SLATE CREEK

HUC 30502, Zone 1, Kuskokwim River Region

FINAL

INTERIM SUMMARY REPORT

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PREFACE

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

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

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

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

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Attachment 3. Curtis V. McVee, Letter from State Director to Chief Division of Technical Services (941), Final Easements for the Village of Goodnews Bay, April 4, 1978, BLM files, F-14862-EE.

Attachment 4. State Director for BLM, to Chief, Division of ANCSA and State Conveyances (960), Memorandum DRAFT, Final Easements for the Village of Goodnews Bay, July 29, 1982, BLM files, F-14862-EE.

Attachment 5. James E. Culbertson, Natural Resource Officer, Alaska Department of Natural Resources, to Mr. Robert Arnold, Assistant to the State Director for Conveyance Management, Letter summarizing easements, October 26, 1982, BLM files, F-14862-EE.

Attachment 6. Felix P. Hess, Land Planner for Calista Corporation, to Mr. Robert Arnold, Assistant to the BLM State Director for Conveyance Management, Letter opposing final easements, October 29, 1982, BLM files, F-14862-EE.

Attachment 7. Robert W. Faithful, Assistant to the BLM State Director for Conveyance Management, to Chief, Division of ANCSA and State Conveyances, Memorandum on Final Easements for Kuitsarak, Inc., June 22, 1983, BLM files, F-14862-EE.

Attachment 8. Robert W. Arndorfer, BLM Deputy State Director for Conveyance Management, to Deputy State Director for Cadastral Survey, Memorandum on Navigable Waters in group Survey No. 194 (Window 1704), June 6, 1988, BLM files, F-14862.

Attachment 9. Wayne A. Boden, Deputy BLM State Director for Conveyance Management, to Deputy State Director for Cadastral Survey, Memorandum on Navigable Waters in Small Tracts in Group Survey No. 194 (Window 1704), February 17, 1989, BLM files, F-14862-EE.

Attachment 10. Heather A. Coats, BLM Land Law Examiner, Decision to Interim Convey to Calista Corporation AA-70147 and AA-70153 regional selections, December 13, 1995, BLM files, F-14862-EE.

Attachment 11. Terry R. Hassett, BLM Chief of Gulf Rim Adjudication, Interim Conveyance No. 1660, January 26, 1996, BLM files, F-14862-EE.

Attachment 12. United States Geological Survey, Goodnews Quadrangle B-6, depicting final trail and site easements for Slate Creek.

Attachment 13. Master Title Plat (MTP) T. 9 S., R. 71 W., SM., United States Survey (USS) 10325, and United States Resurvey (USRS) 10325.

Attachment 14. Dominica VanKoten, BLM Chief, Navigability Section, to Chief, Branch of Survey Planning and Preparation, Memorandum on Navigable Waters within Village Regional-Selected and Interim Conveyed (IC) lands in the vicinity of the Goodnews Bay-Platinum Survey Project (Window 2687), March 21, 2006, BLM files, F-14862-EE.

Attachment 15. Charmain McMillan, BLM Land Law Examiner, Decision to Interim Convey, to Kuitsarak Incorporated, Calista Corporation, and the State of Alaska, March 13, 2009, BLM files, F-14862-EE.

Attachment 16. Richard Thwaites, BLM Chief of Land Transfer Adjudication, Interim Conveyance Nos. 2211 and 2212, April 13, 2009, BLM files, F-14862-A and F-14862-A2.

Attachment 17. Master Title Plats (MTPs), Supplements, and U.S. Survey (USS) plats for T. 10 S., R. 71 W., SM.

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Attachment 19. David Rukke, BLM Realty Specialist, Memorandum to File F-14862-EE, Interviews for Group Survey No. 194 (Window 1704), November 21, 1986, BLM files, F-14862-EE.

SLATE CREEK

HUC 30502, Zone 1, Kuskokwim River Region

II-B Interim Summary Report

I. Introduction

Slate Creek is located in the Yukon-Kuskokwim Delta region, within Zone 1 of HUC 30502 (Figure 1). Slate Creek is a north tributary of the Goodnews River System. The waterway originates in Kisogle Mountain and is 11 river miles[i] long.

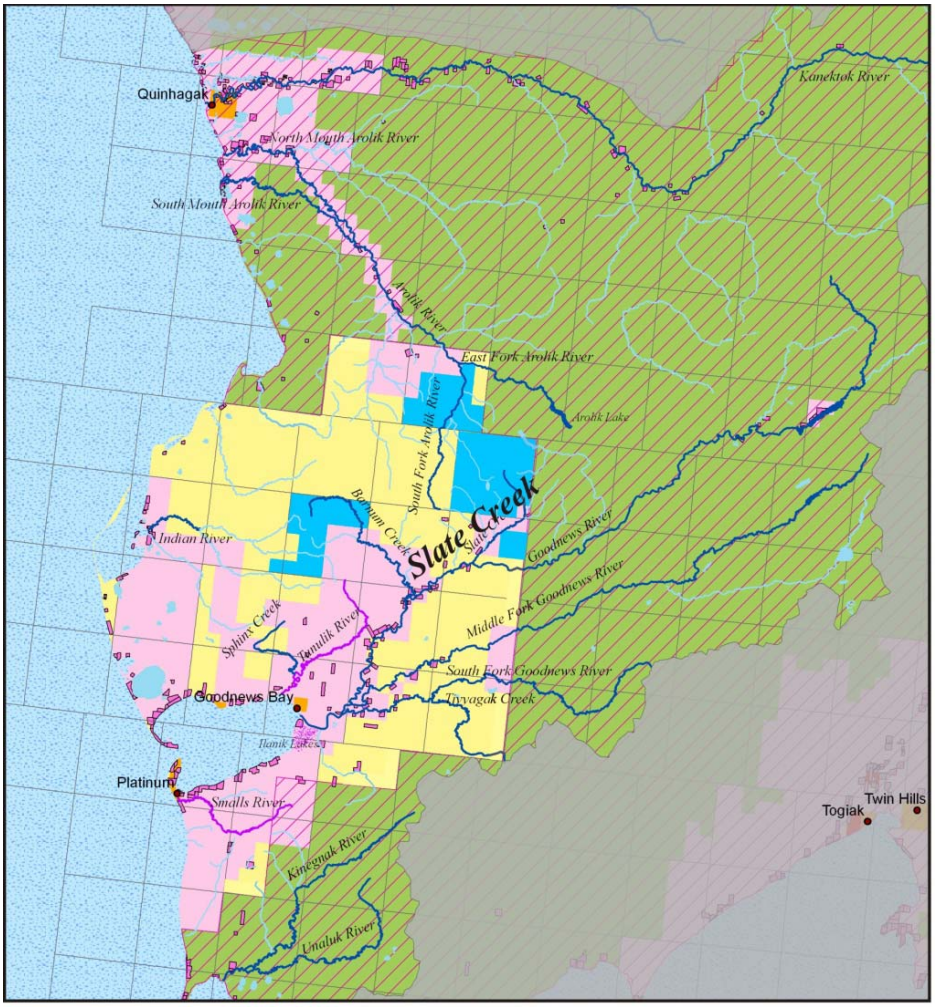

Figure 1. Map of Zone 1, HUC-30502, showing the location of Slate Creek.

[i] 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 U.S. Geological Survey quadrangle maps. The river mile marker system used in this report may be different than 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.

Slate Creek heads in Sec. 15, T. 9 S., R. 71 W., SM, and flows in a southeast direction through Secs. 22, 23, 25, 26, and 36, T. 9 S., R. 71 W., SM, where it continues in a southwest direction through Secs. 1, 2, 10, 11, 15, and 16, T. 10 S., R 71 W., SM, to its confluence with the Goodnews River in Secs. 20 and 21, T. 10 S., R. 71 W., SM. The name Slate Creek was given by prospectors and was first reported in 1919 by the U.S. Geological Survey (USGS) geologist G.L. Harrington. The name is descriptive of the river for the slate-like rocks it flows over in the upper part of its course.[1]

Slate Creek comprises two townships:

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

T. 9 S., R. 71 W., SM
T. 10 S., R. 71 W., SM

The mouth of Slate Creek is 17 air miles[ii] northeast of Goodnews Bay Village. Goodnews Bay Village is located on the north shore of Goodnews Bay at the mouth of Goodnews River. The river is 116 air miles south of Bethel, 110 air miles northwest of Dillingham and 400 air miles west of Anchorage. As of the 2000 Census, the population of Goodnews Bay Village was 230.

