# Ophir Creek

HUC 30502, Zone 3, 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. A list of the Navigable Waters Research Reports completed to date is included at the end of this report.

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Ophir Creek, HUC 30502, Zone 3 Phase II-B: Interim Summary Report

## **Ophir Creek**

HUC 30502, Zone 3, Kuskokwim River Region

# **II-B Interim Summary Report**

#### I. Introduction

Ophir Creek is located in the Kuskokwim Delta region, Zone 3 within HUC 30502 (Figure 1). Ophir Creek is 20.16 river miles<sup>i</sup> long and flows through State, Federal, private, and Native lands.

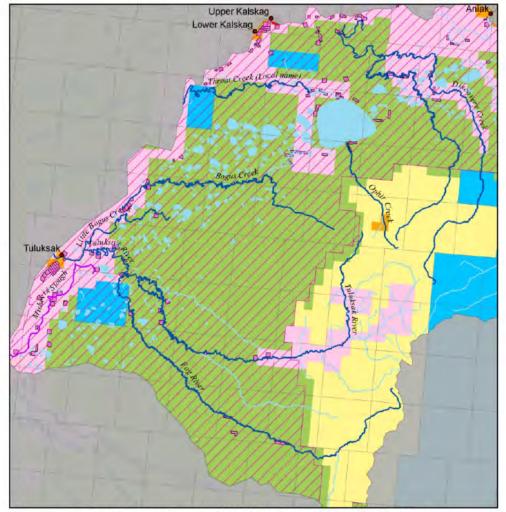


Figure 1. Map of Zone 3, HUC-30502. Location of Ophir Creek.

<sup>&</sup>lt;sup>i</sup> 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.

Ophir Creek comprises four townships in the Seward Meridian (SM): Township (T.), Range (R.), Section (Sec.):

```
T. 13 N., R. 59 W., Sec. 03
                                 T. 14 N., R. 59 W., Sec. 30
T. 13 N., R. 59 W., Sec. 04
                                 T. 14 N., R. 59 W., Sec. 31
T. 13 N., R. 59 W., Sec. 05
                                 T. 14 N., R. 59 W., Sec. 32
T. 13 N., R. 59 W., Sec. 10
                                 T. 14 N., R. 60 W., Sec. 02
T. 13 N., R. 59 W., Sec. 15
                                 T. 14 N., R. 60 W., Sec. 11
T. 13 N., R. 59 W., Sec. 22
                                 T. 14 N., R. 60 W., Sec. 14
T. 13 N., R. 59 W., Sec. 26
                                 T. 14 N., R. 60 W., Sec. 23
T. 13 N., R. 59 W., Sec. 27
                                 T. 14 N., R. 60 W., Sec. 24
T. 13 N., R. 59 W., Sec. 35
                                 T. 14 N., R. 60 W., Sec. 25
T. 13 N., R. 59 W., Sec. 36
                                 T. 15 N., R. 60 W., Sec. 35
```

Ophir Creek flows from Mount Hamilton in Sec. 36, T. 13 N., R 59 W., and joins Whitefish Lake in Sec. 35, T. 15 N., R 60 W., SM (Figure 2).

The nearest villages to the mouth of Ophir Creek are Lower and Upper Kalskag, 17.38 air miles<sup>ii</sup> to the north. These villages are 30 miles west of Aniak, 99 miles northeast of Bethel and 348 miles west of Anchorage.

The Yupik name for Ophir Creek is *Kuik*.<sup>1</sup> Ophir Creek is a name given by prospectors that is shown on a 1914 field sheet by A. G. Maddren, a geologist for the United States Geological Survey (USGS). Gold was discovered on this stream during the "Yellow River stampede" in the winter of 1901-02.<sup>2</sup> The name *Ophir* is Hebrew. In the Bible *Ophir* refers to the name of a land or city that is rich with gold. In Alaska there are at least 12 creeks, one gulch and one town named Ophir by prospectors.<sup>3</sup>

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

Ophir Creek flows through State, Federal, private and Native lands. The river heads from Mt. Hamilton in Sec. 36, T. 13 N., R 59 W., SM, on BLM land and flows northwest for less than a mile. From there it flows through State land for 1.4 miles until crossing back through BLM land for three miles. Ophir Creek flows through private patented land for one mile, then through BLM land for 3 miles. The creek then crosses State land for 4.5 miles until flowing through the Yukon Delta National Wildlife Refuge (NWR) for 5.2 miles. The creek crosses through three Native allotment parcels for two miles and one ANCSA SEC. 14 (h)(1) site just before empting into Whitefish Lake (Figure 2).

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

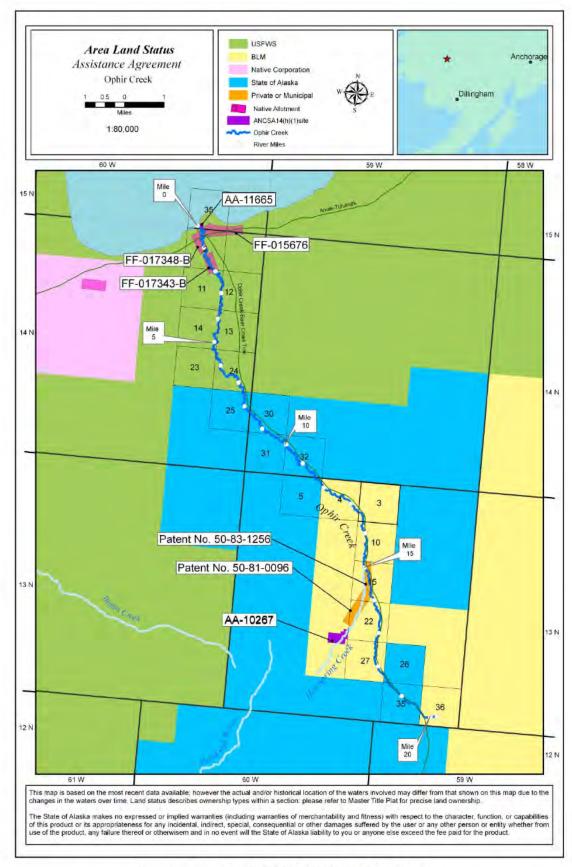


Figure 2. Map showing land status on Ophir Creek.

