 1940s, and 1950s. Use documented in the Native allotment files extends into the mid-1970s. The allotment parcels were used on a seasonal basis for a period of at least 20 to 40 years. These upriver parcels on the North Fork were used mainly for hunting and trapping in the fall and winter months. Claimants and their family members mentioned hunting moose, caribou, and ptarmigan and hunting and trapping beaver, fox, mink, squirrels, wolverine, and otter. Other activities included fishing and wood gathering. All five of the allotment holders claimed use of their parcels during the period from May to September or October, which is during the open-water season. Access was mentioned in the Native allotment files in only one case. In that case, James A. Charles told the BLM field examiner that he accessed his parcel in a boat with an outboard motor. He also stated that it was possible to boat another 25 miles upriver to the juncture of the Eek Lake outlet stream and the North Fork. People interviewed by the BLM in 1998 described the use of skin boats to float down the Eek River from spring camp. The brother of one of the allotment holders described his experiences boating the river to the vicinity of Breast Mountain (river mile 133). Two other individuals (who did not have allotments in the area) told the interviewer of their experiences boating to these upper allotments on the North Fork. Those who were interviewed in 1998 mentioned boating in the company of others, seeing other boaters on the upper river, and camping on the allotments.

## Middle Fork Eek River

Seven Native allotment parcels are located between river miles 1 and 45.5 of the Middle Fork Eek River. The BLM's determination that the Middle Fork is navigable in small

tracts upstream to river mile 46.8 encompasses all of the Native allotments on the Middle Fork. Native allotment files for the seven parcels indicate the claimants first used their parcels in the 1940s, 1950s or 1960s. Use of four of the parcels began prior to Alaska statehood—one in 1935, one in 1941, and two in the 1950s. Three were first used in the 1960s. Use is documented into the late 1980s for five of the parcels, to 1978 for one, and to 2002 for another.

Johnny T. Hawk of Eek filed an application in 1983 for a Native allotment (AA-55924) divided into three parcels. Parcel A consisted of 40 acres located in Sec. 35, T. 1 N., R. 71 W., SM., just upriver from the confluence of the Middle and North forks. The parcel is situated between the two forks, abutting the right bank of the Middle Fork at river mile 1.2, as well as the left bank of the North Fork between river miles 63.5 and 64.5 (See Figure 23 on Page 61). Mr. Hawk began using this parcel in 1963 and used it yearly thereafter for hunting and trapping furbearers in January and February. 355 In an affidavit filed on July 1, 1983, Mr. Hawk described his use of the parcel in the fall, as well. In the fall, he used a boat to access Parcel A, where he stored non-perishable supplies for the trapping season. From Parcel A, he boated up the Middle Fork or the North Fork in search of moose and to assess the beaver populations on Parcel C on the Middle Fork and Parcel B on the North Fork in preparation for the winter trapping season.<sup>356</sup> During the BLM field inspection of Parcel A on June 26, 1987, the examiner observed the presence of a tent camp site. On the Native Allotment Field Report, the examiner noted that the applicant claimed that he used the land for subsistence hunting, fishing, and trapping, and that he accessed the parcel by boat in the fall and snowmachine in winter. 357

Willie John Carter of Eek filed an application in 2001 for a 160-acre Alaska Native Veteran Allotment (AA-83234) located on the right bank of the Middle Fork Eek River between river miles 4.2 and 5.5, in Sec. 6, T. 1 S., R. 71 W., SM. He began using this land in 1966 in August and September for hunting, fishing, and berry picking. During the field examination of the parcel on May 28, 2002, Mr. Carter accompanied the BLM inspector to the site and stated that he began using the land with his family around 1953, when he was a child of seven or eight years of age. He told the examiner that his father would "round up his children and spend half of the day in a wooden boat traveling to the area." At the parcel on the Middle Fork, the family set up a tent camp. After a few days, they broke camp and hauled all of their equipment and supplies back to the village. The examiner reported that Mr. Carter spent summers fishing the Middle Fork for whitefish, Dolly Varden, and crayfish. He also hunted on the allotment and collected tea leaves, blackberries, salmonberries, strawberries, and cranberries. The field report stated that Mr. Carter accessed his parcel by boat from the village of Eek and that he visited his allotment five or six times each summer. 359

Robert Green (now deceased) of Eek filed an application in 1984 for a Native allotment (AA-50582) divided into four 40-acre parcels. Parcel D is located on the left bank of the Middle Fork between river miles 12.3 and 13, in Secs. 14 and 15, T. 1 S., R. 71 W., SM. He began using those Native allotment lands in 1935 and used them seasonally between

the 1950s and 1984 except for a period of nine years from 1969 to 1978, when he relocated to Fairbanks for work in pipeline construction. He used his Native allotment lands from June 1 to September 30 for fishing, from November 15 to March 31 for trapping, and from January 1 to December 31 for hunting. The Native Allotment Field Report stated that Mr. Green claimed occupancy of the land beginning in 1950 and that access to the parcel was "probably by riverboat." In a Statement of Witness dated June 26, 1984, Mr. Green stated that he began using the land in 1935 and used it each year except between 1969 and 1978, when he was in Fairbanks for work. He used the land year round for hunting, in the winter and spring for trapping, and in the summer and fall for fishing and wood gathering. Peter Green, a cousin of Robert Green, also filed a Statement of Witness form concerning Robert Green's Parcel D. Peter Green listed additional ways in which the parcel was used, such as year round for wood gathering and in the summer months for berry picking. Peter Green stated: "I also remember him that he used to go by dog team up river and spend some nights while trapping." Robert Green died in 2003. The BLM field examiner stated that Mr. Green probably accessed Parcel D by riverboat.

Johnny T. Hawk filed an application in 1983 for a Native allotment (AA-55924) divided into three parcels. Parcel A consists of 60 acres on the right bank of the Middle Fork between river miles 27.8 and 28.2, in Secs. 35 and 36, T. 1 S., R. 70 W., SM. He began using his three allotment parcels in 1963 for trapping and hunting during the fall and winter. 365 During the field inspection of the parcel on June 26, 1987, Mr. Hawk claimed use of the parcel for subsistence fishing, hunting, and trapping. He targeted otter, beaver, moose, and bear. The BLM examiner noted that Mr. Hawk accessed the parcel by boat in the fall and by snowmachine in the winter. <sup>366</sup> In an affidavit, Mr. Hawk described his fall moose hunting trips (by boat) to his Parcel A, located on the North and Middle forks of the Eek River, just above their confluence at river mile 62. From Parcel A, he traveled by boat about 27 river miles up the Middle Fork to Parcel C in order to look for moose and to check the beaver population in advance of the winter trapping season. In early winter after freeze-up, he traveled to Parcel A by snowmachine (by dog sled in earlier years) and camped there. Then he traveled by snowmachine to Parcel C (and to Parcel B on the North Fork), where he set traps and snares for beaver, rabbits, fox, wolves, mink, wolverine, and otter.<sup>367</sup>

James Petluska of Eek applied in 1971 for a Native allotment (FF-15686) consisting of four 40-acre parcels. Parcel A is on the left bank of the Middle Fork between river miles 29.3 and 29.7, in Sec. 1, T. 2 S., R. 70 W., SM. He began using his allotment lands in 1941 from May to September for fishing and from September to December for hunting. During the field inspection of Parcel A on July 30, 1975, Mr. Petluska accompanied the examiner to the site and claimed Parcel A was his hunting camp. The BLM examiner found evidence of use consisting of "cooking utensils, pots and pans, and fuel drums scattered about the cleared area," and concluded that "the parcel had obviously been used as a hunting camp." On a Statement of Witness filed in 1978, Mr. Petluska wrote that he used the land in fall and winter for hunting foxes, mink and

beaver.<sup>370</sup> There was no indication in the Native allotment file of how he accessed Parcel A.

Evon Petluska of Eek filed an application in 1983 for a 160-acre Native allotment (AA-55930) on the right bank of the Middle Fork Eek River between river miles 43.5 and 44.2, in Secs. 1 and 2, T. 3 S., R. 69 W., SM. He began using the land in 1958 from November to January for fishing and hunting and from February to March for trapping beaver. He stated, "I have used my land for my subsistence for many years. I have fished by icefishing and hunted and trapped. I did this while growing up with my family and I did this by myself after I turned eleven or twelve."<sup>371</sup> During the field inspection of the allotment on June 26, 1987, Johnny T. Hawk, who was identified as Mr. Petluska's "trapping partner and first cousin," represented him. Mr. Petluska's Native allotment is located 16.3 river miles upstream from Mr. Hawk's Native allotment parcel AA-55924-C. A BLM field report filed on September 2, 1987, stated that Mr. Petluska claimed use of the land for subsistence trapping, hunting, and fishing. He targeted large mammals (brown and black bears and moose), furbearers (otter, beaver, lynx, and wolverine), and fish (salmon, grayling, and trout). The field report also stated that he used a boat to access the allotment in the fall and a snow machine to access it during the winter.<sup>372</sup> On July 2, 1983, Mr. Petluska filed an affidavit in which he recalled traveling to the allotment by boat—a 6 or 7 hour trip—with his father, beginning in 1955, when he was seven years old. When he and his father reached the allotment lands, they set up a camp to serve as their base of operations for a week of moose hunting. While at camp, they also fished for silver salmon, grayling, or trout. In November, Petluska and his father traveled to the allotment by dogsled (a trip of 4-5 hours from Eek). After establishing their camp, they set traplines for furbearers, hunted ptarmigan, and fished for rainbow trout or grayling.<sup>373</sup>