The mouth of Slate Creek is 21 river miles up the Goodnews River from Goodnews Bay Village. Overland access to Slate Creek from Goodnews Bay Village is comprised of two connecting RS 2477 trails, the Goodnews-Barnum Trail (RST 1658) and the Barnum-Slate Creek Trail (RST 211). The Goodnews-Barnum Trail (RST 1658) runs approximately 12 miles from the village of Goodnews Bay to the historic site of Barnum Village at the confluence of Barnum Creek and the Goodnews River. The Barnum-Slate Creek Trail (RST 211) runs from the Barnum Village site to the abandoned Wattamuse Mining Camp.

An airfield parallels the west bank of Slate Creek (Secs. 15-16, T. 10 S., R. 71 W., SM.) at river mile 2. The airfield is associated with the historic Wattamuse Mining Camp (Sec. 9, T. 10 S., R. 71 W., SM) located north of Slate Creek one river mile up the tributary of Wattamuse Creek.

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

II. Land Status

Within the two townships where Slate Creek flows, there was no federal land withdrawal, reserve, or reservation at the time of statehood. Slate Creek is bounded by State, BLM, Native village and regional corporation lands. The upper portions of Slate Creek flow through state lands. The middle and lower portions are bounded by Native lands, except for a small section at river mile 4 that passes through the NW ¼ NW ¼ of Sec. 11, T. 10 S., R. 71 W., SM, which belongs to BLM. The State has selected Secs. 11-14, T. 10 S., R. 71 W., SM, but, as of this writing, has not been granted title (Figure 2).

Two certificated Native allotments abut Slate Creek, AA-37801-A (U.S. Survey No. 10325) and AA-54569-B (U.S. Survey No. 9730).

Under the Alaska Native Claims Settlement Act (ANCSA), Kuitsarak, Inc., the village corporation for Goodnews Bay village, selected 115,200 acres under section 12(a) and 31,882 acres under section 12(d). The selected lands are along the North and Middle forks of the Goodnews River, along the north shore of Goodnews Bay and along the Bering Sea coast northwest of Goodnews Bay.

Calista Regional Corporation selected lands along Slate Creek, most likely for their mineral value. The BLM conveyed the surface and subsurface estate to Calista on January 26, 1996 in Interim Conveyance (IC) No. 1660. These lands extend along the creek from Sec. 16 (excluding U.S. Survey No. 9730) of T. 10 S., R. 71 W., SM, to Sec. 36 (excluding U.S. Survey No. 10325) of T. 9 S., R. 71 W., SM. The lower Wattamuse Creek and Olympic Creek are part of that conveyance.

Slate Creek has been meandered and segregated in T. 10 S., R. 71 W., SM. The river is not depicted on the Master Title Plat (MTP) for T. 9 S., R. 71 W., SM. A rectangular survey for the Slate Creek area is not available.

Kuitsarak Incorporated, the Native village corporation for Goodnews Bay, selected lands within Sec. 20 and 21, T. 10 S., R. 71 W., SM, excluding U.S. Survey No. 9730. This selection encompasses the land on both sides of Slate Creek from its confluence with the Goodnews River to river mile 1. The BLM issued IC No. 2211 on April 13, 2009 conveying the surface estate to Kuitsarak Incorporated and IC No. 2212 to Calista Corporation conveying the subsurface estate.

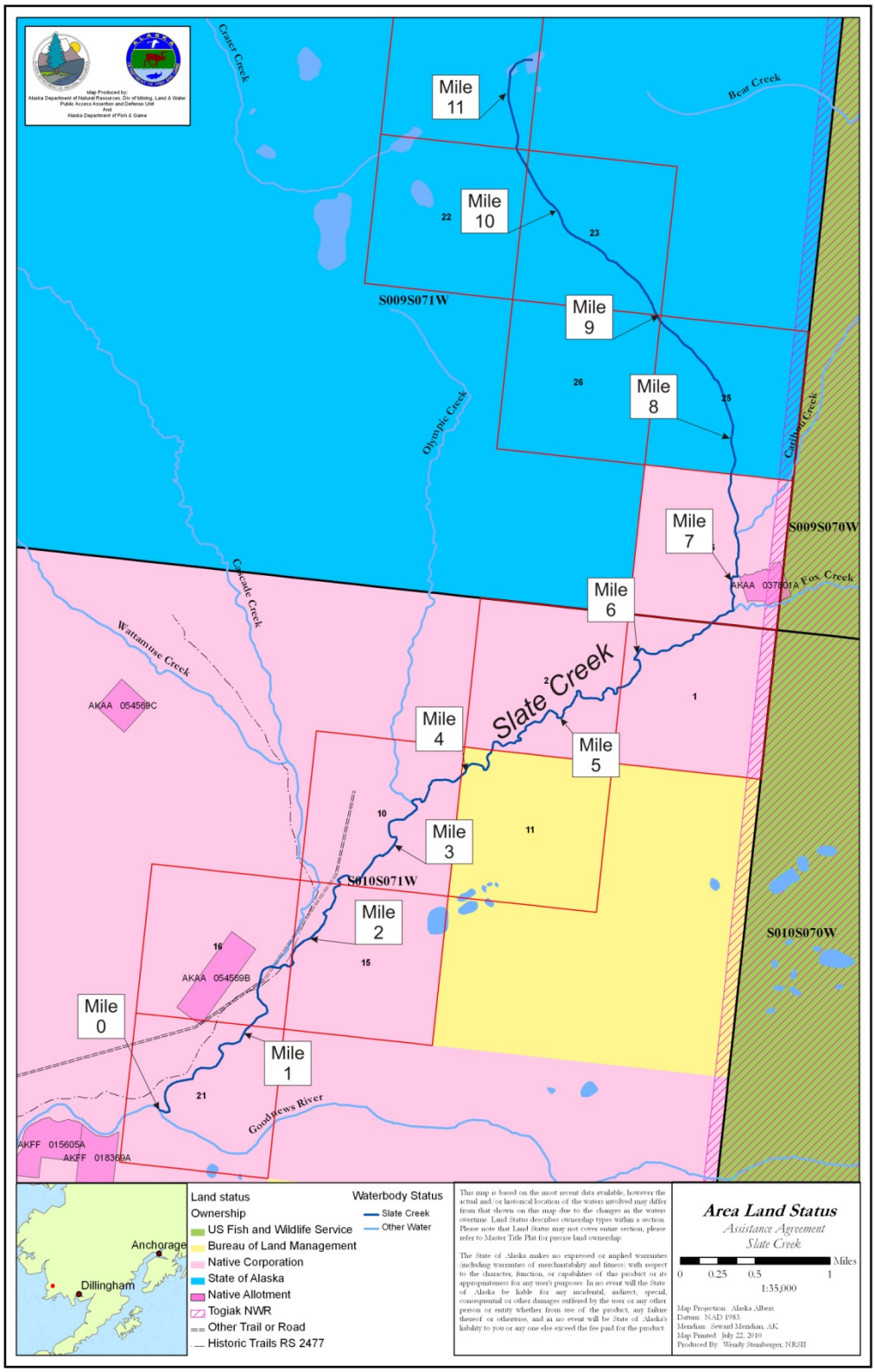

Figure 2. Map of Slate Creek showing associated MTR and Land Ownership Status.