The State applied for two land selections bordering Ophir Creek on December 31, 1992. The selections are AA-76385 in T. 13 N., R. 59 W. and AA-76497 in T. 14 N., Rs. 59-60 W., SM. The BLM tentatively approved (TA) the land selection in T. 13 N., 59 W., SM, as TA No. 20080119 on April 22, 2008. The BLM issued TA No. 20080092 on March 5, 2008 for lands selected in T. 14 N., Rs. 59-60 W., SM.

A portion of the land now part of the Yukon Delta NWR was first set aside by President Theodore Roosevelt in 1909 as a preserve and breeding ground for native birds. This land selection did not include Ophir Creek. A second selection that included Ophir Creek was withdrawn from unreserved public lands managed by the BLM in 1972 (Public Land Order (PLO) 5184, March 9, 1972) and transferred to the federal refuge system under the Alaska National Interest Lands Conservation Act (ANILCA, PL 96-487) of 1980. Title to the refuge lands is held by the United States. The U.S. Fish and Wildlife Service (USF&WS) is the manager of these lands.

A private individual, Harry Eugene Faulkner Sr. owns two parcels of private patented land in T. 13 N., R. 59 W., SM, at river mile 15 of Ophir Creek and its tributary Hot Spring Creek. The Calista Corporation selected a parcel of land surrounding the geo-thermal hot spring near the Faulkner homestead in T. 13 N., R. 60 W., SM, as an ANCSA Sec. 14(h)(1) site (AA-10267, *Puqla*) on November 11, 1975. The Bureau of Indian Affairs (BIA) certified AA-10267 as an eligible Native historical place and cemetery site on November 22, 1988. The Calista Corporation selected lands surrounding the Faulkner homestead in T. 13 N., R. 60 W., SM, under ANCSA SEC. 14 (h)(8) on February 11, 1991. These lands were conveyed to Calista by the BLM in 2009. Faulkner successfully appealed and the land was remanded back to the BLM in 2009. The Master Title Plat (MTP) for T. 13 N., R. 59 W., SM, has not been updated by the BLM to reflect the 2009 remand to the BLM.

# III. BLM Navigability Determinations and Land Conveyance History

On April 21, 1976, Horace D. Sanders, a BLM Natural Resource Specialist, issued a memorandum identifying easement recommendations for lands selected by the village of Lower Kalskag. The BLM approved a 25-foot trail easement from Aniak to Tuluksak, along an old winter route. The "old winter route," an RS 2477 trail (RST 24), is known as the Aniak-Tuluksak Trail. The proposed easement for this trail crosses Ophir Creek in Sec. 2, T. 14 N., R. 60 W., SM. <sup>4</sup> (Attachment 1)

Robert D. Arnold, BLM Assistant to the State Director for Conveyance Management, issued a Final Easements Memorandum for the Kuskokwim Corporation for the Village of Lower Kalskag on August 25, 1982. In this memorandum, Arnold identifies a 25-foot wide easement (EIN 7 D9) for the Aniak-Tuluksak Trail, a historic trail from the village of Tuluksak to the village of Aniak. The season of use was limited to winter. Arnold determined Whitefish Lake and the unnamed stream connecting it to the Kuskokwim River major waterways that small skiffs travel in pursuit of subsistence activities.<sup>5</sup> (Attachment 2)

On May 24, 1989, Wayne A. Boden, BLM Deputy State Director for Conveyance Management, wrote a memorandum identifying Navigable Waters in Group Survey 256. In this memorandum Boden identified navigable water bodies for segregation within certain selected lands using the criteria of navigability by crafts larger than a one-person kayak at the time of Statehood. Boden determined Ophir Creek navigable "to and through" the southern boundary of Native allotment F-17343-B from river mile 0 to river mile 2. He made his determination based on NASA aerial photographs taken in 1978, 1980, and 1984, low level aerial photographs of Ophir Creek taken in 1975 from Native allotment files, the BLM's *Alaska's Kuskokwim River Region: A History* (1985) authored by C. Michael Brown, and a 1989 BLM memorandum of interviews with locals familiar with Ophir creek by Donald C. Koenig. <sup>6</sup> (Attachment 3)

Charles C. Lovely, a BLM Land Transfer Resolution Specialist, issued a Decision to Interim Convey (DIC) to the Calista Corporation lands selected around the upper reaches of Ophir Creek, on June 19, 2009. This selection would later be appealed, segregated, and partially remanded back to the BLM. The DIC included selected lands in T. 13 N., R. 59 W., SM. Lovely stated that within the lands approved for conveyance by the BLM, only the Kuskokwim River and its interconnecting sloughs, Stink River, Stony River Cutoff and Oskawalik River were determined navigable. All other named and unnamed water bodies within the lands to be conveyed were determined to be non-navigable. As a result of this DIC, Ophir Creek was determined non navigable from river mile 12 to river mile 18.2 (Figure 3). (Attachment 4)