Sam Cleveland of Quinhagak filed an application in 1971 for a Native allotment (AA-31272) divided into three parcels. Parcel B consists of 40 acres on the right bank of the Middle Fork between river miles 45.2 and 45.5, in Sec. 12, T. 3 S., R. 69 W., SM (Figure 29). Parcel B is located near the Great Ridge and is approximately 31 miles northeast of Quinhagak. Mr. Cleveland began using the land in 1965 between August and October for hunting. The BLM examiner noted described his use of the land for seasonal subsistence hunting. The BLM examiner noted that Mr. Cleveland accessed the parcel by boat. This parcel is the farthest upriver allotment on the Middle Fork Eek River. Carl Neufelder, the BLM Realty Specialist who visited the property on July 14, 1984, recalled that the Middle Fork Eek River was two to three feet deep at Mr. Cleveland's allotment and "certainly appeared to be suitable for raft or canoe navigation." (Attachment 20)



Figure 29. View of the Middle Fork Eek River at Native allotment AA-31272-B, river mile 45.5, July 14, 1984. This is the farthest upriver Native allotment on the Middle Fork. BLM photo by Carl Neufelder.

The seven Native allotment parcels on the Middle Fork Eek River were used mainly in the fall and winter for hunting and trapping. Two allotment holders also cited summer use from May or June to September for fishing, and one cited year-round hunting. Species targeted during these seasonal activities included moose, brown and black bear, ptarmigan, otter, beaver, lynx, and wolverine. Some fishing for salmon, grayling, Dolly Varden, whitefish, crayfish, and trout also took place. In addition, some allotment holders engaged in berry picking or wood gathering. Camping in conjunction with these subsistence activities was mentioned for five of the seven Native allotment parcels on the Middle Fork. Six of the seven Native allotment parcels on the Middle Fork were inspected in the mid-1980s and were accessed by boat in the fall. Only James Petluska's Native allotment file contained no indication of access. Mr. Petluska stated that he used his allotment parcel for hunting in the fall (during the open-water season), as well as in the winter. The four Native allotment parcels along the Middle Fork below his parcel and the two above it all specified boat access. The farthest upstream parcel on the Middle Fork, Sam Cleveland's Parcel AA-31272-B (located 107 river miles from the mouth of the Eek River), was accessed by boat in the fall for hunting.

## Ugaklik River

There are no Native allotments along the Ugaklik River.

#### Summary

A review of Native allotment files reveals important information about the use of the Eek River System as an access route for boat travel to and from Native allotments along the river and its tributaries. Individuals from Eek Village and other villages in the region traveled to their allotments in boats during the open-water season (in spring, summer, and fall—from May to October) to harvest a variety of resources for subsistence purposes. Some allotments were also accessed in the winter by dog team and later by snowmachine. Many Native allotment files do not address access. For decades Native people used their Native allotments annually on a seasonal basis. Some files include indications that they used them on a day-use basis, returning to the village at night, or that they camped on their allotments. Day use suggests a greater number of trips on the river. Camping

suggests traveling greater distances, most often in groups of two or more, and transporting larger loads that include fuel, tents, supplies, and equipment, as well as harvested resources on the return trip. Some Native allotment files and BLM interviews include specific information about boats, motors, loads, and numbers of people who were transported to the allotments by boat. Yup'ik place names and historical sites that are mentioned in connection with Native allotments along the river are indicators of use. The Native allotment files document annual (seasonal) use spanning the decades before and after statehood. The use of Native allotments was documented most often from the 1930s, 1940s, or 1950s (before statehood) to the 1970s, 1980s or 1990s. In a few cases, use began in the 1960s or extended into the 2000s. Some of the files contain accounts of intergenerational use, in which the allotment holder went to the land as a child with parents or grandparents or, more recently, took his or her children to the allotment to participate in subsistence activities. Spouses and children of deceased allotment holders continue to use the land for subsistence harvesting. Native Allotment Application Statement of Witness forms indicate that relatives and other Native people who were known to the allotment holders have used their allotment lands with permission, suggesting more widespread use of (and access to) Native allotment lands.

# Recent Native Travel on the Eek River Documented in Subsistence Studies and Other Sources

Since statehood in 1959, Native people from Eek Village and nearby communities have continued to use boats on the Eek River and its tributaries in the spring, summer, and fall to reach areas where resources can be harvested. They have followed a seasonal round of subsistence activities that include harvesting salmon, berries, resident fish, small game, moose, caribou, bears, furbearers, seals, and waterfowl. Boats have been used in the pursuit of all of those activities except for winter hunting, trapping, and fishing.

In July 1978, two BLM employees who inspected the Eek River by boat as far as the confluence of the North and Middle forks (river mile 62) reported that the Eskimos made medium to heavy use of the Eek River for travel and subsistence fishing, citing the "numerous net piles and fishing camps" they saw as evidence of this use. <sup>377</sup> (Attachment 41) USF&WS biologists stated in a 1985 report on their biological inventory of the Eek River that the use of the Eek River system came mainly from the village of Eek, and that subsistence fishing made up most of that use, along with some subsistence and recreational hunting, trapping, and berry picking. <sup>378</sup> In 1988, the USF&WS listed the Eek River among Kuskokwim River tributaries which were "used heavily for commercial, subsistence, and/or recreational access." <sup>379</sup>

Information regarding subsistence activities and the use of boats on the Eek River can be found in subsistence studies completed between 1982 and 1991. No subsistence study specifically for Eek Village has been found. However, three subsistence studies for the general area contain references to the Eek River. Those reports describe the subsistence

way of life of the Yup'ik people of Eek and surrounding villages, the boats that were used in subsistence endeavors, and the characteristics of the subsistence economy.

In 1982, anthropologist Ann Fienup-Riordan studied an area extending from Scammon Bay south to Quinhagak and up the Kuskokwim River as far as Akiak and prepared a report for the Bureau of Land Management Outer Continental Shelf Office. She reported that "the most striking feature of the study area [which includes Eek Village] is the fundamental dependence of its inhabitants on the products of the rivers and the sea, both traditionally and at present." She noted that the way of life of the Native people of that region "is inexorably bound up with the seasonal cycling of fish and game." Fienup-Riordan grouped Eek Village with nearby Quinhagak and Tuntutuliak in regard to subsistence activities. 380

Anthropologist Robert J. Wolfe and a team of researchers completed a major subsistence study of Quinhagak and three other southwest Alaska villages in 1983 for the ADF&G Division of Subsistence and the U.S. Department of the Interior Minerals Management Service. That study mentions ties between residents of Quinhagak and Eek and similarities in their subsistence activities.<sup>381</sup>

Anthropologist Michael Coffing authored a 1991 subsistence study of nearby Kwethluk for the ADF&G Division of Subsistence. He based the study upon observations that he had made in 1986-1987. He pointed out that Kwethluk people were involved in subsistence activities in the Eek River drainage and that some of their subsistence activities and those of the Eek people were linked. Coffing described the core resource use area for Kwethluk residents as encompassing "the tundra and uplands areas between the Tuluksak and Eek rivers" and the mountain areas at the headwaters of the Eek and six other rivers. Many Eek residents have relatives in Quinhagak and/or Kwethluk. 382

Wolfe defined subsistence as "the production and provision of fish, game, and other resources for local consumption, distribution, and traditional exchange." Fienup-Riordan characterized the economic system of Eek and nearby Native communities as a "mixed, subsistence-based socioeconomic system." Coffing described it as a "mixed, subsistence-cash economy." Wolfe termed the Yup'ik economy a "mixed economy" consisting of "subsistence food extraction, commercial food extraction, and government-financed service provision." Wolfe noted that this type of economic system includes "a community-wide seasonal round of subsistence activities; substantial outputs of fish and game products for local use; a domestic mode of production; non-commercial distribution and exchange networks; traditional systems of land use and occupancy; and systems of beliefs, ideologies, and motives concerning production and distribution." Wolfe noted that the domestic family groups that are the main economic units of production and consumption in Native villages of western Alaska commonly participated in the subsistence, commercial, and wage sectors of the mixed, subsistence-based economy.

According to Wolfe, the central feature of subsistence-based economic systems is the domestic mode of production. <sup>387</sup> In a domestic mode of production, the work of

harvesting subsistence resources is performed by household members and kin. During the open season (when water bodies are not frozen), from late May through September, Native people in the Eek area organize themselves into "production units" (usually along kinship lines) and travel by boat on the Eek River to traditionally used areas where they harvest and preserve salmon and other resources. They transport their harvests back to their village by boat.