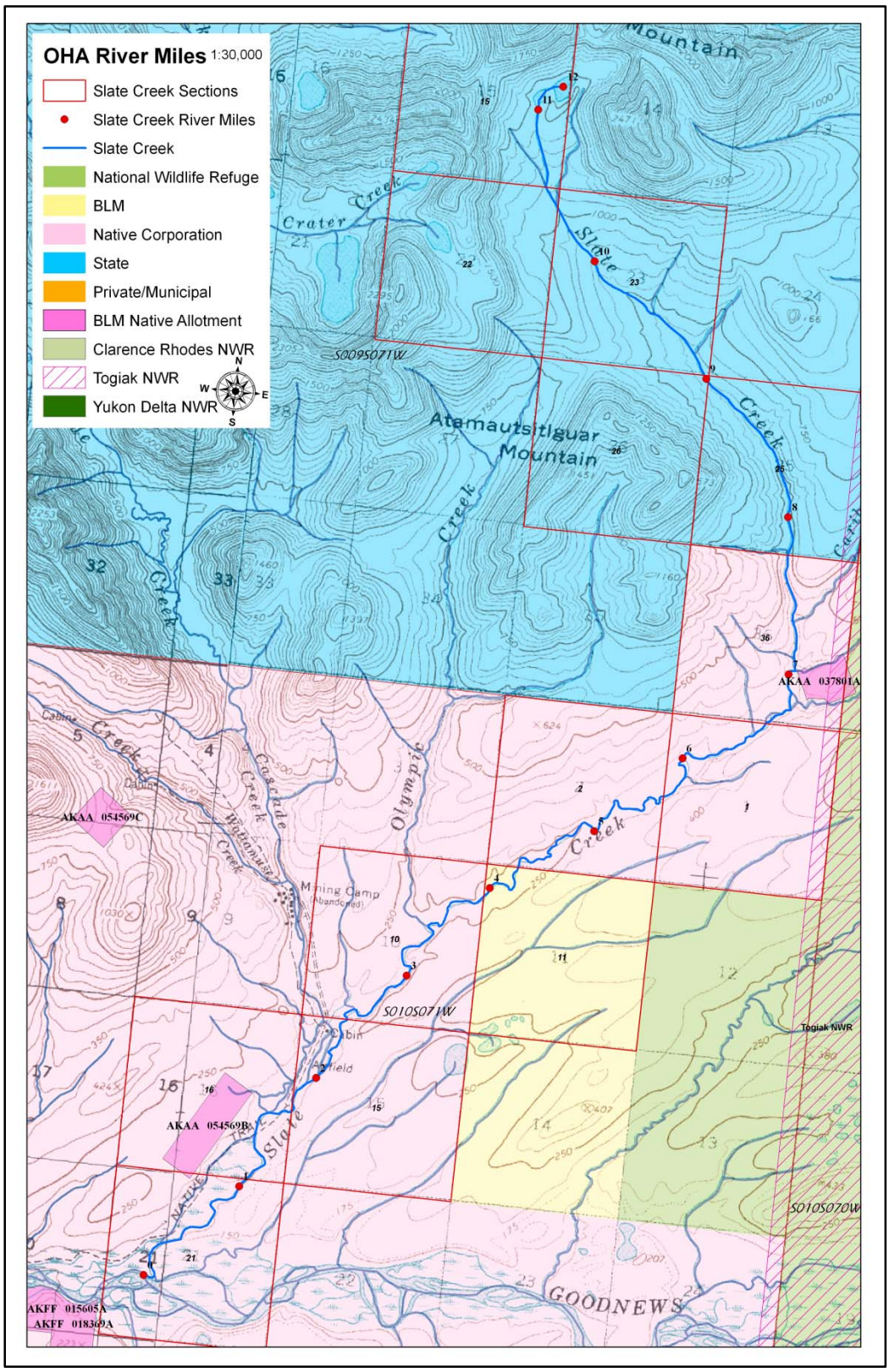

Figure 3. Map of Slate Creek showing river miles.

III. BLM Navigability Determinations and Trail Easements

The BLM solicited comments on easement proposals within the Goodnews Bay selection area from 22 agencies prior to a meeting held in Goodnews Bay Village on September 11, 1975. The easement proposals and related village corporation opinions from the meeting are summarized in a November 15, 1976 memorandum from Realty Specialist Cliff Ells. Slate Creek was the subject of two proposals. The Alaska Department of Fish and Game (ADF&G), the Alaska Division of Lands and the U.S. Bureau of Mines recommended the Wattamuse Mining Trail (Easement Proposal No. 4). Their proposal for the Wattamuse Mining Trail recommended that the historic trail, from Goodnews Bay to the Wattamuse Mining Camp, be maintained for both a transportation route and for future recreational needs on public lands. Miners historically used the trail to haul supplies to the Wattamuse mining camp, and it has continued to be used as a winter route to hunting and trapping areas. Representatives from the village corporation stated that they did not want public travel across their lands. The ADF&G recommended Easement Proposal No. 6, the Slate Creek-Goodnews River Campsite. The campsite was "desired for overnight camping and as a landing site with access to the Slate Creek area trails for fishing, recreational use and access." The village corporation did not want this site easement stating that factors of weather and boat operations determine stopping areas along the river.[2] (Attachment 1)

In a memorandum on January 31, 1977, BLM Realty Specialist Stanley Bronczyk approved the trail easement proposals from a BLM Easement Task Force Meeting on Goodnews Bay held on November 16, 1976. This included one additional easement, Easement Proposal No. 6A as a 50-foot wide trail easement extending northerly connecting Easement Proposal No. 6 to Easement Proposal No. 4, which leads to the Wattamuse Mining Camp. Bronczyk stated that the task force considered "to be navigable due to travel, trade or commerce, or susceptibility to travel, trade or commerce the Goodnews River throughout the selection area and Slate Creek from its mouth to the old Wattamuse Mining Camp."[3] (Attachment 2) On April 4, 1978, Curtis McVee, the BLM State Director, issued a final easements memorandum in which no changes were made from the easements approved in 1977. The final approved easements were EIN 4 the Wattamuse Mining Trail at 50-feet wide, EIN 6 a two acre staging area on the Goodnews River, and EIN 6A as a 50-foot wide trail connecting EIN 6 to EIN 4.[4] (Attachment 3)

In a draft Final Easements Memorandum dated July 29, 1982, the BLM State Director reiterated that the Goodnews River and Slate Creek had been used in the past to haul supplies to the Wattamuse Mining Camp. The final version of this memorandum was unavailable. The BLM categorized the Goodnews River as a major waterway and determined it navigable from its mouth easterly through the selection area. Slate Creek was included in the discussion of the village selection area because the creek connects the Wattamuse mining area to the Goodnews River and "the former Wattamuse area used the Goodnews River and Slate Creek to obtain supplies by boat." The BLM maintained the approved trail easements from the 1978 final easement memorandum.[5] (Attachment 4)

In a letter dated October 26, 1982, James Culbertson of the Alaska Department of Natural Resources asked the BLM to preserve the Wattamuse Mining Trail (EIN 4) on the basis that the transportation of heavy equipment to the mining camp had never been possible using the Goodnews River due to "dangerous ice conditions caused by fast moving water, overflow, and unstable beaver houses." According to Culbertson, the trail received year round use by trappers, schoolteachers and inter-village travel by the people of Togiak, Quinhagak, and Platinum.[6] (Attachment 5) On October 29, 1982, Felix Hess, a Land Planner at Calista Corporation sent to the BLM a letter asking to strike EIN 4 as duplicative since the water route had already been determined navigable. Hess added that delegates from Kuitsarak Incorporated believed the route to be unsuitable for travel by any means and that scenic or recreational easements on Native lands are in violation of ANCSA. Hess objected to the State advocating easements for a specific user group on Native lands.[7] (Attachment 6)

Robert Faithful, the BLM Assistant to the State Director for Conveyance Management, issued final easement and major waterway recommendations for Kuitsarak, Incorporated in a memorandum dated June 22, 1983. Two notable differences from previous final easements memorandums occur. There was no mention of Slate Creek in the determination of the Goodnews River as a major waterway, and trail easement EIN 4 was reduced from 50-feet in width to 25-feet in width from the "village of Goodnews in Sec. 21, T. 12 S., R. 73 W., Seward Meridian, northeasterly, paralleling the Goodnews River to public lands." The season of use was limited to winter. EIN 6 and EIN 6A are not discussed in this memorandum. The discussion of EIN 4 stated that reservation of this easement was necessary to assure public access to public lands and to provide access to valid existing mining claims as protected by the 1872 Mining Law.[8] (Attachment 7)

On June 6 1988, Robert Arndorfer, the BLM Deputy State Director for Conveyance Management, issued a memorandum on navigable waters in Group Survey No. 194 (Window 1704). The memorandum discussed the U.S. District Court's April 6, 1987 decision on the navigability of the Gulkana River and stated that the BLM, following this decision, generally considered that "non tidal water bodies are navigable if they were navigable by crafts larger than a one man kayak at the time of Statehood." Based on information collected in 1986 from local residents on river use in the Goodnews area and the criteria from the Gulkana decision, Arndorfer determined Slate Creek navigable to the mouth of Olympic Creek (river miles 0-3.4). In this decision the BLM stated, "Miners used small boats to travel to Wattamuse Creek. Slate Creek's physical character below Olympic Creek is such that small boats can be taken to that tributary."[9] (Attachment 8)

In a memorandum dated February 17, 1989, Wayne Boden the BLM Deputy State Director for Conveyance Management, identified small tracts in Group Survey No. 194 (Window 1704) including one allotment located on Slate Creek, AA-54569-B (U.S. Survey No. 9730) within T. 10 S., R. 71 W., SM. Boden identified navigable rivers and streams less than 198 feet wide and lakes less than 50 acres in size that were to be excluded on survey plats by township. At this time, the BLM considered nontidal water bodies navigable if they were navigable by crafts larger than a one person kayak at the

time of statehood. In Secs. 10, 16 and 21, T. 10 S., R. 71 W., SM, Slate Creek, between its mouth (river mile 0) and Olympic Creek (river mile 3.4), was listed as navigable. Although Sec. 15, T. 10 S., R. 71 W., SM, was not included in the designation for exclusion for the navigable portion of Slate Creek in the memorandum, that portion was excluded on the MTP. No rivers were listed in T. 9 S., R. 71 W., SM. [10] (Attachment 9)