On July 10, 2009, Dina Torres, a BLM Land Transfer Resolution Specialist, issued a Final Easement Memorandum for Lands to be conveyed to the Calista Corporation. This memorandum identified easements for lands selected by Calista pursuit to the ANCSA Sec. 14 (h)(1). Torres identified AA-11665 (U.S. Survey No. 10573) in T. 15 N., R. 60 W. and T. 14 N., R. 60 W., SM as an eligible ANCSA Sec. 14 (h)(1) site. She added that there were no major waterways within these lands. (Attachment 5)

The BLM issued a DIC to the Calista Corporation for AA-11665 (the ANCSA 14(h)(1) site) and to Olga Nesbit for her Native allotment (F-15676) on September 29, 1992. These two parcels of land are adjacent to each other and to Ophir Creek near its mouth. The DIC did not include any navigability determinations. (Attachment 6)

On November 9, 2009, Steven Scordino, the BLM Attorney Advisor, issued a Motion to Remand the June 19, 2009 DIC for lands selected by the Calista Corporation under ANCSA Sec. 14 (h)(8) in T. 13 N., R. 59 W., SM. Scordino summarized the events leading up to the Motion by explaining that on August 28, 2009 the Interior Board of Land Appeals (IBLA) segregated the lands on appeal, in T. 13 N., R. 59 W., SM, allowing the BLM to convey all other lands identified in the DIC issued on June 19, 2009. The IBLA ruled that the lands within T. 13 N., R. 59 W., SM, were withdrawn pursuant to Sec. 17(d)(1) of ANCSA under PLO 5180 and were not available for selection by Calista Corporation under Sec. 14(h)(8) of ANCSA. The BLM filed this Motion to Remand in order to vacate the portion of the June 19, 2009 decision affecting the lands within T.13 N., R. 59 W., SM, for further adjudication. <sup>10</sup> (Attachment 7)

The Department of Interior's Office of the Solicitor approved The Motion to Remand on November 17, 2009. Bruce R. Harris, BLM Deputy Chief Administration Judge, issued an order to vacate and remand the lands conveyed to Calista on June 19, 2009 in T. 13 N., R. 59 W., SM, back to the BLM. (Attachment 8)

On March 17, 2010, Craig Frichtl, BLM Chief, Branch of Survey Planning and Preparation, issued a Supplemental Navigability Determination for Water Bodies within Group Survey No. 1088. Frichtl defined the criteria for navigability as waterways that "are used, or are susceptible to being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water." Frichtl found no navigable waters within T. 13 N., R. 59 W., SM. 12 (Attachment 9)

Navigability determinations for Ophir Creek are summarized in Table 1 and shown in Figure 3. The BLM has determined Ophir Creek navigable from its mouth to river mile 2, but has determined the remainder of the creek within the village selection area to be non navigable. Ophir Creek has been meandered and segregated only within the Native allotments at the mouth of Ophir Creek in U.S. Survey No. 1011. (Attachment 9) The remainder Ophir Creek has not been meandered and segregated. (Attachment 10)

**Table 1. Summary of Navigability Determinations** 

| Date      | River   | Type Decision and Substance          | Criteria                       |
|-----------|---------|--------------------------------------|--------------------------------|
|           | Section |                                      |                                |
| 5/24/1990 | Lower   | Ophir Creek navigable to and through | Navigability by crafts larger  |
|           |         | the southern boundary of Native      | than a one-person kayak at the |
|           |         | allotment F-17343-B.                 | time of Statehood.             |
| 6/19/2009 | Upper   | Determined non-navigable.            | None stated                    |
| 3/17/2010 | Upper   | No navigable waters found.           | Susceptibility to trade and    |
|           |         |                                      | travel.                        |

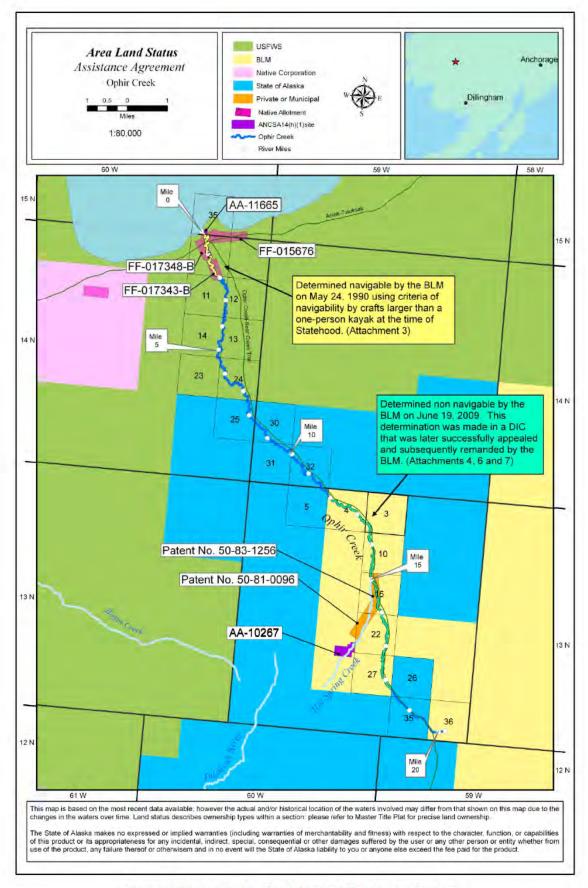


Figure 3. Map of Ophir Creek Navigability Determinations.