Subsistence harvesting of animals and plant materials from the land in southwest Alaska has been compared to agricultural and pastoral economies in other parts of the world. Wolfe observed that residents of the Native communities in his study area participated in "economies [that] are 'food extractive' in nature" and involve the production of large quantities of fish and game for subsistence use. He noted that agricultural and pastoral economies are similarly "food extractive," but, in the case of the Yup'ik communities, "the food is extracted from the wild, natural environment and not from domesticated stock." 388

Distribution of the subsistence harvest takes place chiefly through non-commercial exchange networks (primarily through sharing and trade). Wolfe noted that "Every economic system has mechanisms for moving goods from producers to consumers." In southwestern Alaska villages, local food and materials are distributed not through the market, as in industrially based economies, but primarily through local networks, along kinship lines. This distribution takes place through formal and informal sharing, trade, and cash sale to family and non-family members within the Eek community and in other communities. <sup>389</sup>

Native residents of Eek and neighboring villages follow an annual round of seasonal subsistence activities. They fish for salmon from late May through the summer, harvest berries from mid-July to September, and hunt moose, caribou, bears, and other species in late August and September. In the fall, they gather firewood, fish for whitefish, burbot, and sheefish, and set traps for blackfish. After freezeup, they fish through the ice. In winter, they trap furbearers and harvest small game in the mountains or closer to the village. In late winter and early spring, some families travel to spring camps in the mountains to fish, hunt, and trap. When they return to the village, it is time once again to prepare for summer salmon fishing. Eek residents also hunt seals in the spring and migratory waterfowl in both spring and fall. The Native people of Eek use boats on the Eek River to access fishing, hunting, and berry picking areas during the open season.

Maps of Yukon Delta NWR subsistence harvest areas that were published in 1988 illustrate the geographic extent of the harvest areas in the Eek River drainage, including the Eek River/North Fork, Middle Fork, and Ugaklik River.

Table 2: Subsistence Harvest Areas in the Eek River Drainage within the Yukon Delta NWR.

Resource	Eek River/North Fork	Middle Fork	Ugaklik River
(Species)	(in river miles)	(in river miles)	(in river miles)
Moose	22.5-145	0-83	0-62
Bear	71-145	13-83	25-62
Caribou	77-145	20-83	44-62
Small game	0-145	0-83	0-62
Furbearers	0-145	0-83	0-62
Plants	0-145	0-83	0-62
Salmon	0-77		
Other fish	0-145	0-83	0-62
Waterfowl	0-49		0-7

The areas that are represented in Table 2 were extracted from USF&WS maps depicting subsistence harvest areas for various species in the Yukon Delta NWR. <sup>391</sup> For most species, the upper extent of the harvest area corresponds to the upper extent of the river, i.e. Middle Fork at river mile 83 and Ugaklik River at river mile 62. For the North Fork Eek River, however, the upper extent of the harvest area is shown as the boundary between the Yukon-Delta NWR and the Togiak NWR (river mile 145). The actual upper extent of the North Fork is at river mile 165. Harvest areas on the North Fork may extend upriver beyond river mile 145. <sup>392</sup>

Coffing's 1991 subsistence study of Kwethluk described the region's streams, sloughs, and lakes as "a web, interconnecting the communities with one another and providing access to seasonal camps and subsistence harvest areas." Boats ply those waterways from late May through mid-October. Eek residents use fishing boats and skiffs for local transportation to Bethel and other villages during the open season. A 1988 USF&WS report on the Yukon Delta NWR characterized the lower 50 miles of the Eek River as "easily accessible by boat" during the summer season. Barges deliver fuel and supplies to Eek Village (river mile 18) during the summer. Quinhagak residents regularly travel up the coast of Kuskokwim Bay to Eek.

Except for a one-mile gravel road in Eek Village, there are no roads in the Eek River drainage.<sup>398</sup> In the winter, people travel mainly by snowmachine and all-terrain vehicle.<sup>399</sup> Snowmachines (formerly dog teams) were used to access resource harvest areas. A network of snowmachine trails connects villages in this region, with marked trails from Eek to Quinhagak (39 mi.), Eek Island (15 mi.) and the Kwethluk River (45 mi.)<sup>400</sup> The Bethel to Quinhagak Trail (RST 30), a historical RS 2477 winter trail, passes through Eek Village. Eek Village is accessible by air.

A variety of boats, including canoes, kayaks, wooden skiffs, and aluminum boats, have been used on the lower Kuskokwim River tributaries. By the late 1960s, the number of canvas-covered kayaks was declining as men built plank boats or purchased aluminum boats. 401 Anthropologist Wendell Oswalt described the wooden boats that were in use on

the lower Kuskokwim in the early 1960s. They were three feet wide, with a pointed bow that was decked over to about three feet and a square stern. The boats were made from spruce planks six or eight inches wide, about twenty-four feet long, and one-half inch thick. They were powered by outboard motors ranging from 1½ to 32-horsepower. Photographs taken by BLM personnel in the mid-1970s show similar boats on the Eek River and a rightbank tributary (Figures 15, 17, and 21). An undated photograph shows such boats at Eek Village (Figure 30). Kayaks or canoes continued to be used for hunting muskrats in the spring and for transporting light loads. Small sleds were used to haul them over portages. Oswalt noted that "one old man travels in a kayak nearly every fall to Eek via a series of sloughs rather than on the Kuskokwim River." Skin boats were used prior to the introduction of power boats to descend the Eek River from spring camps in the mountains. 403

Most families used boats for a variety of purposes, including salmon fishing, moose hunting, wood gathering, and basic transportation. At Kwethluk in the late 1980s, wooden boats ranging in length from 20 to 24 feet outnumbered aluminum boats, which were 16 to 18 feet long. Outboard motors owned by Kwethluk households with salmon fishing camps ranged from 10 to 100-horsepower. The most popular sizes were 25, 40, and 70 horsepower.

Quinhagak saw a shift from wooden skiffs to aluminum boats in the 1970s and 1980s. By 1983, Quinhagak residents preferred to use 16 to 18-foot Lund aluminum boats with 35 to 70-horsepower outboard motors for ocean salmon fishing, river fishing, and other subsistence purposes. Such boats could carry loads of 1,500 to 2,000 pounds. Flat-bottomed plywood skiffs ranging from 3½ to nine feet wide and from 18 to 24 feet long were also used. Some Quinhagak hunters used power boats to travel up the Eek River for hunting in the fall. Sam Cleveland, who owns the farthest upriver Native allotment parcel on the Middle Fork Eek River, is a Quinhagak resident.

In 1998, Native allotment holders from Eek told a BLM interviewer that they used (or observed others using) on the upper Eek River 16 to 18-foot Lund aluminum boats with 40 to 50-horsepower propeller outboard motors or 30 to 90-horsepower jet units, or flat-bottomed Roughnecks with 40 or 70-horsepower jet units. One person stated that he used an 18-foot Wooldridge with a 150-horsepower jet. (Attachment 38)

Wooden boats could be repaired locally. Until recently, repairs to aluminum boats had to be done in Bethel or some place having specialized equipment. More types of boats can now be repaired in Eek Village. In 2005, the Coastal Villages Resource Fund (CVRF) contributed to the construction of a local fishery support building in Eek. The facility houses welding equipment and other tools that professional mechanics use for repairing boats, outboards, and four wheelers and also for boat building. 408

vii The CVRF was established under the Western Alaska Community Development Quota (CDQ) Program, which was formed under the Magnuson-Stevens Act. (Coastal Villages Region Fund, Neqsurtet Nepiit, Vol. 11, Issue 1, Winter, 2008, p. 6.)



Figure 30. Boats at Eek Village, river mile 18 of the Eek River. The view is looking west. The photographer and date are not known. Photo from BLM file FF-14854-EE/2.

USF&WS biologists characterized the Eek River as "an important salmon river, at least on a local scale." All five species of Pacific salmon return to the Eek River. The subsistence salmon harvest area on the Eek River extends from river mile 0 to approximately river mile 77 of the North Fork Eek River. Salmon are considered "the core resource" in the mixed, subsistence-based socioeconomic system of the Yup'ik people of the region, and salmon fishing is the most important subsistence activity. As recently as 2008, Eek Village was described as "a traditional Yup'ik Eskimo village with a subsistence lifestyle." In that year, all Eek families participated in subsistence fishing, and salmon made up 80-90% of the diet of Eek residents. Eek's economy is based primarily on subsistence fishing and commercial fishing.

Salmon fishing is the predominant summer activity in the region. Many families move by boat to traditional salmon fishing camps in late May or early June. Ideal sites for fishing camps are level, well drained, exposed to gentle breezes (but protected from strong winds), and accessible by boat (but protected from erosion). Fienup-Riordan wrote that Eek villagers move upriver to summer fish camps that are located in areas with "access to whitefish lakes as well as good drifting grounds." Fishing camps may serve as the summer homes for one or more households of relatives, who are organized into what anthropologists have termed "salmon production units." Working together, they harvest and preserve (primarily through drying and smoking) enough salmon to last for the entire year. Wolfe considered the "salmon production unit" to be "the largest and most complex of the economic groups organized to fish and hunt during the year." People travel back and forth by boat between the fish camp and the village. Those people whose fish camps are near the village may make these trips more frequently than do those with more distant camps.

The salmon that are harvested and preserved at fish camps are shared. In the domestic mode of production, networks of households make up production units and consumption units, but those groups are not necessarily the same. Some households of individuals, who may not have helped to produce salmon because of advanced age or competing activities, can draw salmon from the cache, even though they were not involved in the production phase. 420

According to Fienup-Riordan, the subsistence and commercial aspects of the economy of southwestern Alaska communities were inextricably intertwined. Native people have alternated between commercial and salmon fishing, often using the same boats and equipment. Income from commercial fishing has provided cash to purchase boats, motors, and fuel. Fienup-Riordan described subsistence and commercial activities as "inseparable in real life."