On December 13, 1995, the BLM issued a Decision to Interim Convey (DIC) lands to Calista Corporation selected in AA-70147. Lands in this DIC that are relevant to Slate Creek include approximately 5,040 acres within Secs. 1-4, 9, 10, 15, and 16 (excluding U.S. Survey No. 9730), T. 10 S., R. 71 W., SM, and approximately 615 acres in Sec. 36 (excluding U.S. Survey No. 10325) of T. 9 S, R. 71 W, SM. Included in this DIC was the reservation of EIN 4 at 25-feet wide for an existing access trail from Sec. 21, T. 10 S., R. 71 W., SM, northeasterly, generally paralleling Slate Creek to the intersection with EIN 6A, in Sec. 15, T. 10 S., R. 71 W., SM, where the trail becomes 50-feet wide and parallels Slate Creek to public lands in Sec. 25, T. 9 S., R. 71 W., SM. The season of use was limited to winter only on the 25-foot section of EIN 4.[11] (Attachment 10)

The BLM issued IC No. 1660 to Calista Corporation on January 26, 1996, conveying Secs. 1-4, 9, 10, 15, and 16 (excluding U.S. Survey No. 9730), T. 10 S., R. 71 W., SM, and Sec. 36 (excluding U.S. Survey No. 10325), T. 9 S., R. 71 W., SM. Submerged lands less than 3 chains wide (198 feet) were included in the conveyance, excluding those determined navigable. Within the lands approved for conveyance, Slate Creek, from its mouth to Olympic Creek (river mile 0-3.4) was determined navigable. IC No. 1660 included the reservation of EIN 4 at a width of 25-feet from Sec. 21, T. 10 S., R. 71 W., SM, northeasterly, generally paralleling Slate Creek to the intersection EIN 6A, in Sec. 15, T. 10 S., R. 71 W., SM, where the trail becomes 50-feet in width and continues paralleling Slate Creek to public lands in Sec. 25, T. 9 S., R. 71 W., SM. Use was limited to winter on the 25-foot section of EIN 4 and was subject to the State of Alaska's claimed RS 2477 right-of-way, if valid.[12] (Attachment 11) The final easement map depicts EIN 4, EIN 6, and EIN 6A. This depiction differs from the descriptions for EIN 6, placing the easement in Sec. 22 (as opposed to Sec. 21), T. 10 S., R. 71 W., SM.[13] (Attachment 12)

In 2006, BLM issued a memorandum for Group Survey No. 979 that identified Native allotment AA-37801 (U.S. Survey No. 10325) for resurvey. A MTP that encompasses the area covered in the survey and dated December 3, 2008 does not depict Slate Creek in Sec. 36, T. 9 S., R. 71 W., SM. A previous survey was filed on October 11, 1991, and updated on December 5, 2008.[14] The resurvey more clearly depicts the portion of the Native allotment that falls outside of T. 9 S., R. 71 W., SM, but does not meander or segregate Slate Creek.[15] (Attachment 13)

On March 21, 2006, Dominica VanKoten, the BLM Chief of Navigability Section, issued a memorandum summarizing previously identified navigable water bodies on certain ICd regional, and village selected lands in the vicinity of the villages of Goodnews Bay and Platinum. VanKoten cited previous determinations of navigability by indicating the date of issue for the navigability determination for the affected lands. The memorandum lists

Slate Creek as navigable within Secs. 1-4, 9, 10, 15 and 16, T. 10 S., R. 71 W., SM, as included in IC 1660, and refers to the memorandum of June 6, 1988, by Robert Arndorfer, for its navigability determination. Arndorfer did not provide a legal description of the lands containing Slate Creek. Arndorfer stated only "I determine Slate Creek navigable to the mouth of Olympic Creek."[16] (Attachment 14)

Charmain McMillian, a BLM Land Law Examiner, issued to Kuitsarak Incorporated on March 13, 2009 a DIC for lands selected within Secs. 20 and 21, T. 10 S., R. 71 W., SM, excluding U.S. Survey No. 9730. Within the lands approved for conveyance, Slate Creek, extending from river mile 0 to Olympic Creek, at river mile 3.4, was determined navigable.[17] (Attachment 15) ICs for Secs. 20 and 21, T. 10 S., R. 71 W., SM, excluding U.S. Survey No. 9730, were signed on April 13, 2009, granting Kuitsarak Incorporated the surface estate under IC No. 2211 and the subsurface estate to Calista Corporation, under IC No. 2212. This conveyance encompasses the land on both sides of Slate Creek from its confluence with the Goodnews River (river mile 0) to river mile 1.[18] (Attachment 16)

Slate Creek has been meandered and segregated from its confluence with the Goodnews River (river mile 0) to the mouth of Olympic Creek (river mile 3.4) as depicted in the MTP for T. 10 S., R. 71 W., SM, current to August 13, 2009. The Supplemental Plat No. 1 for T. 10 S., R. 71 W., SM, depicts the confluence of Slate Creek's main channel in Sec. 20, T. 10 S., R. 71 W., SM, and a back slough of Slate Creek having its confluence in Sec. 21, T. 10 S., R. 71 W., SM. This differentiates from the single line confluence with Goodnews River depicted in the river mile and land status maps (Figures 2 and 3).[19] (Attachment 17)

Table 1. Summary of BLM Navigability Determinations for Slate Creek.

Date	River Section	Type Decision and Substance	Criteria
1-31-77 (Attach-ment 2)	Lower Slate Creek	BLM memo, Easement Task Force Meeting on Goodnews Bay. Approved easements on selected lands and identified Slate Creek navigable from its mouth to old Wattamuse Mining Camp.	Susceptibility to travel, trade and commerce
6-06-88 (Attach-ment 8)	Lower Slate Creek	BLM Navigable waters memo, Summarized interviews by Dave Rukke, Realty Specialist, and determined Slate Creek navigable to the mouth of Olympic Creek.	small boats can be taken to that tributary
2-17-89 (Attach-ment 9)	Lower Slate Creek	BLM memo on Navigable Waters in Small Tracts in Group Survey No. 194. Listed lower Slate Creek to be excluded in survey plats.	1st Gulkana decision, larger than a one man kayak
1-26-96 (Attach-ment 11)	Lower Slate Creek	IC No. 1660 entitling Calista Corporation to conveyance of the surface and subsurface estates in their selection area. Slate Creek determined navigable to Olympic Creek (river mile 0-3.4)	Not Stated
3-21-06 (Attach-ment 14)	Lower Slate Creek	Navigable Waters within Village/Regional Selected and IC lands within the Goodnews Bay-Platinum Survey Project (Window 2687) Slate Creek determined navigable in Secs. 1-4,9,10,15,16, T. 10 S., R. 71 W., SM.	Not Stated
3-13-09 (Attach-ment 15)	Lower Slate Creek	DIC to Kuitsarak Incorporated and Calista Corporation, selected lands. Within the lands approved for conveyance, Slate Creek determined navigable to Olympic Creek.	Not Stated
4-13-09 (Attach-ment 16)	Lower Slate Creek	IC No. 2211 to Kuitsarak Inc. and IC No. 2212 to Calista Corporation, ICing Secs. 20-21, T. 10 S., R. 71 W., SM (excluding U.S. Survey No. 9730). Slate Creek determined navigable to Olympic Creek.	Not Stated

IV. Physical Character of the Waterway

Slate Creek heads in Sec. 15, T. 9 S., R. 71 W., SM, approximately 900 feet above sea level at a small unnamed lake. There are no major lakes or glaciers at the head of Slate Creek. The creek flows generally south for 11 miles into the Goodnews River in Secs. 20 and 21, T. 10 S., R. 71 W., SM. Slate Creek is not reported to be tidally influenced. The river has a gravel bottom, current of 4 mph and a width of about 20 feet.[20]

Slate Creek has five major tributaries, Wattamuse Creek, Cascade Creek, Olympic Creek, Caribou Creek and Fox Creek. Slate Creek is shown on the USGS Goodnews B-6 (1954) and B-7 (1954) quadrangle maps as a single lined stream with a gradient averaging 35-feet per mile. A 1988 BLM memorandum described Slate Creek as flowing through steep terrain from its headwaters to the tributary of Fox Creek where it becomes a shallow, gentle waterway to the mouth of Olympic Creek. The river is 30-40 feet wide and three feet deep from the mouth of Olympic Creek to its confluence with the Goodnews River.[21] (Attachment 7)

Slate Creek is within the transitional climate zone, which is between the maritime and continental climatic zones. This transition zone in the Yukon-Kuskokwim Delta area extends 100 to 150 miles inland.[22] No weather-gathering stations are located along or near Slate Creek. The nearest station is at Platinum, about 28 air miles southwest of the river mouth. The average annual precipitation near Platinum is 26 inches.[23] There is no detailed hydrologic information available with regard to Slate Creek. No information is available indicating that the natural and ordinary condition of Slate Creek has changed.