## IV. Physical Character of the Waterway

Ophir Creek heads from Rockpile Pass on the west slope of Mount Hamilton and flows 20 river miles to the southeast shore of Whitefish Lake in Sec. 35, T. 15 N., R. 60 W., SM. Rockpile Pass has an elevation of about 2,250 feet and Whitefish Lake is about 100 feet above sea level. Ophir Creek descends about 1,000 feet between river mile 20 and river mile 17. Below this steep upper section, the creek falls about 200 feet to the mile in a valley bordered on both sides by rolling mountain ridges 1,500 feet in altitude. The stream grade decreases as the terrain becomes lowlands at river mile 6 and dense vegetation covers the 20-foot wide creek but no obstructions occur. Ophir Creek is a fairly fast stream that widens to approximately 40-feet at its mouth. The creek is clear with a gravel bottom and has cyclical periods of high and low water. Ophir Creek appears to be in its natural and ordinary condition since the time of Statehood.

Ophir Creek is located within the transitional climate zone, which is between the maritime and continental climatic zones. This transition zone in the Kuskokwim Delta area extends 100 to 150 miles inland. Precipitation averages 16 inches in the area near Tuluksak Village, with snowfall of 50 inches. Summer temperatures range from 62 degrees Fahrenheit (F) to 42 degrees F. Winter temperatures can range from 19 degrees F to -2 degrees F.

## V. Evidence of Use of the Waterway

### Early Native Use of Ophir Creek

Human occupation of the Kuskokwim area goes back 11,000 years to nomadic hunters of Pleistocene animals. These hunters were supplanted about 1,900 B.C., when Eskimos from the north moved into the lower Kuskokwim drainage, bringing with them the so-called Arctic Small Tool tradition. Permanent occupation of the interior Kuskokwim Delta with chronological continuity began about AD 600. The *Kusquqvagmiut*, who descended from the Eskimos and are 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. Proceedings of the control of the present as far inland as the village of Aniak.

The *Kusquqvagmiut* have lived a traditional subsistence lifestyle that spans many centuries. Subsistence is a form of production and consumption in which hunting, fishing and collecting plants are the primary sources of food and other necessities of life. Traditional Alaska Native subsistence practices involve harvesting, distributing and consuming resources. These activities include important social and religious components, one of the most important of which is the distribution and exchange of subsistence products within families, between families and bands, and with Native groups outside their territory. Each Native culture in Alaska has its own set of customs and values governing the transfer of subsistence goods, falling into categories such as ceremonial, sharing, partnership, trade and commercial exchange. The cultural values that promote ceremonial feasting and distribution of subsistence resource goods have persisted in all Alaska Native groups.<sup>21</sup>

As contact with Russian fur traders and American missionaries, traders and miners increased in the nineteenth and twentieth centuries, the Native subsistence system of distribution and exchange gradually changed. While the *Kusquqvagmiut* continued to sustain themselves through their hunting, fishing, and gathering efforts, their involvement in the fur trade brought about significant changes. <sup>22</sup> Contact with American traders increased the interaction between subsistence production and commercial exchange, including the sharing and trading of commercial and subsistence goods. <sup>23</sup>

The *Kusquqvagmiut* traveled by water craft to harvest and transport subsistence resources to their village sites and to distribute them to other groups.<sup>24</sup> They used canoes to travel up the tributaries of the Kuskokwim River to fish for salmon, hunt and gather berries. Tributaries of the Kuskokwim enhanced the mobility of travelers and provided extensive access deep into the adjacent countryside. Villages and seasonal camps were dispersed along the Kuskokwim River and its tributaries. Over time these villages and campsites were abandoned as Natives moved to villages where missionary schools had been established.<sup>25</sup> These historic sites became available for selection by Native regional corporations under ANCSA 14(h)(1).

On June 4, 1976, the Calista Corporation applied for an ANCSA Sec. 14 (h)(1) historical place designated as Nanvarmiullret (AA-11665). This parcel is located at the mouth of Ophir Creek on the south bank of Whitefish Lake (Figure 4). The BIA conducted field investigations of the site in June of 1988, accessing the site by helicopter. The subsequent field report submitted by the BIA in 1990 includes background information on the site gathered from oral interviews of Native residents from Tuluksak and Kalskag. Nanvarmiullret was occupied around 1830 during the "Bow and Arrow Wars." The people of *Nanvarmiullret* traveled by boat to other villages in the Kuskokwim Region for festivals and dances. Oral history tells an account of Natives returning to the village across Whitefish Lake when a sudden storm capsized the boat causing the entire population of the village to drown. Over the years the site has been used seasonally mostly by people from Kalskag although people from other villages also use the location. In the early 1900's this area was used by miners and at least eight Native reindeer herders. The site is well known because of the abundance of fish which made it a destination during periods of famine. Natives stated that the area is a prime hunting area for black bear, brown bear, moose, wolf, coyote, wolverine, squirrel, grouse, and small marmots and that "access to the site is limited to boat traffic during the summer." During the winter the Tuluksak-Aniak trail (RST 24) traverses the area less than 200 meters from the site. A north-south trail (RST 1783) connects Whitefish Lake to the Bear Creek mining area. The trail was used in the early 1900s by miners and local reindeer herders. Besides the fish in Whitefish Lake, another attraction to this area is the nearby natural thermal spring located on Hot Spring Creek, a tributary of Ophir Creek, approximately 11 miles south of Whitefish Lake. A BIA report on the village site does not discuss boat use on Ophir Creek.<sup>26</sup> The BIA certified eligible AA-11665 as an ANCSA Sec. 14 (h)(1) site on April, 2, 1990. The BLM surveyed the parcel as U.S. Survey No. 10573 and patented it on September, 17, 2009 as 50-2009-0368.



Figure 4. Photo of Ophir Creek looking southwest over river mile 1. Photo taken by the BIA in 1988 from file AA-11665.