Since statehood, Native people of the lower Kuskokwim region have worked in canneries and have fished for canneries. Cannery work surpassed trapping as the primary source of cash income, and income from cannery work brought new life to the economies of communities in the region. The commercial salmon fishery in the Kuskokwim River remained small until about 1960. Commercial salmon harvests surpassed subsistence

catches of Kuskokwim salmon for the first time in 1969, when chum salmon began to be marketed commercially. 424

During the 1970s and 1980s, Native villagers shifted from working in canneries to harvesting salmon commercially. In 1973, the State instituted a system of limited entry permits designed to control the commercial salmon harvest and protect salmon stocks. The limited entry system led to dramatic growth in local earnings from commercial salmon fishing. By the 1980s, Bristol Bay canneries no longer employed large numbers of residents of Kuskokwim area villages. Instead, most residents participated in the harvest phase of the fishing industry as captain or crew. 427

Wolfe reported that in 1983 there were no canneries in the Goodnews Bay and Quinhagak districts "nor in the entire area for that matter." The only major processing facility was a large freezer plant in Bethel that was not in operation during the 1982 season. Since then, the CVRF has built a salmon processing facility in Quinhagak. The plant employs local people (from Quinhagak and nearby villages) and pays villagers for their commercial harvest of salmon. The plant operates as part of Coastal Villages Seafoods LLC (CVS), which was established in 1999 to operate fish plants in the region. In 2008, 44 Eek residents held commercial fishing permits. The commercial salmon fishery begins in June and lasts into late July or early August.

Native people of Eek and surrounding villages harvest a number of species of resident fish, such as whitefish, burbot, sheefish, and blackfish. The Eek area is noted for the quality of its blackfish. Yup'ik elder Paul Jones of Quinhagak explained that he sets traps for blackfish near Eek (river mile 18) in the fall because the blackfish in the Eek area are known to be larger, fatter, and more abundant than those in the Quinhagak area. In the Lower Kuskokwim region, freshwater fish are usually netted just before freeze-up or just after break-up. They are also caught by jigging through holes in the river ice during the winter and in early spring. 434

Plants, including berries, are harvested throughout the Eek River drainage. From mid-summer through the fall, Native people of the region travel by boat to favorite berry picking locations where they harvest blueberries, salmonberries, lowbush cranberries, and crowberries. Berry picking excursions can be either day trips or camping trips that last for several days. Some Quinhagak families set up berry camps in the area south of Eek and in other areas along Kuskokwim Bay and the lower Kuskokwim River. Native people harvest large quantities of berries. Oswalt reported that in the early 1960s, Napaskiak families worked to fill "three or four small wooden barrels, which stand about three feet high and are about sixteen inches in diameter." In the late 1980s, some Kwethluk family members traveled by boat as far as 75 miles downriver from the village for berry picking. Kwethluk households gathered an average of 20 gallons of berries, although some families gathered as many as 60 gallons of salmonberries, 20 gallons of blueberries, 20 gallons of crowberries, 40 gallons of lowbush cranberries. Blueberries are eaten fresh, but salmonberries and lowbush cranberries are cached for winter use. The berries are often used in making *agutuk*, a mixture of berries, fat, and other

ingredients. *Agutuk* is offered to visitors and has traditionally represented hospitality, which is a central value of Yup'ik culture. Those who did not harvest enough berries might buy berries from other families. Hose who did not harvest enough berries might buy berries from other families.

Native people gathered other plant materials in addition to berries in the Eek River drainage. For example, Kwethluk people gathered wood in the headwaters of the North Fork Eek River.<sup>441</sup>

In the fall when rainfall raises the level of the Eek River, hunters from Eek, Quinhagak, and Tuntutuliak travel upriver in powerboats to hunt for caribou, moose, and other game. Subsistence harvest areas for moose in the Eek River drainage extend from river miles 22 to 145 of the Eek River/North Fork, and include all of the Middle Fork and the Ugaklik River (Figure 31). 442

The harvest area for caribou extends from river mile 77 to 145 of the North Fork, from river mile 20 to 83 of the Middle Fork, and from river mile 44 to 62 of the Ugaklik River. Wolfe reported in 1984 that groups of three to six Quinhagak hunters traveled in skiffs up the Eek and Kanektok rivers during September and October to hunt for moose, brown bear, squirrel, and beaver. Moose were more common along the Eek River than along the Kanektok River. The hunting trips lasted from several days to several weeks, during which time the hunters ranged outward from traditional camps in search of game. When Quinhagak men hunted in the Eek River drainage, they sometimes fished for whitefish, using set nets. The core caribou hunting area for Kwethluk hunters includes the upper reaches of the Eek River, as well as the headwaters of the Kwethluk and four other rivers. Caribou have been found scattered throughout the upper Eek River valley since the early 1960s. Coffing reported that the Kilbuck caribou herd roams the foothills and mountains to the east and south of Kwethluk. Between 1988 and 1997, Akiachak residents used a portion of the upper Eek River drainage, between river miles 106 and 135, for subsistence hunting, fishing, and gathering.

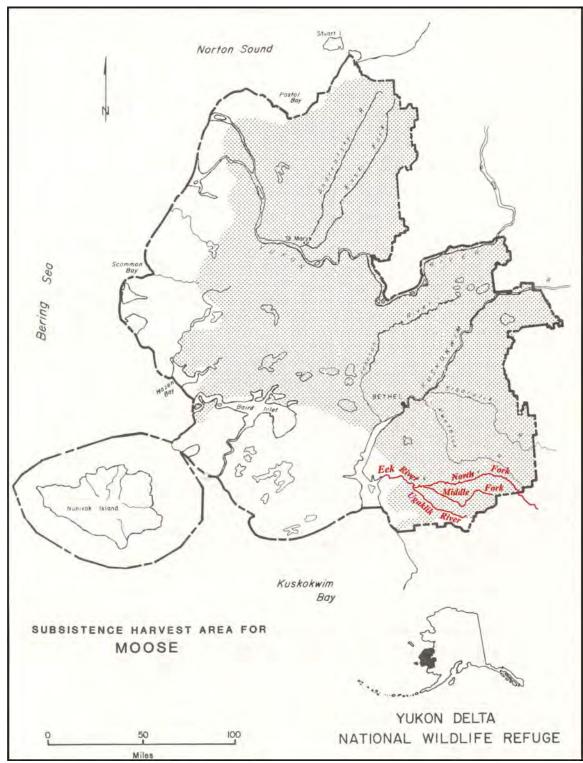


Figure 31. Subsistence harvest area for moose in the Yukon Delta NWR. The Eek River drainage is shown in red. Reprinted from USF&WS, Yukon Delta NWR:

Final Comprehensive Conservation Plan, Environmental Impact
Statement, Wilderness Review, Wild River Plan, 1988, p. 140.

Hunters typically boated up the Eek River in groups of two or more, in what anthropologists have termed "production units." Several men from Eek who were interviewed in 1998 by BLM Navigable Waters Specialist Laura Lagstrom described boating upriver with others in the fall to the vicinity of Breast Mountain and Kapon Creek (river miles 132-134 of the North Fork) for moose hunting. (Attachment 38) Eek hunter Kenneth Henry told Lagstrom that he normally boats to the Sawtooth Mountains (about river mile 128 of the North Fork Eek River) every September for moose hunting. In mid-September 1996, he and another person boated to the Kapon Creek area (river mile 134). 448 Steven White, of Eek, said that he had boated up the Eek River and the North Fork to Breast Mountain (about river mile 134) in the mid-1990s, in September. He said that he used to go subsistence hunting every year during the second week of September with his older brother, Carlie White, whose Native allotment parcel (FF-16967-D) was located on the North Fork between river miles 130.1 and 130.5, just a few miles downstream from Breast Mountain. 449 The locations that Kenneth Henry and Steven White accessed annually by boat on a seasonal basis for hunting were 30 to 35 river miles above the farthest upriver point where the river had been determined navigable by the BLM. In 1998, Fritz Petluska, of Eek, told a BLM interviewer that he had been up the Eek River hunting moose and caribou many times. He went hunting with one or two other people in mid-September and stayed one or two weeks.<sup>450</sup>

Hunting for brown bears took place in the fall (from late August through mid-October) and in the spring (from late March into May). The black and brown bear hunting area of the Kwethluk people included much of the Eek River drainage. The bear harvest area extended between river miles 71 and 145 of the North Fork Eek River, between river miles 13 and 83 of the Middle Fork, and between river miles 25 and 62 of the Ugaklik River. Bear hunters used boats to travel up and down the river in the fall or to float downriver after breakup in the spring. Bear skins were often used in the construction of skin boats (*angyaqatet*), in which hunters floated downriver from spring camps. Bear meat "was distributed among households." According to Coffing, "to harvest a bear is considered as being given a gift which is to be fully utilized and shared widely." 453

Small game animals—including ptarmigan, hare, parka squirrel, marmot, porcupine, and grouse—were harvested throughout the year, in the course of harvesting other wildlife. They were harvested primarily between mid-August and the end of May. Small game animals, except for parka squirrels and marmots, were generally available relatively close to the community, but the harvest area for small game animals extended throughout the drainage of the Eek River System, including upriver to at least river mile 145 of the North Fork. Small boats were used extensively to harvest furbearers, especially muskrat and beaver, during periods of open water. Johnny Hawk of Eek reported scouting for beaver by boat in the fall at his Native allotment parcels AA-55924-B (between river mile 90.5 and river mile 91.1 of the North Fork) and AA-55924-C (river mile 28 of the Middle Fork) in advance of the winter trapping season. During the trapping season, he returned to the area by snowmachine (in earlier years by dog sled).