V. Evidence of Use of the Waterway

Early Native Use of Slate Creek

Human occupation of the Kuskokwim area goes back 11,000 BP[iii] to nomadic hunter gatherers of the Pleistocene. These hunter gatherers were supplanted about 3800 BP, when Eskimos from the north moved into the lower Kuskokwim drainage, bringing with them the so-called Arctic Small Tool tradition.[24] Permanent occupation of the interior Kuskokwim Delta with chronological continuity began about 1350 BP (AD 600).[25] Their descendents, the *Kusquqvagmiut* (also known as Yup'ik Eskimos or mainland southwest Alaskan Eskimos), have inhabited the Kuskokwim River and its tributaries down to the present as far inland as the village of Aniak. By 1880, their population was estimated at 3,100 people.[26]

[iii] Archaeologists have adopted the approach of specifying dates in terms of years 'Before Present', abbreviated as BP. The date is calculated back from AD 1950. This convention is used in this report for dates older than the nineteenth century.

Prior to Euro-American contact in the 1870s through the late 1920s, modes of transport, besides walking, were by dog teams and kayaks in the Goodnews Bay area. The Native people would spend large portions of time in nonpermanent settlements spread out along the Goodnews River drainages alternating their subsistence harvest activities between coastal camps in the summer and inland camps in the winter. When the time came to travel from the inland camps to the coast after spring breakup, familial groups would use the rivers to assist their travel to Goodnews Bay. The women would walk along the rivers while the elderly drifted down the river in boats or kayaks, pushing with a pole or oar. Men would continue overland to hunt or herd reindeer. Outboard motors became more available to the Natives in the 1930s, but kayaks continued to be used along with oar boats. With an increased involvement in the cash economy through the 1930s and into the 1950s, more condensed and permanent communities were settled. This did little to change the seasonal harvesting rounds practiced in the Goodnews Bay area, just the mode of transportation. With outboard motors and snowmachines, the extended camping trip became an overnight or day trip by power driven boats.[27]

Archaeologist Dr. Robert E. Ackerman documented prehistoric use of the area around Slate Creek when, in 1967, he found large chert blocks, the local stone material used to make stone tools, eroding out of the stream banks. He also found evidence of nine distinctive areas identified by concentrations of chipped stone flakes characteristic of the debris left behind in the manufacture of stone tools. Within the area was also found one stone blade manufactured in a style that represents what archaeologists identify as Early Norton or transitional Denbigh Flint Complex dating to at least 2,500 years old. The presence of the three features, stone tools, chipping debris and the large chert blocks, suggests use of the area around Slate Creek as a quarry site covering an area one mile long by 0.2 miles wide.[28]

Mining on Slate Creek

In 1915, a native reindeer herder named Wattamus discovered gold on what is now called Wattamuse Creek. He informed local prospectors of his find. By 1918, Jo Jean and a partner Ed “Slim” Smith held mining claims on Wattamuse Creek and began hand mining the area.[29] In the first month they mined $16,000 worth of gold. They continued to work the creek and are reported to have removed enough gravel to produce $250,000 in gold. Gold continued to be found in the area and eventually miners staked claims all along, Slate, Bear, and Olympic Creeks. Since then, miners have used boats to travel up the Goodnews River and at least two miles above the mouth of Slate Creek to their claims.[30]

Two companies, the Discovery Mining Company and Ryan and Wickert Company, worked claims on Wattamuse Creek in 1919. That same year, a USGS party consisting of George L. Harrington, R. H. Sargent, a cook, and a station assistant ascended the Goodnews River (Figure 4) an unknown distance in a thirty-foot poling boat with a two-horsepower gasoline engine.[31] Harrington reported that:

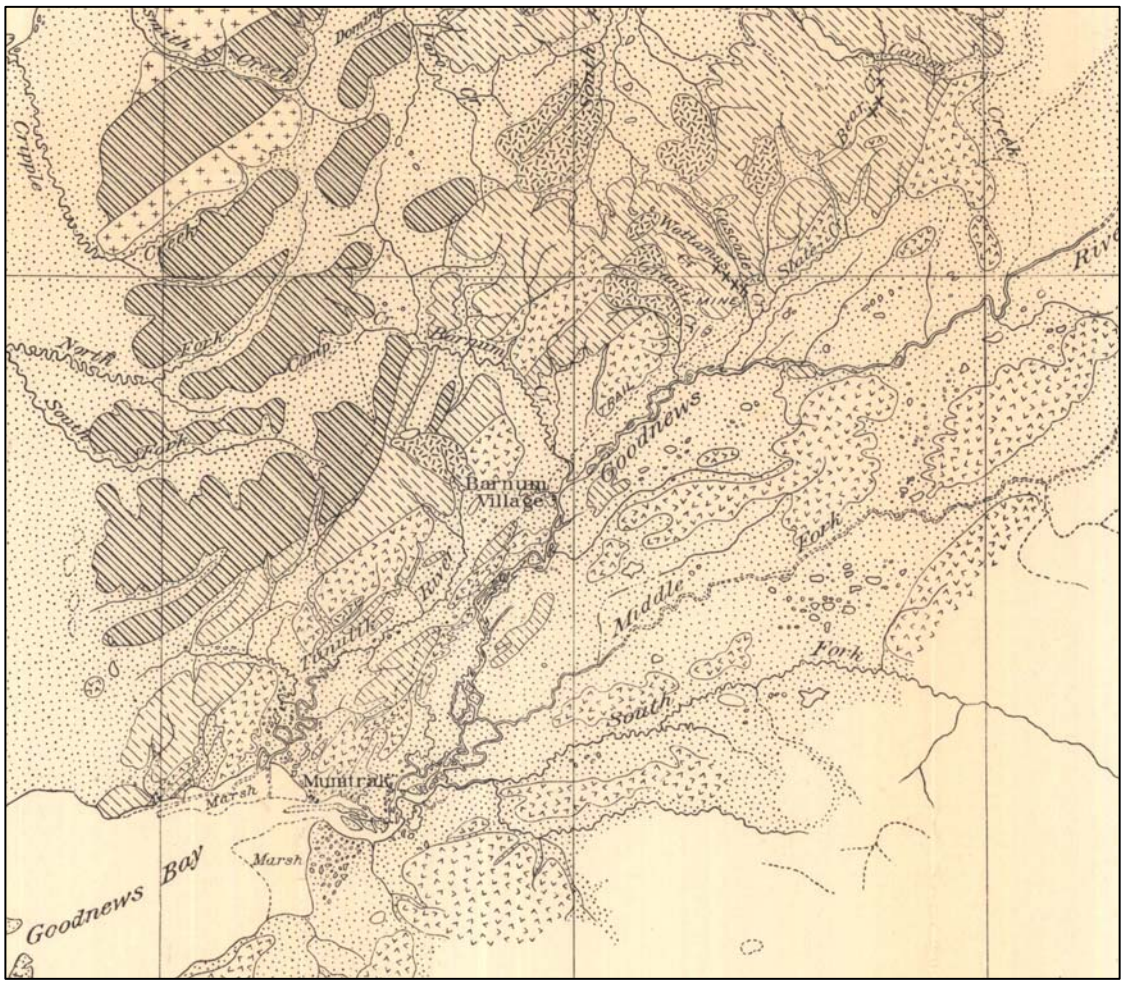

Figure 4. Detail of Geological Sketch map of the Goodnews Bay Region from 1919 by G.L. Harrington. Note the Village of Mumtrak near the current location of the Goodnews Bay Village. Also note the presence of Barnum Village and mining claims near Slate Creek.