On November 6, 1975 the Calista Corporation applied for AA-10267 as a Native historical place under ANCSA Sec. 14(h)(1). This site, identified as *Puqla*, is located in T. 13 N., R. 59 W., SM., two miles up Hot Spring Creek, a tributary of Ophir Creek at river mile 15 (Figure 2). The BIA conducted field investigations of the site on May 25, June 25, and July 12, 1988. During these visits the BIA archaeologists conducted on-site interviews with Dolly Faulkner and Tuluksak elder Peter Lott. The interviews indicated that the site has been used by area Natives for many generations. The site is located near two Native trail systems. The BIA interviewed elders from six villages along the Kuskokwim River about the site. The elders indicated that these trail systems were used during winter and summer months and that the presence of overland access to the hot springs contributed to its continued use in the seasonal rounds of the local Natives. Reindeer herders used the site as well as gold miners in the area. The BLM has requested a survey of the parcel, but a survey has not been conducted. 27

#### Mining Development on Ophir Creek

During the winter of 1900-1901, rumors of a placer gold discovery on an unspecified "Yellow River" in the Kuskokwim River drainages was followed by a rush of prospectors into the area. Ophir Creek is one of many rivers in the Kuskokwim region affected by this gold rush. A few prospectors found placer gold on Ophir Creek, but their claims were quickly relinquished because of a failure to perform assessment work on the claims. No serious development was

undertaken because no party had brought a proper outfit to remain in the area throughout the winter.<sup>28</sup>

Interest in the mining occurred again on Ophir Creek in 1913-1914 when "a dozen or more prospectors located claims along the course of the stream for a distance of about 10 miles." Their claims were staked four miles above the mouth to a point near its source. These men came prepared to stay through the winter and they built at least six cabins along the creek.<sup>30</sup>

The first known record of boat travel on Ophir Creek occurred in the summer of 1914 when geologist A.G. Maddren traveled by poling boat on Ophir Creek as part of a USGS expedition. To arrive at Ophir Creek, Maddren's expedition took the White Pass railroad from Skagway to Whitehorse and traveled down the Yukon River by steam boat to Iditarod. From Iditarod Maddren's party followed a pack trail 65 miles through the Kuskokwim Mountains to Georgetown, a supply port on the Kuskokwim River. From Georgetown, the party descended the Kuskokwim River by pole boat a distance of 90 miles to the now abandoned village of Ohgagamut. From Ohgagamut they traveled ten miles down the Kuskokwim and ascended "a tortuous chain of creeks and ponds" to Whitefish Lake.<sup>31</sup> Once on the lake, they rowed about six miles to the mouth of Ophir Creek, then up the creek about one-half mile to a barabara and fish camp. At the fish camp, Maddren met Charles Heckman, two Japanese and a German known as "Flying Dutchman" Smith (or Schmidt) curing whitefish. The fish, which were caught with a seine net, entered the creek about June 20<sup>th</sup> to spawn. Upon Maddren's arrival, the men had already cured seven thousand fish. Maddren wrote in his journal that Heckman caught six to eight hundred fish a day. The men packed the fish over the trail to Bear Creek, where miners purchased them at fifty cents a pound. From the fish camp, Maddren followed the trail up Ophir Creek, crossed Rockpile Pass, and continued his journey to Bear and Marvel creeks in the Tuluksak River drainages.<sup>32</sup>

In his published report of the 1914 Kuskokwim expedition, Maddren wrote that the miners on Ophir Creek were "somewhat favored as regards to the transportation of heavy mining equipment and supplies, for the water route from Kuskokwim River to Whitefish Lake [was] available if the proper kind of boat [was] used." He added, "It would be less difficult to place a small dredge on Ophir Creek than on the other placer creeks now known in the district, because tedious and expensive overland hauling would not be necessary." So far as is known, the Ophir Creek miners never placed a dredge on the creek. In 1917, Joseph Lewis and associates planned to take a gasoline-powered drill and three tons of gasoline and other supplies from Bethel to Ophir Creek by way of Whitefish Lake in a specially-built boat with a thirty-horsepower motor. The men intended to test the gold content of the gravel on Ophir Creek with the drill. Maddren took photographs of the Ophir Creek basin dated August 18, 1914 and September 17, 1914.

In the 1960s Harry Faulkner and his family staked 33 federal mining claims from river mile 12 to river mile 19 including the nearby tributaries, Hot Spring Creek and Lewis Creek. Faulkner

<sup>&</sup>lt;sup>iii</sup> A barabara was the traditional dwelling used by the indigenous people of Alaska. It lay partially underground, and most of the house was excavated from the dirt so as to withstand the high forces of wind.

These photographs are currently available at the UAA Archives and Collections as photocopies of the originals. The original photos are missing. The quality of the photocopied images is too poor to reproduce here.

originally built a cabin close to the source of the hot spring. He moved his cabin and applied to patent two parcels of land on Hot Spring Creek in 1966. The parcels were surveyed as Lots 1 and 2, U.S. Survey No. 5238 and approved on April 22, 1975. Ophir Creek flows through Lot 1, U.S. Survey No. 5238 which was patented as a 79.98-acre Trade and Manufacturing Site, Patent No. 50-83-1256, on September 9, 1983. Lot 2, U.S. Survey No. 5238 is a 160-acre parcel directly adjacent to Lot 1 and encompasses the confluence of Hot Spring Creek and Ophir Creek (Figure 2). The parcel is a Homestead awarded Patent No. 50-81-0096 on April 13, 1981. Faulkner has a 30 year lease (AA-12502) for a pipeline that brings water from the geo-thermal hot spring on Hot Spring Creek to his patented land (Figure 5).