Eek residents also hunt and trap during the winter, using snowmachines (formerly dog teams) to access productive areas. The harvest area for small game and furbearers extends from the mouth to the Eek River to river mile 145 of the North Fork, to river mile 83 of the Middle Fork, and to river mile 62 of the Ugaklik River. The small game hunting and trapping area used by Kwethluk residents between 1920 and 1987 included the upper Eek River drainage. In a 1976 report, ADF&G biologist Rae Baxter stated that "A few trappers from the village of Kwethluk sometimes pass over the low divide between the Kwethluk and the Eek River in the vicinity of Eek Lake during the winter on snow machines" in search of fox, ptarmigan, moose, and caribou. Snowmachines and sleds were used in most furbearer harvesting activities.

People begin trapping for mink, otter, fox and weasel by the middle of November. After beaver became more common in the headwaters area of the Eek River, people began to harvest them. Wolfe reported that fur trapping for commercial sale declined in southwest Alaska after World War II, although beaver trapping was still important in the area. Some residents continued to trap furbearers for commercial sale in the early 1980s, when fur trapping was described as "a minor source of income" in southwestern Alaska villages.

Two BLM employees noticed an abundance of beavers along the Eek River when they motored up the river to the forks in July 1978. 462 (Attachment 41) Beaver provided a source of food and skins for family use or for sale. In 1998, Johnny T. Hawk of Eek stated that he hunted and trapped beaver and other furbearers on his Native allotments, which he accessed in winter by snowmachine. 463 Residents of Eek, Quinhagak, and Goodnews Bay are known for making fine beaver hats. In the early 1980s, such hats were sold in Bethel for about \$150 each. Also, Eek residents made distinctive dolls with wooden faces and fur clothing that sold for \$65 or more in Bethel. 464

In late winter and early spring, hunters traveled on snowmachines (formerly by dog sled) to the mountains to hunt parka squirrels and marmots. 465 In 1975 Alfred Alexie of Kwethluk reported that he had trapped beaver (as well as squirrel, moose and otter) on his Native allotment FF-17241 (river miles 131.6-132.4 of the North Fork). His father and uncles mentioned that they had hunted with him. Although Mr. Alexie's Native allotment file contains no indication of how he accessed the site, his sons told a BLM interviewer about floating downriver from spring camp. According to the interviewer, they said that "traditionally, families would leave the villages near the end of January or February and travel by dog team to their 'spring camps' situated in the mountains where they would hunt, trap and fish. Shortly after the ice went out and the rivers were high from snow run off, they would build wooden-framed skin boats and drift downstream."466 These boats were made by stretching skins of brown bear, caribou, moose, reindeer, or seal and fastening them over wooden frames. Michael Coffing said that Kwethluk people went to hunting and trapping camps in the mountains in the late winter and spring. After breakup, they built shallow, bowl-like skin boats, in which to float their families, equipment, meat, and skins down one of several rivers, including the Eek River. Coffing documented the construction and use of skin boats by Kwethluk people as recently as the

1980s. 467 BLM Navigable Waters Specialist Laura Lagstrom cited information about skin boat use on the Eek River from the Alexie interviews and from Coffing's Kwethluk subsistence study in her 1998 navigability reports on portions of the North Fork Eek River and the Kwethluk River. 468 (Attachment 28)

Parka squirrels that were trapped or hunted "were skinned and hung on meat drying racks to dry." The meat that was produced by Kwethluk hunters was transported back to the village (often by skin boat) where it was "shared with other families, cooked and eaten, or frozen for later use." The skins were stretched, dried, and used for making parkas. They were also bartered and sold. Wolfe reported in 1984 that fur parkas made of squirrel skins and trimmed with calf skin "are valuable prestige items in the Kuskokwim region." Such parkas were luxury items that were often sewn for children or grandchildren and worn on special occasions. Squirrel parkas were rarely offered for sale but were "valued at thousands of dollars when shown at craft displays." In the early 1980s, Wolfe noted that bundles of 45 stretched squirrel skins were sold in the Quinhagak area for \$150 per bundle untanned. 472

Seal hunting is another spring activity that is pursued by Native people from Eek and other Kuskokwim Bay area. Quinhagak seal hunters were said to "commonly range from the Eek River south to Carter Bay." During April, some Kwethluk residents were known to fly to Eek or other coastal villages, where they hunt seals with their relatives. 474

Fienup-Riordan and other anthropologists emphasized the importance of the distribution aspect of the subsistence economy. Fienup-Riordan wrote, "The goal of subsistence economic activity... was traditionally, and is still to some extent, the accumulation of goods by the individual household in order that those goods might be given away" [Fienup-Riordan's emphasis]. She noted that "distribution is a 'moral necessity' that confers status." Fienup-Riordan stated that successful hunters in Eek and other coastal communities engaged in "a community-wide redistribution of their subsistence catch." She said that subsistence should be viewed "on a community rather than an individual, or individual household basis." 475

Wolfe characterized as "extensive" the non-commercial distribution and exchange networks for fish and game products in Quinhagak and other southwest Alaska communities. He noted that "the form and principles governing distribution and exchange vary depending upon the type of resource harvested and the composition of the work group involved in production." He stated that products of the subsistence sphere "rarely enter the outside economic system, and are confined to distribution and exchange within local networks." He described the process of sharing, stating that "Most sharing...occurred between members of multi-household, extended family groups." Sharing also took place "along networks of friends and more distant kin who were not co-members of a single domestic group."

According to Wolfe, the domestic mode of production requires the transfer of goods to other segments of the society. Thus highly productive domestic units transferred

resources they had harvested to those that were less productive. Particular resources also were distributed from geographic areas where they were more abundant to areas where they were less abundant. Those resources were distributed through intercommunity exchanges, mostly along kinship lines. Wolfe noted that "many ties of kinship" exist between Quinhagak, Eek, Goodnews Bay, and Togiak and that "considerable amounts of subsistence products are shared." A Quinhagak resident, for example, reported receiving a variety of resources through intercommunity networks, including pike and burbot from a sister in Eek. He reciprocated with smelt, dried trout, king strips, and dried salmon. Other Quinhagak residents received whitefish, pike, caribou and moose from Eek and reciprocated with trout. Eek people sent seal oil to Kwethluk. Households in 17 communities, including Eek, provided subsistence resources to Kwethluk households.

In the communities that Wolfe studied, "control over the technical means of production [including, for example, boats, outboard motors, and fishing gear] is often vested in a larger group and less frequently rests with an individual." Wolfe noted that "once cash is converted into equipment for use, others in the person's domestic group have access to the equipment when the need arises. A boat purchased by a member of one household will be borrowed and used by close relatives in another household."

In the summer, Native people of Eek travel up and down the Eek River between the village and fish camps where they work in "salmon production units" to harvest and preserve salmon and other resources. They then transport their salmon harvest back to the village by boat and distribute it along kin networks. Native people of Eek travel in groups up the Eek River in boats in the fall to hunt caribou, moose, and bears with the intention of distributing substantial portions of their subsistence harvest other households. After harvesting those animals, the Eek hunters transport the meat down the Eek River by boat for distribution through kinship networks in Eek Village, Quinhagak, and other communities. Native people from Quinhagak also boat up the Eek River in groups to hunt for caribou and moose. They boat down the river with their harvest, which they share among households within the Quinhagak community and beyond. 480

## Government Studies of the Eek River System

Government biologists and archaeologists and BLM and USF&WS officials have traveled in the Eek River drainage since the mid-1970s. Their reports provide information about their means of travel and the loads they transported.

Various scientists, including biologists and archaeologists, conducted scientific investigations in the Eek River drainage in the 1970s and 1980s. In late July 1976, ADF&G fishery biologist Kenneth T. Alt made a field study of the Eek River to assess its characteristics and to evaluate its fish populations. He motored up the river in a 24-foot aluminum riverboat with an outboard motor. The boat carried a crew of two or three

biologists as well as sampling gear, fuel, and camping equipment. Alt and his crew ascended the Eek River beyond the confluence of the two forks to river mile 68 of the North Fork and river mile 12 of the Middle Fork. Alt commented that "Navigation beyond Mile 10 on the Middle Fork with a conventional motor is extremely difficult at low water."