> For the mining operations on Wattamus [sic] Creek, which flows into a tributary of the Goodnews River, supplies are taken in the summer up the river in poling boats or by kayaks to the landing about three miles from the scene of mining operations, where they are transferred to a small scow which is lined and poled up to the camp at Wattamus. In winter supplies may be brought by dog teams from either Mumtrak or Kwinak.[32]

Ten or eleven men worked claims on Wattamuse Creek by hand, producing about $35,000 worth of gold in 1917 and 1918 combined.[33] By 1919 the Denver Mining Co. was also running an operation on Wattamuse Creek. In 1919 the freight rate on general merchandise was 5 cents a pound from Mumtrak to Wattamuse Creek.[34]

Mining influenced settlement patterns and the Native population in the area. The village of Goodnews Bay was established in the early 1930s when a Bureau of Indian Affairs (BIA) school and a post office were built at the village's present location. Residents of both the former village of Mumtrak and the former village of Kinegnak moved to Goodnews Bay Village. Mumtrak was approximately .2 miles northwest of the present day Goodnews Bay Village (Figure 4), while Kinegnak was 35 miles to the south.[35]

In 1926 local Eskimo miners Walter Smith and Henry Wuya discovered platinum on the Salmon River, south of Goodnews Bay. The Goodnews Bay Mining Company established a road house and post office at Agvik, an outlying encampment of the Goodnews Bay Village. With the establishment of the post office, Agvik was renamed Platinum in 1937.[36]

I.M. Reed, a geologist for the Alaska Territorial Department of Mines visited the mines at Slate Creek and photographed the area (Figure 5). With the help of an Eskimo guide, Reed "left Mumtrak on June 30, 1931, in a polling [*sic*] boat with an outboard motor, arriving at the mouth of Slate Creek on July 1st. After examining Slate, Wattamoos [*sic*], Olympic and Bear Creeks, a return was made to Mumtrak, on July 3rd." [37]

Figure 5. Historic photo by I.M. Reed in 1931 looking up Slate Creek from near the mouth of Bull Creek, a small tributary south of Wattamuse Creek.

Mining continued on Wattamuse, Slate, Fox, and Bear creek throughout the 1930s. In 1934, the New York-Alaska Company conducting extensive drilling at Wattamuse.[38] In 1938 and again in 1939, J.C. Roehm, a geologist for the Territorial Department of Mines, visited the mines at Wattamuse Creek. He observed a 2 ½ foot dredge, constructed for the

Bristol Bay Mining Company, that mined lower Wattamuse, Cascade and Slate Creeks. Once up and running, the dredge reportedly recovered $200,000 worth of gold in 1939. Roehm wrote, "the dredge started… below Discovery and came upstream onto Discovery to the mouth of Cascade creek and has started back down."[39] In 1941 the dredge produced 3,000 ounces of gold from Cascade Creek and 1,700 ounces from Slate Creek below the confluence with Cascade Creek. The dredge was shut down in 1942 due to the U.S. entry into World War II.[40]

After the war, small scale mining resumed on Wattamuse Creek when a company called Mumtrak Mines leased claims in 1953. Using a dragline and a set of sluice boxes, the company mined the claims with unknown results. From 1959 to 1961, the Wattamuse Mining Company mined for gold on Slate Creek with a dragline.[41]

One unauthorized mining operation occurred on Slate Creek at river mile 7 at least through the 1980s.[iv] The last three legitimate claims held on Wattamuse Creek belonged to Clyde E. Huffmon: the Discovery, Above Discovery and McDowell Creek.[v] Huffmon and his wife, Betty, purchased the claims from the Bristol Bay Mining Company and attempted to keep the engines running in the abandoned dredge in the hopes they could one day resume a full scale mining operation.[42] The dredge remained near Slate Creek and was photographed during the Native allotment field examination for Lynda (Huffmon) Shade (Figure 6). The Above Discovery and the McDowell Creek claims were located in the upper reaches of Wattamuse Creek in Sec. 31, T. 9 S., R. 71 W., SM, and Secs. 5 and 6, T. 10 S., R 71 W., SM. The Mineral Survey Plat No. 2284, dated June 18, 1981, maps the ditching and penstock construction on the property. Closer to Slate Creek, Huffmon also held the mining claim Discovery, Mineral Survey 2272, situated in Sec. 9, T. 10 S., R. 71 W., SM. The Discovery claim is depicted on the survey plat with mining ditches, a house, an outhouse, shop buildings, an antenna and an antenna pole.[43] (Attachment 18) The Huffmon's continued to work their claims on Wattamuse and filed annual assessments with the BLM. Mr. Huffmon accessed his claim by boat in the summer. He used an 18-foot flat bottomed boat to access and haul supplies to the mine. Local law enforcement used boats to check on him each summer.[44] In the summer of 1986 Betty and Clyde Huffmon were in Goodnews Bay Village preparing their "boat and motor to go up the river to the camp when he [Clyde Huffmon] had a fatal heart attack."[45] Their claim was cancelled on June 10, 1994, because the family failed to file a timely annual assessment to the BLM.

[iv] The BLM file for this case, AA-60506, was sealed from public viewing at the time this research was conducted.

[v] Clyde E. Huffmon was married to Betty M. Huffmon, daughter of Jo Jean who held the original mining claim on Wattamuse Creek. Jo Jean and four other partners were the proprietors of the Bristol Bay Mining Company.

Figure 6. Lynda Shade's Native allotment AA-54569-B, near Slate Creek. Photo taken in 1986. Stream in upper left corner is possibly a back slough of Slate Creek but was not identified by the Realty Specialist. Note historic dredge (built in 1938 for the Bristol Bay Mining Co.). The black circle is a BLM corner marker for the allotment parcel. The view is looking southwest. Photo by Robert P. Rineland.

Local Use of Slate Creek from BLM Interviews

David Rukke, BLM realty specialist, interviewed 17 people in regard to river use in the Goodnews Bay area in November 1986.[46] (Attachment 19) Of those interviewed seven[vi] discussed Slate Creek. Their statements, as written by Rukke, are summarized below. Rukke makes a point of noting that local residents sometimes referred to Slate Creek as Wattamuse Creek.

Joseph Martin Sr., the Land Planner for Kuitsarak, Inc., stated that his "grandparents used to take 18 to 24-foot boats up to Wattamuse Creek on the north fork of the Goodnews River."[47] The interview did not elaborate on this information.

[vi] Keith Schultz, a biologist with ADF&G, also commented on Slate Creek. His information is included in the *Mining on Slate Creek* section in reference to how Clyde Huffmon accessed his mining operation.

Willie Eechuck, an elder Native resident of Platinum, stated that Wattamuse and Slate creeks were just two of the many trickles that flow out of the mountains in the area. He added that although there is a history of early "riverboats being taken up the Goodnews River to Slate Creek there would not be enough water for any propellered craft to power a boat up to the old mine."[48]

Dave Fisher, manager of the Togiak National Wildlife Refuge, described Slate and Wattamuse Creeks as being small, shallow and rocky. He did not believe that the smallest commercial craft could be taken upstream very far if at all by propeller.[49]

George Dahl, an Alaska State Fish and Wildlife Protection Officer, stated that he had worked at the old Platinum mine when he was a boy and was familiar with the Goodnews Bay area. During the summer of 1985, Dahl flew his personal aircraft to the airstrip on Slate Creek where he dropped off his son who floated a "raft downstream passing the mouth of Wattamuse Creek to reach Goodnews Village."[50]

Ron Whittom ran a mining operation at the confluence of Slate and Fox Creeks near Mary Smith's Native allotment AA-37801-A (Figure 7). He stated that BLM's smallest commercial boats, carrying 1000 pounds, could easily reach the Slate Creek airstrip opposite Wattamuse Creek. Whittom added that it is also possible for one to travel as far as the entrance to Olympic Creek, only a short distance upstream from the airstrip on Slate Creek. He described Slate Creek as being thirty to forty feet wide and two to three feet deep at low water. On high water the creek would be five or six feet deep. The high waters came within eight to ten hours after a heavy rain, which are very common in the summer and fall. Whittom indicated that once past the confluence with Fox Creek, Slate Creek flows through much steeper terrain.[51]

Ron Hyde Jr., a commercial guide, stated he had taken his "eighteen-foot propellered Lund upstream on the Goodnews River to the airstrip on Slate Creek across from the mouth of Wattamuse Creek many times over the years and believed that it was not a problem for BLM's smallest craft and load."[52]

Recent Native Use of Slate Creek Documented in Native Allotment Files

The BLM began collecting information in the 1970s to adjudicate Native allotment applications filed by local Natives who have fished, hunted and picked berries on lands in the Lower Kuskokwim Delta. The Natives accessed favorite spots along the rivers for hunting, trapping, fishing and berry picking by boat. These favorite spots, through customary use, developed into exclusive use areas. The federal government recognized many of these allotments and transferred title to the sites to the applicants.

Two Native allotments abut Slate Creek, AA-37801-A and AA-54569-B. Native allotment files for these two parcels indicate that AA-54569-B was used in the summer and AA-37801-A was used year round. Documents in these Native allotment files,

including application forms and BLM field inspection reports, indicate that the applicants accessed their parcels by boat during the open season (when the water bodies are not frozen).