#### Recent Native Use of Ophir 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 the lands in their area. The Natives accessed favorite spots along the river by boat for hunting, trapping, fishing and berry picking by boat. These favorite spots, through customary use, developed into exclusive use areas. The federal government approved many of these areas as allotments and transferred title to the land to the applicants. There are three certificated Native allotments on Ophir Creek located at the mouth of the river.



Figure 5. Photo looking northeast over Hot Spring Creek. Harry Faulkner's residence is at center right and the pipeline to the hot spring is in the foreground. Ophir Creek is in the valley in the background. Photo taken by the BIA in 1988 from file AA-10267.

Steven Alexie of Kalskag applied for Native allotment FF- 17343 on November 22, 1971. Parcel B is an 80-acre parcel bisected by Ophir Creek in Sec. 2, T. 14 N., R. 60 W., SM, between river mile 1 and river mile 2. Alexie has used the land since 1966 for seasonal subsistence activities. Alexie used the parcel for fishing, hunting, collecting fuel wood and berry picking from August to December. From November to July he claimed use of the parcel for trapping, hunting, and berry picking. <sup>34</sup> Clifford D. Ells, a BLM Realty Specialist, conducted a field examination in June of 1975 with the applicant and his father. Ells found the parcel to be suited for the claimed activities but did not mention how the applicant accessed the parcel. <sup>35</sup> The parcel was surveyed as Lots 2 and 4, U.S. Survey No. 10011 in 1992. <sup>36</sup> (Attachment 10) The BLM issued Native allotment Certificate No. 50-93-0047 for the parcel on December 2, 1992.

Olga Nesbit applied for Native allotment FF-15676 on June 19, 1971. The 160-acre parcel is located on the south side of Whitefish Lake at the mouth of Ophir Creek in Sec. 2, T. 14 N., R. 60 W., SM. She claimed use of the land since 1953 for seasonal subsistence activities. Nesbit specified that she used the parcel from June to September for picking berries. She stated that she had picked berries there with her mother for as long as she could remember.<sup>37</sup> Clifford D. Ells, a BLM Realty Specialist, visited the parcel for a field examination in June of 1975. He noted that evidence of "someone's use near the parcel consists of a kayak and large amounts of bird feathers at a river mouth campsite." Ells reported that interviews with other residents lead him to the conclusion that the natural wooded campsite at the river's mouth, on a popular lake, was used by many people and probably had been for many years.<sup>38</sup> Ells did not indicate how Nesbit accessed her parcel. The parcel was surveyed as lot 3 and 6, U.S. Survey No. 10011 in 1992.<sup>39</sup> (Attachment 10) The BLM issued Native allotment certificate No. 50-93-0049 on December 3, 1992.

David Nook applied for Native allotment FF- 17348 on November 22, 1971. Parcel B (Figure 6) is an 80 acre parcel located near the mouth of Ophir Creek in Sec. 2, T. 14 N., R. 60 W., SM. Ophir Creek crosses through the southwest corner of the parcel. Nook claimed use since 1964 for seasonal subsistence activities. These activities occurred from June to November for gathering wood fuel, fishing, hunting and berry picking and from August to January for hunting, berry picking and trapping. BLM Realty Specialist Clifford D. Ells visited the parcel with Joseph P. Nook in June of 1975. Ellis found that the parcel was used for the claimed activities, but did not indicate how the applicant accessed his parcel. The parcel was surveyed as Lots 1 and 5, U.S. Survey No. 10011 in 1992. (Attachment 10) The BLM issued Native allotment Certificate No. 50-93-0161 for the parcel on December on March 16, 1993.



Figure 6. Photo of the mouth of Ophir Creek and Whitefish Lake. The black mark is a corner of David Nook's Native allotment FF-17348.

Photo taken by Clifford Ells of the BLM in June of 1975.

### Local Knowledge of Ophir Creek from BLM Interviews

On May 1, 1989, Donald C. Koenig, a BLM Navigable Waters Specialist, issued a memorandum entitled interviews for Ophir Creek in Yukon Delta NWR, Group Survey 256. In this memorandum, Koenig reported on phone interviews he conducted with five people about their knowledge of boat use on Ophir Creek: Olga Nesbit, George Nook, Mike Reardon, Mike Hincks, and Jerry Peterson. <sup>43</sup> (Attachment 12)

Olga Nesbit is a lifetime resident of Chuathbaluk and Kalskag. She has Native allotment FF-15676 on the east side of the mouth of Ophir Creek. Nesbit stated that the creek "was not much of a river." However, she had "heard that people go up Ophir Creek," but she did not have any names. She said that her boat is too large for that stream, except near the mouth, where the water is over ten feet deep in places and very clear. Her boat is an 18-foot aluminum River Runner with a 75-hp motor." According to Koenig, Nesbit said that "canoes and small boats" had been taken up Ophir Creek for the purpose of hunting and fishing. She added that the stream is "especially prolific with white fish." 44

George Nook is a lifetime resident of Kalskag. His brother David Nook has the Native allotment FF-17348-B on the west side of the mouth of Ophir Creek. George Nook told Koenig that he did not personally know anyone that used the creek past the mouth, but he knew that his brother could reach his allotment on the creek. George Nook said that he thought Ophir Creek was too shallow for boats large enough to cross Whitefish Lake and was not aware of any canoe use.<sup>45</sup>

Mike Reardon, Assistant Manager for the Yukon Delta NWR told Koenig he believed "the first half mile [of Ophir Creek] would be navigable in normally used boats almost any time." Beyond that, it would probably require high water to use the normally used boats. He thought that a canoe could be taken upstream a mile or two, or more during high water. Reardon added that polling a canoe was certainly possible. <sup>46</sup>