Rae Baxter, an ADF&G fishery research biologist, and an assistant conducted a boat reconnaissance of the Eek River between August 5 and 11, 1976, from 250 km upstream [river mile 155] to the river mouth. In preparation for the trip downriver, Baxter sledded a 15-foot Grumman Sportsboat to the Rainy Creek airstrip by snowmachine in March of 1976. Baxter reported that in early August (traditionally a period of low water), he encountered shallow, rocky bars alternating with a narrow channel next to the cut bank where sweepers of alder, willow and cottonwood trees abound. He found it necessary to drag the boat over many bars by hand and to chop through brush and fallen trees at times to get down the river. He stated that "The Eek River is not an easy river to traverse and is not suitable for raft or kayak travel above the flat land in the lower section at about 138 km [86 miles]." 483

Alaska float-hunting guide Michael Strahan has described the limitations of sport boats in certain conditions. He wrote:

Drifting in a sport boat as you would drift with a raft is problematic, especially on rough rivers that require precise maneuvering. This is because the flat transom creates drag and doesn't allow water to flow properly under the boat. In shallow rivers, the transom sits deep and comes into repeated contact with the river bottom.<sup>484</sup>

In the summer of 1978, archaeologist Robert E. Ackerman of Washington State University and two graduate students conducted an archaeological survey of the North Fork Eek River as part of a larger survey of three major lake and river valley systems. They also studied the Goodnews River, Kagati Lake, and the middle section of the Kwethluk River. Ackerman's survey crew set up camps near lakes where he and his crew used a Zodiac for transportation to various sites along the shoreline and on the inlet and outlet streams. More extensive trips required setting up temporary camps along the route. Ackerman noted that "all of the rivers were at a low water stage" during that season. 486

In the Eek River drainage, Ackerman and his team established a base camp at Eek Lake, from which they "made survey transects over the tundra to nearby high points, some two to three miles distant." The team used a helicopter to access lookout points between the Eek and Kwethluk rivers because there were no nearby lakes on which a fixed wing

viii Alt mentioned in the introduction to his report that his field inspections involved two or three biologists, but he did not specify how many individuals studied any particular river.

aircraft could land and no streams on which their raft could proceed northward from Eek Lake. They found that hiking long distances over wet tundra was difficult.<sup>487</sup>

On July 10, 1978, two BLM employees motored up the Eek River in a flat-bottomed riverboat. They traveled from Kuskokwim Bay to Eek Village (river mile 18), where they refueled, and then continued upriver to the confluence of the North and Middle forks (river mile 62). They returned to Eek Village the following day. (Attachment 41)

In June and July 1985, USF&WS biologists Mike Brown, Phillip Paniyak, and Marc Lapin conducted a general biological inventory of the Eek River basin. The three-person field crew used a power boat and inflatable rafts on the Eek River during 27 days of field work. They primarily studied birds and plants and occasionally sampled fish and small mammals. Their study of the Eek River basin's flora and fauna was part of a larger inventory undertaken to gather baseline data for the development of comprehensive conservation plans for the Yukon Delta NWR. In the performance of their work, the survey crew boated to campsites near each of their intended work sites and then spent two days doing two transects (one on each side of the river). On the following day, they traveled by boat to the next transect area and repeated the process. They also made two backpacking trips: one into the Eek Mountains and one to Eek Lake.

Brown and his crew made two separate trips on the Eek River that summer. On the first one, which lasted seven days, they used a 17-foot Boston Whaler equipped with a 70-horsepower Evinrude motor and a 12-foot inflatable Zodiac raft with a 30-horsepower short-shaft Mariner motor. They used the Whaler on the Kuskokwim River, the Eek River to the confluence of the North and Middle forks (river mile 62), and to approximately river mile 5 of the Middle Fork. They used the Zodiac between river miles 5 and 21.5 of the Middle Fork.

For the second trip, Brown and his crew used a Cessna 185 float plane owned by the Yukon Delta NWR, two 12-foot inflatable Avon redshank rafts, and a commercial airplane. Brown explained that the Cessna 185 flew the crew in three trips to a small lake between the Eek Mountains and the Eek River, at about river mile 129 of the North Fork. From that point they used the two rafts to float down the river to Eek Village (river mile 18 of the Eek River), where they boarded a commercial flight to Bethel. On June 17, they flew in to river mile 129 of the North Fork Eek River, where they established their Camp 5. They backpacked into the Eek Mountains and returned to Camp 5 on June 21. On June 23, they floated down the river to river mile 125 of the North Fork, where they established Camp 7. On June 24, they backpacked to Eek Lake, where they set up Camp 8 and spent the next day exploring the lake. On June 26, they returned to Camp 7 at river mile 125 of the North Fork and then floated downriver to the Great Ridge, where they set up Camp 9 at river mile 105. On June 29, they floated downriver to Camp 10 at river mile 94. On July 1, they floated downriver to Camp 11 at river mile 78.6. On July 4, they floated downriver to Camp 12 at river mile 62 (the juncture of the North and Middle forks). On the night of July 5-6, they floated downriver to Eek Village, where they boarded a commercial flight to Bethel. <sup>491</sup> Their 111-mile-long raft trip lasted 20

days and included travel on a 30-mile-long section of the river (between river miles 98.5 and 129 of the North Fork) that has not been determined navigable by the BLM.

Residents of Eek Village sometimes took government personnel up the Eek River by boat to conduct field research. For example, Johnny Hawk told a BLM interviewer in 1998 that he currently had seven 18-foot boats with 40-horsepower propeller outboards. He planned to take AVCP and USF&WS personnel up the Eek River that summer to get an index of the fish population. He expected to travel with Tim Andrew of AVCP and Mike Reardon of the USF&WS. 492 (Attachment 38)

Villagers also offered advice to government personnel who were contemplating making such trips on their own. Eek resident Fritz Petluska advised a BLM interviewer in 1998 that if BLM employees wanted to access the Native allotment in Sec. 18, T. 1 N., R. 63 W., SM (river mile 131.6) by boat in the spring, "they could make it, but they needed to take a cordless drill and some patches in case they hit boulders and tore the boat." A trip to that Native allotment would have covered a 30-mile-long stretch of the North Fork upstream of the farthest upstream point where the BLM had determined the Eek River navigable.

### Commercial Travel on the Eek River System since Statehood

Robert J. Wolfe reported in 1984 that for Quinhagak and other southwest Alaska villages, "Barges are the common method of getting large, bulky, heavy items, large quantities of many kinds of merchandise, including food and fuel; to the villages in the spring and fall." Barges transported goods to Eek Village (river mile 18) even before statehood. The Alaska Department of Commerce reported in 2010 that barges deliver fuel and supplies to Eek Village during the summer months and that a dock is available. Eek Village has several fuel tank owners, and the combined capacity of the fuel tanks exceeds 200,000 gallons. In 1976, ADF&G fishery biologist Rae Baxter stated in his Eek River reconnaissance report that a shallow draft barge could ascend the Eek River to at least 43 km (river mile 26, eight miles above Eek Village) but could not go much farther because of shallow places, except during highest water in late May or June.

In 1988, the USF&WS listed the Eek River as a major Kuskokwim River tributary which was "used heavily for commercial, subsistence, and/or recreational access." The agency also reported that "road access into the refuge [Yukon Delta NWR] does not exist." In the absence of roads, people wishing to access areas of the Eek River drainage have traditionally used boats in summer and dog teams or snowmachines in winter. They have also used aircraft in more recent years.

Native allotment holder Johnny Hawk told a BLM interviewer in 1998 that he was thinking of establishing a fly-fishing/eco-tourism business and that someday he would like to build a lodge at one of his allotment sites. He said that the "window of opportunity" would be during July, August and September for 90-120 days. He had three

allotments along the Eek River, one on the North Fork at river mile 90.5 to 91.1, one on the Middle Fork at river mile 28, and one abutting both the North and the Middle forks just upriver from the confluence of the two forks at mile 62 of the Eek River. Mr. Hawk said that he owned seven 18-foot boats with 40-horsepower propeller outboards. He said that he would be taking AVCP and USF&WS personnel up the Eek River in the summer of 1998 to get an index of the fish population. He did not specify how far upriver he intended to take them. <sup>499</sup> The BLM has determined the North Fork Eek River to be navigable in small tracts to a point about seven miles upriver from Mr. Hawk's North Fork allotment.

