In Reply Refer To:
1864 (LLAK9410)

Memorandum

To: File AA-94269 (1864)

From: Jack Frost, Navigable Waters Specialist (AK9410)

Subject: Summary Report on the Federal Interest in Lands underlying the Egegik River, Becharof Lake, and Ruth Lake and Outlet in Alaska

On Sept. 7, 2016, the State of Alaska filed a draft application for a recordable disclaimer of interest (RDI) with the Bureau of Land Management (BLM) for the lands underlying Becharof Lake, and the Egegik River, on the Alaska Peninsula in Southwest Alaska. On Dec. 28, 2017, the State submitted its final application that also included the addition of Ruth Lake and its outlet. Accordingly, the application is submitted for: 1) “Becharof Lake: All submerged lands between the ordinary high water lines of Becharof Lake upstream from its outlet within Sec. 08, T. 25 S., R. 46 W., S.M., Alaska”; 2) “Egegik River: All submerged lands between the ordinary high water lines of the left and right banks of the Egegik River beginning at the outlet of Becharof Lake downstream to the limit of tidal influence”; 3) “Unnamed outlet Ruth Lake: All submerged lands between the ordinary high water lines of Unnamed outlet of Ruth Lake upstream from its outlet at Becharof Lake within Sec. 05, T. 30 S., R. 42 W., S.M., Alaska, upstream to Ruth Lake”; and 4) “Ruth Lake: All submerged lands between the ordinary high water lines of Ruth Lake upstream from its outlet within Sec. 09, T. 30 S., R. 42 W., S.M., Alaska.” The state listed the coverage area of the U.S. Geological Survey (USGS) 1:63,360 series topographic maps as follows: Naknek A-1 through A-3, Karluk C-6, D-6 and Ugashik C-1 and D-1, D-2, D-3.

1 Ruth Lake and its outlet are tributary to Lake Becharof (at its most southerly tip).
2 1951 (minor revisions 1970, 1982).
4 1951 (minor revisions 1975).
5 1951 (minor revisions 1973).
In its legal description, the state described Becharof Lake as being located within the following (unsurveyed) townships:

Seward Meridian, Alaska
T. 24 S., Rs. 44-46 W., unsurveyed.
T. 25 S., Rs. 42-46 W., unsurveyed.
T. 26 S., Rs. 41-46 W., unsurveyed.
T. 27 S., Rs. 41-45 W., unsurveyed.
T. 28 S., Rs. 41-43 W., unsurveyed.
T. 29 S., Rs. 41, 42 W., unsurveyed, and
T. 30 S., Rs. 42 and 43 W. unsurveyed.

The Egegik River flows through the following (surveyed and unsurveyed) townships:

Seward Meridian, Alaska
T. 22 S., Rs. 49 and 50 W., surveyed.
T. 23 S., Rs. 48 to 50 W., surveyed.
T. 24 S., R. 46 W., unsurveyed.
T. 24 S., R. 47 W., surveyed.
T. 24 S., R. 48 W., surveyed; and
T. 25 S., R. 46 W., unsurveyed.

The State’s final application of Dec. 29, 2017, added Ruth Lake6 and its unnamed outlet as an integral link in the continuous route of travel linking Egegik and the now abandoned village of Kanatak,7 situated on the Gulf of Alaska. Ruth Lake and its outlet are both tributaries to Becharof Lake. The unnamed outlet and Ruth Lake are located in the following township:

Seward Meridian, Alaska
T. 30 S., R 42 W., S.M., unsurveyed.

The precise location may also be within other townships due to the ambulatory nature of water bodies.

The State based its application for a disclaimer of interest on the Equal Footing Doctrine, the Submerged Lands Act of May 22, 1953, the Alaska Statehood Act, the Submerged Lands Act of 1988, or any other legally cognizable reason. The BLM may disclaim federal interest in the submerged lands on any of the grounds that apply. The State’s application for lands underlying the subject water body must also meet the regulatory requirements (43 CFR Subpart 1864), including whether or not another land managing agency with jurisdiction over the affected lands submits a valid objection.

6 Orth, Dictionary of Alaska Place Names, Geological Survey Professional Paper 567, United States Department of the Interior. Also referenced (locally) as “Ruth Lake Outlet” or “Unnamed outlet.”
7 Orth, Pg. 492. Also described as Kanataq by BIA anthropologist Matt O’Leary (U.S. Bureau of Indian Affairs 1991b:6).
In support of its application, the State submitted a navigability determination prepared by the BLM on Jan. 24, 1984, and a letter addressed to Mr. William J. Wilson, Arctic Environmental Information and Data Center from Sherman Berg, COAR, dated Oct. 26, 1978, containing information about the U.S. Army Corps. Of Engineers’ (COE) activities in the area. Attached to the application was a copy of the publication, “United States Coast Pilot,” dated Nov. 10, 2012, containing navigation information for water bodies in coastal Alaska including the Egegik River and Lake Becharof.8 Also attached was a map based on the Alaska Mapped WMS9 Feed with water body data extracted from the USGS National Hydrography Dataset – 2016, and a legal description with a list of townships and sections affected by the water bodies therein.