Mike Hincks, a wildlife biologist and pilot for Yukon Delta NWR, told Koenig that he had flown over Ophir Creek many times. He did not recall seeing boats very far up the creek, but he agreed with the description of the creek given by Mike Reardon. Hincks said the creek is swift, narrow and goes through heavy vegetation. He believed that a canoe or raft could easily be used, certainly during high water, and certainly well beyond the two allotments that were under consideration. Terry Peterson, the fifth person interviewed by Koenig, was aware of boating activity on Whitefish Lake, but he was not familiar with Ophir Creek, nor could he recommend someone who might be.<sup>47</sup> (Attachment 12)

The villages of the middle Kuskokwim, including Upper and Lower Kalskag, have a subsistence based economy with low cash flow and limited access to commercially produced goods. The surrounding river drainages are rich in fish and game resources and valued as areas for subsistence harvest by local residents. In 1982, the Alaska Department of Fish and Game (ADF&G) conducted a study to document the use of the Aniak and Oskawalik river drainages for fishing, hunting, trapping and berry picking activities. The ADF&G researchers documented that Aniak and Kalskag residents used 16 to 20-foot wooden or aluminum boats powered by 15 to 35-horsepower outboard motors for transportation in the summer on the middle Kuskokwim River drainages. Many areas upstream are accessible by boat with jet units, but most households only owned boats with prop units. <sup>48</sup> The seasonal round of Kalskag residents that have Native allotments on Ophir Creek includes making trips to this creek during the open season (when the rivers and creeks are not frozen) to harvest whitefish, and other resources. The Natives with allotments on Ophir Creek harvest berries, firewood, freshwater fish, and wild game. In the winter they also hunt and trap from these parcels.

# VI. Summary

In 1990, BLM determined Ophir Creek navigable from its mouth (river mile 0) to and through the southern boundary of Native allotment F-17343-B (river mile 2). The upper reaches of Ophir Creek from river mile 12 to river mile 18.2 have been determined non navigable by the BLM.

The village site of *Nanvarmiullret* (AA-11665) is located at the mouth of Ophir Creek. The village was in use in the late 1800's and has had continued use as a campsite by residents of

Kalskag. The BLM Realty Specialist Clifford Ells, who conducted a site visit to a Native allotment adjacent to AA-11665 in 1975, found a kayak and scattered bird feathers at a campsite. His description of the campsite is consistent with the location of AA-11665.

Early mining activities occurred on Ophir Creek from river mile 4 to its headwaters. The first known record of boat travel on Ophir Creek occurred in the summer of 1914 when geologist A.G. Maddren traveled by poling boat up Ophir Creek about one half mile from its mouth.

Three Native allotments are associated with Ophir Creek. One allottee used her parcel in the open season (when the creeks were not frozen) in the years prior to statehood. Two allottees used their parcels in the open season and in the winter in the years after statehood. Interviews conducted by the BLM in 1989 with one of the allottees indicate that the boat she uses to get to her parcel can only go up the first mile of the creek. In 1975, a BLM Realty Specialist observed a kayak and scattered bird feathers and a campsite near an allottee's parcel at the mouth of Ophir Creek.

#### **Endnotes**

<sup>&</sup>lt;sup>1</sup> Dennis Griffin, *Report of Investigation for Nanvarmiullret, Calista Corporation BLM AA-11665*, Bureau of Indian Affairs, ANCSA Office.

<sup>&</sup>lt;sup>2</sup> Orth, Donald J. *Dictionary of Alaska Place Names*. Vol. Geological Survey Professional Paper 506, United States Geological Survey, Washington, D.C.,1971, p. 727.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Horace D. Sanders, BLM Natural Resource Specialist, Memorandum Task Force Meeting on the Lower Kalskag, April 21, 1976, BLM files, F-14888-EE.

<sup>&</sup>lt;sup>5</sup> Robert D. Arnold, BLM Assistant to the State Director for Conveyance Management, Final Easements Memorandum for the Kuskokwim Corporation for the Village of Lower Kalskag, August 25, 1982, BLM Files.

<sup>&</sup>lt;sup>6</sup> Wayne A. Boden, BLM Deputy State Director for Conveyance Management, Navigable Waters In Group Survey 256, May 24, 1989, BLM files,F-14888-EE.

<sup>&</sup>lt;sup>7</sup> Charles C. Lovely, BLM Land Transfer Resolution Specialist, Decision to Convey, June 19, 2009, BLM files, AA-70150.

<sup>&</sup>lt;sup>8</sup> Dina Torres, BLM Land Transfer Resolution Specialist, Final Easement Memorandum for Lands to be Conveyed to Calista Corporation, July 10, 2009, BLM files, AA-11665, and U.S. Survey No. 10573, officially filed June 25, 1992.

<sup>&</sup>lt;sup>9</sup> Charlotte M. Pickering, Lead Land Law Examiner, Branch of Calista Adjudication, Decision to Interim Convey, September 29, 1992, BLM files, AA-11665.

<sup>&</sup>lt;sup>10</sup> Steven Scordino, Department of the Interior Attorney Advisor, Motion to Remand, November 9, 2009, BLM files, AA-70150.

<sup>&</sup>lt;sup>11</sup> Bruce R. Harris, BLM Deputy Chief Administrative Judge, Order, November 17, 2009, BLM files, AA-70150.

<sup>&</sup>lt;sup>12</sup> Craig Frichtl, BLM Chief, Branch of Survey Planning and Preparation, Supplemental Navigability Determination for Water Bodies within Group Survey No. 1088, March 17, 2010, BLM files, AA-70150.