No commercial recreational fishing or floating guides operate on the Eek River because the USF&WS will not issue commercial permits for guiding. In 1988 the USF&WS wrote that private recreational use of rivers in the Yukon Delta NWR was not restricted but that "No commercial sport fishing guiding permits have been issued at the present time." In that year, the USF&WS began to consider requiring permits for guides on rivers in the Yukon Delta NWR. Delta NWR. A BLM Navigability Specialist quoted Paul Liedberg of the USF&WS Permitting Section in Bethel as saying in 1998, "Currently there are no commercial activities allowed on the Kisaralik, Kwethluk, Eek and Kasigluk Rivers which lie inside refuge lands (Yukon Delta and Togiak NWR)." Several guiding and air charter operators drop clients off on the upper reaches of the Eek River, but guides are not allowed to accompany clients. Liedberg mentioned that pickup services were offered on the lower end of the river, downriver from the upper end of corporation lands. Attachment 38) Fritz Petluska of Eek was quoted in 1998 as saying, "There are no commercial activities on the river. Attachment 38)

In May 2005 the CVRF built a boat repair facility—the Steven "Angivran" White Fisheries Support Center—in Eek. The support center provides "a place to make repairs on boats, four-wheelers, snowmachines, and provide other mechanical and welding services." <sup>503</sup>

### Recreational and Commercial Rafting on the Eek River System

In 1988, the USF&WS listed the Eek River as a major Kuskokwim River tributary which was "used heavily for commercial, subsistence, and/or recreational access." At that time, recreational use of the entire Yukon Delta NWR—including sport hunting, sport fishing, river floating, and bird watching—was estimated at "probably no more than 1,000 visitor use days [per year] and less than 5 percent of the public use." The report identified the expense and difficulty associated with accessing the refuge as contributing factors to this light recreational use. The USF&WS stated that the high expense of transportation "does not lend itself to casual recreation." The report projected that the low number of outsiders participating in recreational activities on the refuge would grow at a very slow rate. <sup>504</sup>

Rafters descended the Eek River as early as 1975. According to Ed Swanson, president of Knik Kanoers & Kayakers, at least one party ran the Eek River in that year. 505 (Attachment 42) ADF&G fishery biologist Rae Baxter, who floated down the Eek River with an assistant in 1976, believed that the recreational potential of the river was not very bright. He stated that other nearby areas had more to offer than did the Eek River. 506 Baxter considered it possible for short take-off and landing (STOL) aircraft to land at the Rainy Creek airstrip (river mile 150 of the North Fork) during July and August, but he noted that hiking in the vicinity of the airstrip was difficult because of poor footing on the tundra. 507

In September 2010, the ADF&G Sportfish Division website described the Eek River as "an intermediate duration float trip [of five to seven days] for the experienced or novice rafter." The website noted that access is by aircraft charter services from Bethel or Dillingham and that float trips begin in an unnamed lake in the headwaters with a short portage to the river. The ADF&G recommended the use of rafts with a rowing frame and advised rafters to arrange for pick up by float plane on the lower river below the confluence with the Middle Fork. Angling opportunities for salmon and Dolly Varden were described as "seasonally fair," and Arctic grayling were described as "abundant." <sup>508</sup>

During the 2010 season, PaPa Bear Adventures, a commercial operator based in Bethel, offered a drop off service for river rafters and recreational fishermen making unguided float trips down the Eek River. PaPa Bear Adventures noted on its website that rafters would be flown in by float plane and dropped off on Little Eek Lake for a float trip "through approximately 75 miles of the Yukon-Kuskokwim Wildlife Refuge." The location of Little Eek Lake was not clear from the website. The website characterized the Eek River as "without a doubt the least known river in Western Alaska" and as receiving "little fishing pressure." PaPa Bear Adventures recommended the Eek River "for the fisherman looking for an easy scenic float, clear water and few if any other people." Rafters were advised that they could expect clear water with abundant salmon, grayling, Dolly Varden, and sheefish, although not rainbow trout. PaPa Bear Adventures picks up rafters on a straight stretch of the lower part of the river by floatplane, at the end of their six to eight days on the river. In addition to drop-off and pick-up transportation, PaPa Bear Adventures rents rafts and camping equipment and provides packing lists for food, clothing, and camping equipment. PaPa Bear Adventures also offers expediting, logistical support, and lodging at Lakeside Lodge in Bethel. The lodge provides a gear preparation and storage area for river rafters.<sup>509</sup>

In 2010, Bethel-based Float Alaska was another commercial operator offering unguided float fishing and rafting trips on the Eek and other southwest Alaska rivers. Float Alaska offers a wide array of services for clients, including fishing information, advice on river selection, guidance on selection of personal gear and fishing tackle, assistance in planning, help with food planning and preparation, rental of rafting and camping equipment, and coordination of logistics. They also arrange lodging in Bethel and coordinate airplane transportation to and from the river. The Float Alaska website touts myriad benefits of float fishing and rafting trips down the Eek and other rivers. It

describes spectacular scenery, amazing fishing experiences, escape from concerns of the outside world, opportunities to form lasting friendships and create incredible memories, enjoyment of wilderness adventure, and a sense of accomplishment and self discovery. <sup>510</sup>

Native people of the Yukon-Kuskokwim Delta region have expressed concern about outsiders flocking into the region to engage in recreational activities that could put pressure on limited fish and game resources. In 1982, Fienup-Riordan cited "intrusion by non-local fishermen" as a continuing issue that "can be expected to rise in concern as developing marketing infrastructures lessen the communities' isolation."

## VI. Summary

BLM documents from the late 1970s and early 1980s described the significance of the Eek River for travel and subsistence. The BLM considered the Eek River to be "a major waterway" and described the Eek and Eenayarak rivers as "water highways connecting the village of Eek with other Kuskokwim River villages." In addition, the BLM stated that the Eek River received "significant present use for access to public lands surrounding the village." (Attachment 10) The BLM stated that "The Kuskokwim, Eek, and Eenayarak rivers continue to serve as major avenues of travel through and within the [Eek Village selection] area." (Attachment 13) BLM employees who boated up the Eek River in July 1978 stated that the Eskimos made medium to heavy use of the Eek River for travel and subsistence fishing. (Attachment 41) In 1988, the USF&WS listed the Eek River as one of the Kuskokwim River tributaries which were "used heavily for commercial, subsistence, and/or recreational access."

C. Michael Brown wrote in 1995 that "The BLM has consistently held this river [Eek River] to be navigable." In general, the BLM has determined the Eek River navigable within the village selection area (river miles 0-48.6), to the eastern boundary of Sec. 24, T. 1 N., R. 72 W., SM. In addition, the BLM has determined the river navigable within small tracts from river mile 48.6 of the Eek River to river mile 98.5 of the North Fork, from river mile 0 to river mile 46.8 of the Middle Fork, and from river mile 0 to river mile 0.5 of the Ugaklik River. Three other water bodies that were determined navigable under the one-man kayak standard in 1988 were determined non-navigable by the BLM in 1998, 2006 and 2008. They are: the leftbank slough (river miles 0-1) that flows into the Eek River at river mile 16.9, a portion of the unnamed rightbank stream (river miles 4.5-9) that flows into the Eek River at river mile 27.4, and a portion (river miles 0.5-1) of the lake outlet that enters the Eek River at river mile 40. The unnamed rightbank stream is still considered navigable in Sec. 16, T. 2 N., R. 72 W., SM (river miles 9-11.3). The BLM has not made a definitive determination of tidal influence for the Eek River, but BLM documents have described the Eek River as tidal below the village of Eek (river mile 18) since 1979. U.S. Surveys from 1991 noted tidal influence at river mile 31 of the Eek River and at river mile 10 of the unnamed rightbank stream that enters the Eek River at river mile 27.4.

The Eek River has no whitewater or obstructions for most of its length as it meanders 165 miles from the Eek and Ahklun mountains to Kuskokwim Bay. An interpretation of photographs of the river that were taken in July 1980 indicated that the Eek River "appears open to Sec. 11, T. 1 S., R. 64 W., SM" (river mile 138.7). (Attachment 28) Water levels range from less than a foot to eight feet and fluctuate during the summer, with the highest levels occurring early and late in the season. The Middle Fork has some sandbars or gravel bars in its upper 25 miles at river bends. The river is 80-feet wide as it rounds the Great Ridge. Below river mile 45.5 there are no obstructions. (Attachment 20) The Ugaklik River is a slow-moving, continuous, 50 to 60-foot-wide dark thread of water flowing through tundra covered lowlands. The BLM reported in 1989 that "No impediments or obstructions in the river were visible." (520)

The Eek River has been floated from about river mile 155 to the mouth of the river. <sup>521</sup> Native subsistence hunters have traveled upriver in power boats as far as river mile 134 in the fall when water levels are high. <sup>522</sup> The use of rafts to descend the river has been documented from as far upstream as river mile 129. <sup>523</sup> On the Middle Fork, owners of Native allotments located as far upriver as river mile 45.5 use power boats to access them.

There were three major types of use of the Eek River System during the historic period prior to statehood in 1959. The first type of use involved Native people floating down the river from spring hunting camps, using skinboats that were laden with people, equipment, supplies, skins, and meat.

The second type of use prior to statehood involved use of boats on the Eek River by non-Native people. C. Michael Brown stated that early gold prospectors and miners may have boated up the Eek River to mining sites on the North Fork Eek River. The major mining sites were on the upper North Fork and its tributaries Kapon Creek (river mile 134) and Rainy Creek (river mile 146). Geologists who conducted investigations of mining prospects in the Eek River drainage stated that the Eek River was navigable by power boat to the forks (river mile 62) and by poling boat to the head (river mile 165), but they considered boat travel impractical for miners' purposes. In addition, the U.S. Army Corps of Engineers reported that in 1958 a trader used a 6-ton barge and tug to transport supplies to his trading post at Eek Village (river mile 18).

The third type of use prior to statehood involved local Natives ascending the river in boats with outboard motors each year during spring, summer, and fall for the purpose of accessing exclusive use areas (later identified as Native allotments), where resources were seasonally abundant. Those locations were along the Eek River (river miles 3.4-62), on the North Fork (river miles 63.5-132.4), and the Middle Fork (river miles 1.2-45.5). There were exclusive use areas along the unnamed rightbank stream that enters the Eek River at river mile 27.4, as far upstream as river mile 11.4 and along its unnamed right tributary as far upstream as river mile 3.8. These areas were used before statehood. Boat access was mentioned as far upstream as river mile 3.8 of the unnamed right tributary. In the 1950s and earlier, the Native people engaged in traditional

subsistence activities—fishing, hunting, trapping, and berry picking—at those sites during the open season.