Lynda Shade, (maiden name Huffmon), of Dillingham filed an application on October, 16, 1984 for three parcels.[vii] Her Native allotment parcel AA-54569-B is located along Slate Creek and consists of 80 acres. The parcel lies on the left bank of Slate Creek at river mile 1 in Secs. 16 and 21, T.10 S., R. 71 W., SM (Figure 3). Shade claimed use and occupancy of the land since 1965 for berry picking, fishing, and hunting during unspecified seasons.[53] Her father Clyde Huffmon and her grandfather Joe Jean had an extended history of mining in the area. Shade stated that the airfield near the parcel had been constructed by her grandfather. In the Native allotment Field Report, Shade stated that she accessed the parcel by plane or boat.[54]

Due to the rich mining history in the lands adjacent to Lynda Shade's allotment parcels, BLM geologist Carl Persson examined the parcel on September 1-2, 1987 and wrote a Mineral in Character Determination. In his report dated June 20, 1988, Persson stated that "access to the parcels can be achieved by jet boat from the village of Goodnews approximately 15 miles to the south." He determined the parcel "not mineral in character." The Native allotment was certified on August 13, 1996 as Native allotment certificate 50-96-0601.[55]

Mary Smith of Goodnews Bay filed a Native allotment application on December 5, 1979 for four parcels. Parcel A is located along Slate Creek (AA-3780-A) and consists of 40 acres. The parcel lies in Sec. 36, T. 9 S., R. 71 W., and Sec 31, T. 9 S., R.70 W., SM on the right bank of Slate Creek at river mile 7 (Figure 7). It is bordered on the South by Fox Creek. Smith claimed occupancy of the land since 1941 for fishing, drift wood collecting, and picking berries, both seasonally and year round.[56] The Native Allotment Field Report indicated that Smith told the inspector she accessed the tract by taking a boat up Slate and Fox Creek in the summer and by dog team or snow machine in the spring. This parcel was certificated on March 8, 1993 as Native allotment certificate 50-93-0156.[57]

The BLM Native allotment files do not provide information about the types of boats used on Slate Creek. Skiffs are the most widely used watercraft in the Goodnews Bay area, and they are the major subsistence transportation in the summer and used in commercial fishing. Aluminum skiffs replaced the wooden skiffs in the 1970s and 1980s. Goodnews Bay residents also use Togiak skiffs, a semi-V bottomed wooden vessel between 24 to 26 feet in length, powered by 125-185 horsepower outboard engines. These boats have a small cabin on the stern. The Togiak skiff is used primarily in Goodnews Bay.[58]

[vii] Both allotments associated with Slate Creek were among many petitioned to a Federal court under Fanny Barr v. U.S. A number of applications collected by Rural Cap were lost and never processed. Under the court settlement, individuals were allowed to submit new applications past the original ANCSA deadline.

Figure 7. Photo depicts Slate Creek at river mile 7 near Mary Smith's Native allotment AA-30801-A. Joe Man, Realty Specialist for BLM, took this photo in 1989. The view is looking northeast. The black circle indicates the NW corner marker for the Native allotment. Ron Whittom's mining operation is shown between the corner marker and Slate Creek.

Other Recent Use of Slate Creek

Archaeologist Dr. Robert E. Ackerman conducted archaeological surveys in the Goodnews Bay area in 1967. According to his field notes, he and another archaeologist, Bill Harrison, arrived by plane on August 21, 1967, set up a base camp next to the mining dredge near the mouth of Wattamuse Creek and surveyed the area from there. The morning of August 23 they left their camp and "used a fold-boat to navigate Slate Creek" heading downstream to the confluence with the Goodnews River. Ackerman walked along side of the fold-boat where the creek was shallow and "hopped into the boat to pass the deeper areas." After the boat tipped over in a deep pool, Harrison got in the boat and used a paddle to steer the boat while Ackerman pulled the boat down the creek with a rope. Once they reached the Goodnews River, they both got in the boat and paddled to the Granite Creek area.[59]

VI. Summary

On June 6, 1988, the BLM determined Slate Creek navigable from its mouth (river mile 0) to the mouth of Olympic Creek in Sec. 10, T. 10 S., R. 71 W., SM (river mile 3.4). In a memorandum dated February 17, 1989, the BLM Deputy State Director for Conveyance Management, determined Slate Creek navigable in Secs. 10, 16 and 21, T. 10 S., R. 71 W., SM, between its mouth (river mile 0) and Olympic Creek (river mile 3.4), because the creek was navigable by crafts larger than a one person kayak at the time of statehood. The BLM reaffirmed this determination of navigability in a March of 2006 Navigability Memorandum and again in 2009 when the uplands surrounding river mile 0 to river mile 1 were conveyed to Kuitsarak, Inc.

Slate Creek is a meandering stream approximately 11 miles in length. It is approximately 30-40 feet wide between river miles 0 and 7. The river has a gravel bottom and a current of 4 mph. No hydrological information is available on the river. The waterbody appears to be in its natural and ordinary condition from the time of statehood. Impediments to boating Slate Creek include shallow areas during periods of low water.

Evidence of prehistoric use along Slate Creek consists of a large area with three features including stone tools, chipping debris and large chert blocks. This suggests a quarry site covering an area 1 mile long by 0.2 miles wide on lower Slate Creek.[60] During his survey of the area, Ackerman used a fold-boat to travel down Slate Creek from the mouth of Wattamuse to the Goodnews River.

Miners used boats to travel up Slate Creek from the 1910s up through the 1980s to access mining claims along Slate, Wattamuse and Fox creek. Miners used boats to carry equipment and supplies up Slate Creek between 1917 and 1941. They also developed a trail and supplied their mining operations by overland travel. No information available suggests that the miners relied on overland transportation more heavily than water transportation in the 1930s and early 1940s. Clyde Huffmon used a boat to supply his mining operation in the 1960s, 1970s, and 1980s.

There are two Native allotments along the creek with a history of use, one since 1941 and the other since 1965. Both allotees accessed their parcels by boat during the open season for subsistence purposes through at least the mid-1980s. They traveled by boat reaching parcels as far upstream as river mile 7, near the mouth of Fox Creek. The BLM Native allotment documents do not indicate what type of craft was used.

Endnotes

[1] Donald J. Orth, *Dictionary of Alaska Place Names*. Geological Survey Professional Paper 506, United States Geological Survey, Washington, D.C.: U.S. Government Printing Office, 1971, p. 886.
[2] Cliff Ells, Realty Specialist, Summary of Goodnews Bay Village Easement Proposals Meeting on September 11, 1975, November 15, 1976, BLM files, F-14862-A.