<sup>&</sup>lt;sup>13</sup> U.S. Survey No. 1011, Officially Filed June 25, 1992.

<sup>&</sup>lt;sup>14</sup> Master Title Plats (MTP) Tps. 14-15 N., R. 60 W., and Tps. 13-14 N., R. 59 W., SM.

Donald C. Koenig, Navigable Waters Specialist, Interviews for Ophir Creek in Yukon Delta NWR, Group Survey 256, May 1, 1989, BLM files, F-14888-EE.

Wayne A. Boden, BLM Deputy State Director for Conveyance Management, Memorandum on Navigable Waters in Group Survey 256, May 24, 1989, BLM files, F-14888-EE.

<sup>&</sup>lt;sup>17</sup> "Tuluksak," Alaska Community Database Community Information Summaries, on the web at http://www.comerce.state.ak.us/dca/commdb/CIS.cfm.

- <sup>18</sup> 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.
- <sup>19</sup> 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.

<sup>20</sup> Vanstone, "Mainland Southwest Alaska Eskimo," pp. 227-229.

- <sup>21</sup> Steve Langdon and Rosita Worl, *Distribution and Exchange of Subsistence Resources in Alaska*. Alaska Department of Fish and Game Technical Paper Number 55, Arctic Environmental Information and Data Center, University of Alaska, Anchorage, 1981, pp. ii, 1.
- <sup>22</sup> Vanstone "Mainland Southwest Alaska Eskimo," p. 299.
- <sup>23</sup> Langdon and Worl, Distribution and Exchange of Subsistence Resources in Alaska, pp. 28 and 96.
- Vanstone "Mainland Southwest Alaska Eskimo," p. 299.
- <sup>25</sup> Wendell H. Oswalt, *Bashful No Longer, An Alaskan Eskimo Ethnohistory, 1778-1988*, University of Oklahoma Press, Norman, 1990, pp. 8-9.
- <sup>26</sup> Dennis Griffin, *Report of Investigation for Nanvarmiullret, Calista Corporation BLM AA-11665*, Bureau of Indian Affairs, ANCSA Office, Anchorage.
- <sup>27</sup> Dennis Griffin, *Report of Investigation for Puqla, Calista Corporation BLM AA-10267*, Bureau of Indian Affairs, ANCSA Office, Anchorage, 1988.
- <sup>28</sup> A.G. Maddren, *Gold Placers of the Lower Kuskokwim, With a Note on Copper in the Russian Mountains*, in Alfred H. Brooks and others, *Mineral Resources of Alaska; Report of investigations in 1914*, United States Geological Survey, Bulletin 622, Washington, D.C., p. 299-300, 334.
- <sup>29</sup> Ibid., p. 334.
- <sup>30</sup> Ibid., p. 335.
- <sup>31</sup> Ibid., p. 294.
- <sup>32</sup> Michael C. Brown, *Alaska's Kuskokwim River Region: A History*, Bureau of Land Management, State Office, Anchorage, 1985, p. 416.
- 33 Ibid.
- <sup>34</sup> Steven Alexie, *Alaska Native Allotment Application and Evidence of Occupancy*, November 22, 1971, BLM files, F-17343.
- <sup>35</sup> Clifford D. Ells, *Native Allotment Field Report*, June 17, 1976, BLM files, F-17343.
- <sup>36</sup> U.S. Survey No. 1011, Officially Filed June 25, 1992.
- <sup>37</sup> Olga Nesbit, *Alaska Native Allotment Application and Evidence of Occupancy*, June 19, 1971, BLM files, F-15676.
- <sup>38</sup> Clifford D. Ells, *Native Allotment Field Report*, November 5, 1976, BLM files, F-17343.
- <sup>39</sup> U.S. Survey No. 1011, Officially Filed June 25, 1992.
- <sup>40</sup> David Nook, *Alaska Native Allotment Application and Evidence of Occupancy*, November 22, 1971, BLM files, F-17348.
- <sup>41</sup> Clifford D. Ellis, *Native Allotment Field Report*, June 30, 1976, BLM files, F-17348.
- <sup>42</sup> U.S. Survey No. 1011, Officially Filed June 25, 1992.
- <sup>43</sup> Donald C. Koenig, BLM Navigable Waters Specialist, Interviews for Ophir Creek in Yukon Delta NWR, Group Survey 256, May 1, 1989, BLM files, F-14888-EE.
- <sup>44</sup> Donald C. Koenig, Navigable Waters Specialist, Interviews for Ophir Creek in Yukon Delta NWR, Group Survey 256, May 1, 1989, BLM files, F-14888-EE.
- 45 Ibid.
- 46 Ibid.
- 47 Ibid.
- <sup>48</sup> Susan Charnley, "*Resource Use Areas in the Aniak and Oskawalik River Drainages*," Technical Paper Number No. 50, Alaska Department of Fish and Game, Division of Subsistence, September 1982, p. 40.

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- No. 20 Lantz, Nicole. Discovery Creek System (Including Unnamed Leftbank Tributary of Discovery Creek and Slough near Mouth of Discovery Creek), HUC 30502, Zone 3, Kuskokwim River Region, Final Interim Summary Report, Office of History and Archaeology Navigable Waters Research Report No. 20, Alaska Department of Natural Resources, Anchorage, September 14, 2011.
- No. 21 Lantz, Nicole. Throat Creek, HUC 30502, Zone 3, Kuskokwim River Region, Final Interim Summary Report, Office of History and Archaeology Navigable Waters Research Report No. 21, Alaska Department of Natural Resources, Anchorage, October 5, 2011