There have been three major types of use of the Eek River System since statehood in 1959. The first type of use since statehood involves Native people from Eek and other nearby villages traveling up the Eek River and the North and Middle forks in wooden or aluminum skiffs with outboard propeller motors (and more recently jet units) to use their Native allotments for subsistence fishing, hunting, trapping, and berry picking. The Native allotments are located along the Eek River (river miles 3.4-62), along the North Fork (river miles 64.5-135), and along the Middle Fork (river miles 1.2-45.5). Native allotments are also located along an unnamed rightbank stream (river miles 0-11.4) and its unnamed right tributary (river miles 0-4). There is a Native allotment along an unnamed leftbank slough (river miles 0.2-0.6). The slough joins the Eek River at river mile 16.9. There is another Native allotment in Sec. 3, T. 2 N., R. 72 W., SM, along lakes whose outlet stream between river miles 0.5 and 1 was determined navigable but later determined non-navigable.

The second type of use since statehood involves employees of state and federal government agencies motoring upriver and floating downriver while conducting studies of the Eek River's physical characteristics and the flora, fauna, and other resources of the river's drainage. In the 1970s and 1980s, several groups motored up the Eek River to the confluence of the North and Middle forks at river mile 62 and up to river mile 10 of the North Fork and to river mile 21.5 of the Middle Fork. They traveled during early June and July in boats that carried loads of two or more people, fuel, camping equipment, and sampling gear. In the 1970s and 1980s, biologists rafted down the Eek River from as far upriver as river mile 158 of the North Fork in connection with their biological inventories of the river and its environs. Groups of biologists descended the Eek River in a 15-foot Grumman Sportsboat from river mile 155 and in a 12-foot inflatable Avon redshank rafts from river mile 129. They traveled in June, July, and early August. In addition, in 1998 a Native resident of Eek stated that BLM personnel would find it possible to boat upriver to river mile 131.6 of the North Fork in the spring, but advised them to take repair equipment in case rocks damaged their boat.

The third type of use since statehood involves commercial and recreational rafting down the North Fork and the Eek River. Recreational rafting down the Eek River took place as early as 1975. In the 1990s, the USF&WS decided that no permits for recreational guides would be allowed on the Eek River within Yukon Delta NWR lands. As a result, in 1998 no commercial guides were operating on the Eek River. Outfitters rent equipment and drop off rafters on the river, but guides could not accompany the clients. River rafters were picked up on the lower reaches of the river, downriver from the upper end of Native corporation lands. During 2010 at least two commercial operators advertised services for river rafters and recreational fishermen who were making unguided float trips of the Eek River. Those services included: float plane drop off and pick up services, raft and equipment rental, planning assistance, packing lists (food, clothing, and camping equipment), expediting, logistical support, lodging in Bethel, and gear preparation and

storage areas. PaPa Bear Adventures noted that rafters would be dropped off on Little Eek Lake and picked up below the confluence of the North and Middle forks. Information on the numbers of rafters who floated the Eek River rafters was not found. In 2010, the ADF&G Sportfish Division described the Eek River as "an intermediate duration [5-7 days] float trip for the experienced or novice rafter." <sup>524</sup>

A variety of sources have the potential for providing additional information about use of the Eek River System. Those sources include the files of federal agencies that exercise management responsibilities for the lands along the river, published and unpublished accounts by individual recreational users of the river and commercial service providers that assist them with their trips. In addition, data on traditional Native uses of the river might be found in first-person accounts, Moravian Church files, and records of archaeological investigations of pre-twentieth century settlements along the Eek River. Finally, Yup'ik language place names and any stories that may be associated with those place names could shed light on traditional Native uses of the land and water bodies.

#### **Endnotes**

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<sup>&</sup>lt;sup>2</sup> Laura Lagstrom, BLM Navigability Specialist, Memorandum re Interviews for Native Allotment selections added to Window 2700 which straddle Kwethluk and Eek River, March 13, 1998, BLM files, Bethel-NA-FY98 9600 (924), p. 8.

<sup>&</sup>lt;sup>3</sup> Alt, Inventory and Cataloging Western Alaska Waters, p. 39.

<sup>&</sup>lt;sup>4</sup> Donald J. Orth, *Dictionary of Alaska Placenames*, Geological Survey Professional Paper 506. United States Geological Survey, Washington, D.C.: U.S. Government Printing Office, 1971, pp. 302, xi.

<sup>&</sup>lt;sup>5</sup> Alden M. Rollins, compiler, "Census Alaska: Numbers of Inhabitants, 1792-1970," Anchorage: University of Alaska Anchorage Library, 1978, p. 1960-8.

<sup>&</sup>lt;sup>6</sup> http://factfinder.census.gov (3-9-11)

<sup>&</sup>lt;sup>7</sup> Orth, Dictionary of Alaska Placenames, p. 302.

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<sup>&</sup>lt;sup>13</sup> Curtis McVee, BLM State Director, Notice of Proposed Easement Recommendations for the Village of Eek, March 24, 1977, BLM files, F-14854-EE.

<sup>&</sup>lt;sup>14</sup> Peter P. Three Stars, Bureau of Indian Affairs, Superintendent, Bethel Agency, Letter to Joint Federal-State Land Use Planning Committee, Anchorage, April 14, 1977, source unknown, but probably BLM files F-14854-EE.

<sup>&</sup>lt;sup>15</sup> Russell J. Gallagher, Law Offices of Gallagher, Cranston and Snow, Letter to Joint Federal-State Land Use Planning Commission., May 16, 1977, BLM files, F-14854-EE.

- <sup>16</sup> Walter B. Parker, State Co-Chairman, Federal-State Land Use Planning Commission, Letter to Curtis V. McVee, BLM State Director, June 17, 1977, BLM files, F-14854-EE.
- <sup>17</sup> Curtis McVee, BLM State Director, Memorandum to Chief, BLM Division of Technical Services, re Final Easements for the Village of Eek, April 4, 1978, BLM files, F-14854-EE.
- <sup>18</sup> Clifford D. Ells, BLM Realty Specialist, McGrath Resource Area, Transmittal memorandum regarding Final Easements for the Village of Eek, December 21, 1979, BLM files, F-14854-EE.
- <sup>19</sup> Robert E. Hiller, Jr., BLM Realty Specialist, Trip Report for the Village Meeting Held with Iqfijouaq Company Concerning Lands in the Vicinity of Eek, April 5, 1983, BLM files, F-14854-EE.
- <sup>20</sup> Robert W. Faithful, BLM Assistant to the State Director for Conveyance Management, Memorandum to Chief, Division of ANCSA and State Conveyances re Final Easements for Iqfijouaq Company for the Village of Eek, June 9, 1983, BLM files, F-14854-EE.
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- <sup>23</sup> Ruth Stockie, BLM Section Chief, Branch of ANCSA Adjudication, Decision, Section 14(h)(1) Applications Rejected, Section 12(b)Application Rejected in Part, Lands Proper for Village Selection Approved for Interim Conveyance, Iqfijouaq Company and Calista Corporation, September 29, 1983, p. 7, BLM files, F-14854-EE.
- <sup>24</sup> Ibid., maps.
- <sup>25</sup> Ann Johnson, BLM Chief, Branch of ANCSA Adjudication, Interim Conveyance Nos. 799 and 800, February 29, 1984, BLM files, F-14854-A.
- <sup>26</sup> Ann Johnson, BLM Chief, Branch of ANCSA Adjudication, Interim Conveyance Nos. 1032 and 1033, April 19, 1985, BLM files, F-14854-A.
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- <sup>35</sup> C. Michael Brown, BLM Navigable Waters Specialist, Letter to Michael Rearden, Manager, Yukon Delta National Wildlife Refuge, December 13, 1995, BLM files, 2628(930), 1995.
- <sup>36</sup> Dennis R. Benson, BLM Realty Specialist, Amended Notice of Proposed Easements and Request for Easement Nominations for Lands Selected by and to be Conveyed to the Iqfijouaq Company, August 28, 1997, BLM Files, F-14854-EE.
- <sup>37</sup> Katherine L. Flippen, BLM Land Law Examiner, Decision, Lands Proper for Village Selection Approved for Patent, January 9, 1998, BLM files, F-14854-EE; Ruth Stockie, BLM Section Chief, Branch of ANCSA Adjudication, Decision, Section 14(h)(1) Applications Rejected, Section 12(b)Application Rejected in Part, Lands Proper for Village Selection Approved for Interim Conveyance, Iqfijouaq Company and Calista Corporation, September 29, 1983, BLM files, F-14854-EE.
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- <sup>57</sup> C. Michael Brown, BLM Navigable Waters Specialist, Letter to Michael Rearden, Yukon Delta National Wildlife Refuge Manager, December 13, 1995, BLM files, 2628 (930); Dominica VanKoten, BLM Chief, Navigability Section, Navigable Waters within ANCSA-Selected and Interim-Conveyed lands in the Eek Village Project Area, January 12, 2006, BLM files, F-14854-A (2651).
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