[3] Stanley Bronczyk, Realty Specialist, BLM Easement Task Force Meeting on Goodnews Bay January 31, 1977, BLM files, F-14862-EE.
[4] Curtis V. McVee, From SD to: Chief Division of Technical Services (941), Final Easements for the Village of Goodnews Bay, April 4, 1978, BLM files, F-14862-EE.
[5] From SD to Chief Division of ANCSA and State Conveyances (960), Final Easements for the Village of Goodnews Bay, July 29, 1982, BLM files F-14862-EE.
[6] James E. Culberson, Letter to Mr. Robert Arnold, Assistant to the State Director for Convayence Management, Disscussion of easement proposals, October 26, 1982, BLM files, F-14862-EE.
[7] Felix P. Hessland, planner for the Calista Corporation, to Mr. Robert Arnold, Assistant the State Director for Conveyance Management, Letter opposing final easements, October 29, 1982, BLM files, F-14862-EE.
[8] Robert W. Faithful, Assistant to the State Director for Conveyance Management, to Chief, Division of ANCSA and State Conveyances, Memorandum on Final Easements for Kuitsarak, Inc., June 22, 1983, BLM files, F-14862-EE.
[9] Robert W. Arndorfer, Deputy State Director for Conveyance Management, to Deputy State Director for Cadastral Survey, Memorandum on Navigable Waters in group Survey No. 194 (Window 1704), June 06, 1988, BLM files, F-14862-EE.
[10] Wayne A. Boden, Deputy State Director for Conveyance Management, to Deputy State Director for Cadastral Survey, Memorandum on Navigable Waters in Small Tracts in Group Survey No. 194 (Window 1704), February 17, 1989, BLM files, F-14862-EE.
[11] Heather A. Coats, BLM Land Law Examiner, Decision to Interim Convey, concerning Calista Corporation AA-70147 and AA-70153 regional selection applications, December 13, 1995, BLM files, F-14862-EE.
[12] Terry R. Hassett, Chief of Gulf Rim Adjudication, Interim Conveyance No. 1660, January 26, 1996, BLM files, F-14862-EE.
[13] http://sdms.ak.blm.gov/scanned_images/esmtindex.html.
[14] http://dnr.alaska.gov/Landrecords/ search "9s71ws" then "Get U.S. Federal Records", Accessed on August 20, 2010.
[15] Master Title Plat (MTP) T. 9 S., R. 71 W., SM; United States Survey (USS) 10325 Officially filed October 11, 1991; and United States Resurvey (USS) 10325, Officially filed December 5, 2008.
[16] Dominica VanKoten, Chief, Navigability Section, to Chief, Branch of Survey Planning and Preparation, Memorandum on Navigable Waters within Village Regional-Selected and Interim Conveyed (IC) lands in the vicinity of the Goodnews Bay-Platinum Survey Project (Window 2687), March 21, 2006, BLM files, F-14862-EE; SD to Chief Division of ANCSA and State Conveyances (960), Final Easements for the Village of Goodnews Bay, July 29, 1982, BLM files F-14862-EE; and Robert W. Arnold, Memorandum on Navigable Waters in group Survey No. 194 (Window 1704), June 06, 1988, BLM files, F-14862-EE.
[17] Charmain McMillan, BLM Land Law Examiner, Decision Interim Convey, to Kuitsarak Inc., Calista Corp. and the State of Alaska, March 13, 2009, BLM files, F-14862-EE.
[18] Richard Thwaites, BLM Chief of Land Transfer Adjudication, Interim Conveyance Nos. 2211 and 2212, April 13, 2009, BLM files, F-14862-A and F-14862-A2.
[19] Master Title Plats (MTPs), supplements, and U.S. Survey (USS) plats for T. 10 S., R. 71 W., SM.
[20] Kenneth T. Alt, *Inventory and Cataloging of Sport Fish and Sport Fish Waters of Western Alaska*. Federal Aid in Fish Restoration Study G-1-P, Vol. 18. Alaska Department of Fish and Game, Sport Fish Division, 1977, p. 56.
[21] Robert W. Arnold, Memorandum on Navigable Waters in Group Survey No. 194 (Window 1704), June 6, 1988, BLM files, F-14862-EE.
[22] Harza Engineering Company, *Bethel Area Power Plan Feasibility Assessment*, Appendix B, December 1982.
[23] http://cityinfo.local.com/city-information/platinum-ak-weather.
[24] James W. VanStone, "Mainland Southwest Alaska Eskimo," in *Handbook of North American Indians, Volume V, Arctic*, David Damas, editor, Smithsonian Institute, Washington, D.C., 1984, pp. 227-229.
[25] Robert D. Shaw, *Cultural Resources Survey Preceding Construction of a Water and Sewer System in Kwethluk, Alaska*, a report done under contract to the Alaska Native Tribal Health Consortium, Anchorage, 2002, p. 10.

[26] VanStone, "Mainland Southwest Alaska Eskimo," pp. 227-229.
[27] Robbin LaVine, Mark J. Lisac, and Philippa Coiley-Kenner, *Traditional Ecological Knowledge of 20th-Century Ecosystems and Fish Populations in the Kuskokwim Bay Region*, Final Report, Fisheries Resource Monitoring Program, FIS 04-351, Anchorage, U.S. Fish and Wildlife Service, Office of Subsistence Management: October 2007, p. 33.
[28] Robert E. Ackerman, *Goodnews, Bethel, Taylor, Sleetmute and Russian Mission Quads.* 1981. ms. On file at the Office of History and Archaeology gray literature, Anchorage, AK.
[29] Betty M. Huffmon, History of Wattamuse Creek, Exhibit A in an appeal to a decision of "Mining Claims Deemed Abandoned-Mineral Patent Applications Rejected" 1987, BLM file AA-12386/MS 2272.
[30] C. Michael Brown, *Alaska's Kuskokwim River Region: a History*, Anchorage, Alaska: Bureau of Land Management State Office, 1985, p. 26-127.
[31] G.L. Harrington, "Mineral Resources of the Goodnews Bay Region", in A.H. Brooks, editor, *Mineral Resources of Alaska, report on progress of investigations in 1919*, U.S. Geological Survey Bulletin 714, Government Printing Office, Washington D.C., 1921, p. 207; and Harrington, G.L., 1921, Mineral resources of the Goodnews Bay region, in U.S. Geological Survey Staff, Mineral resources of Alaska, report on progress of investigations in 1919: U.S. Geological Survey Bulletin 714, p. 207-228, scale 1:250,000.
[32] Ibid., p. 211.
[33] Ibid., pp. 223, 225-226.
[34] Ibid.
[35] Robert J. Wolfe, Joseph J. Gross, Steven J. Langdon, John M. Wright, George K. Sherrod, Linda J. Ellanna, Valery Sumida, and Peter J. Usher, *Subsistence-Based Economies in Coastal Communities of Southwest Alaska*, Technical Paper Number 89, Juneau, Alaska: ADF&G, Division of Subsistence, February, 1984, pp. 102.
[36] Robert E. Ackerman and Lillian A. Ackerman, *Ethnoarcheological Interpretations of Territoriality and Land Use in Southwestern Alaska, Ethnohistory,* Vol 20. No.4 (Autumn, 1973) pp. 315-334, Duke University Press, (Orth; 1967), http://alaskaminighalloffame.org/inductees/smith_wuya.php. and Charles Johnston, "Platinum Mining in Alaska : Dredge and Dragline Operations at Goodnews Bay." *Platinum Metals Review*, 6 (2), 68-74.
[37] I.M. Reed, "Report on the placer deposits of the Goodnews-Arolic gold field," 1931, Alaska Territorial Department of Mines Miscellaneous Report 101-2, pp 1-2.
[38] J.C. Roehm, *General Report of Mining and Prospecting Activities, Goodnews Bay District, Alaska 1937*. MR195-16, p. 24.
[39] J.C. Roehm, *Summary Report of Mining Investigations in the Aniak-Tuluksak, Goodnews Bay and Kuskokwim Mining Districts to Commissioner of Mines and Itenerary, 1939*, Alaska Territorial Department of Mines Itinerary Report, p. 6.
[40] Carl Persson, Geologist, Mineral in Character Determination Report for the Native Allotment of Lynda Shade, AA-54569, 1988, p. 5, BLM Native Allotment file AA-54569.
[41] Brown, *Alaska's Kuskokwim River Region: a History*, p. 127.
[42] Betty M. Huffmon, History of Wattamuse Creek, Exhibit A in an appeal to a decision of "Mining Claims Deemed Abandoned-Mineral Patent Applications Rejected" 1987, BLM file, AA-12386/MS 2272.
[43] Mineral Survey (MS) No. 2272, MS No. 2284, Cancelled MTP for T. 10 S., R. 71 W., SM, and detail of USGS quadrangle Goodnews Bay B-6.
[44] David Rukke, November 21, 1986, Interviews for Group Survey No. 194 (Window 1704), p. 3, BLM files, F-14862-EE.
[45] Betty M. Huffmon, History of Wattamuse Creek, 1987, BLM files, AA-12386/MS 2272.
[46] David Rukke. November 21, 1986. Interviews for Group Survey No. 194 (Window 1704), BLM files, F-14862-EE, p. 3.
[47] Ibid., p. 4.
[48] Ibid., p. 6.
[49] Ibid., p. 9.
[50] Ibid., p. 15.
[51] Ibid., pp. 15-16.

[52] Ibid., p. 16.
[53] Lynda Shade, Native Allotment Application and Evidence of Occupancy, April 16, 1986, BLM files, AA-54569.
[54] Robert P. Rineland, Native Allotment Field Report AA-54569-B for applicant Lynda Shade, July 09, 1986, BLM files, AA-54569.
[55] Carl Persson, Mineral in Character Determination, Report for the Native Allotment of Lynda Shade, June 20, 1988, BLM files, AA-54569.
[56] Mary Smith, Native Allotment Application and Evidence of Occupancy, November 7 1970, BLM files, AA-37801.
[57] Joe C. Man, Native Allotment Field Report AA-37801-A for applicant Mary Smith, January 15, 1987, BLM files, AA-37801.
[58] Wolfe, et al., "*Subsistence-Based Economies,*" p. 268.
[59] Robert E. Ackerman, Field Notes from Goodnews River Survey, 1967, on file at the State Office of History and Archaeology, Navigability Unit files.
[60] Ibid. and Robert E. Ackerman, *Goodnews, Bethel, Taylor, Sleetmute and Russian Mission Quads,* 1981, Office of History and Archaeology gray literature files, Anchorage, Alaska.