This paper summarizes the history of land status and conveyance actions, BLM navigability determinations, and evidence related to commerce, subsistence, mining and recreational use.

**Location**

The Egegik River-Becharof Lake system is located in the Bristol Bay sub-region of southwest Alaska about 50 miles south, southwesterly of King Salmon, Alaska.10 The village of Egegik is located at the mouth of the Egegik River where it empties into Bristol Bay. The river flows approximately 34 miles northwesterly from its source at Becharof Lake to the ocean. The Egegik River and Becharof Lake are clear water bodies, draining a watershed estimated at 1,400 square miles.11

The 600 foot deep Becharof Lake is the second largest in Alaska with a surface area of approximately 290,000 acres (417 square miles) and spanning a distance approximately 40 miles long and nearly 15 miles across.12 Boat travel on this lake is well documented. However, high winds and high waves make travel on this large body of water perilous if caution is not exercised. One account alleges that “30-foot waves have occurred during a 60-mph wind at the mouth of the lake.”13

The Egegik River is a low-gradient, largely single-channel river, approximately 200 feet wide at the rapids below Becharof Lake, to 2 miles wide at river mile 28 (a large lagoon).14 Only the uppermost mile presents any challenge to navigation due to a series of large boulders and rapids making boat travel hazardous if the wrong channel is attempted. M.L. McCurdy, in his report for the Alaska Department of Fish and Game, described the Egegik River as “large and sluggish

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9 Web Mapping Service.
10 Orth.
11 Stewart, Robert and Molyneaux, Alaska Dept. of Fish and Game (ADF&G), & Orabutt, David, Kuskokwim Native Association (Aniak), George River Salmon Studies, 2004, ADF&G, Div. of Sport Fish Research and Technical Services, Anchorage, Alaska , December, 2005.
13 Keogh, Pg. 96.
14 Keogh, Wilson, Pg. 50.
nearly to the lake (Becharof Lake), where a constriction occurs above a large lagoon to form some rapids.” Tidal influence reportedly affects all but the uppermost two miles of the river.\textsuperscript{15}

Ruth Lake, a three-mile-long water body with a surface area of 1.7 square miles, drains into the southernmost arm of the southeastern corner of Becharof Lake via the 1.4-mile long Ruth River (referred to as “Unnamed Outlet of Ruth Lake” in the State’s application).\textsuperscript{16} The lake and river are situated a short distance from the western approach to Kanatak Pass and its overland crossing to the Pacific Ocean, little more than 4 miles to the southeast.

**Land Status and BLM Navigability Determinations**

No pre-statehood withdrawals were in effect in the Egegik River area at the date of statehood. The entirety of Becharof Lake and the uppermost 2 miles of the Egegik River (river miles 32.5 to 34) are situated within the Becharof National Wildlife Refuge (a post-statehood withdrawal) administered by the U.S. Fish and Wildlife Service (FWS).\textsuperscript{17} The remaining 32.5 miles of the Egegik River uplands, downstream to river mile “0” at Bristol Bay, are a mixture of state and village corporation lands with state lands predominating along the middle portion of the river. Not counting the area immediately surrounding Egegik Village, only three Native allotments are located along the Egegik River.

**Egegik River**

The BLM first considered the navigability of the Egegik River in 1975 when it began to adjudicate land selections made pursuant to the Alaska Native Claims Settlement Act\textsuperscript{18} for the village of Egegik. On June 8, 1979 and Sept. 10, 1979, the agency issued decisions to interim convey the first of Becharof Corporation’s land entitlements. The decisions recognized the Egegik River’s history of use and noted that tidal influence extends far upriver, almost to the outlet of Becharof Lake. In a subsequent navigability determination for State selections the BLM affirmed the river’s navigable status on Aug. 8, 1982. On Jan. 4, 1991, the BLM sent out a “revised determination of navigable water bodies” for survey work in the Egegik area, affirming earlier findings that the Egegik River is navigable.

**Becharof Lake**

On Jan. 24, 1984, the BLM, in addressing state selections on the Ugashik USGS quadrangle, determined the Bellim Bay and a small portion of Becharof Lake within T. 30 S., Rs. 42 & 43 W., S.M. to be navigable.\textsuperscript{19} However, the agency has not issued a finding on the navigability status of the remainder of this massive lake. Regardless, it is generally held that if one channel

\textsuperscript{15} U.S. NOAA 1994:275.\textsuperscript{16} Also variously known as Kanatak Creek, Fish Creek Village and Ruth Lake Creek, depending on which period of recent history (see Keogh, Warren and Wilson, Margaret, Pg. 122).\textsuperscript{17} Congress created the refuge on December 2, 1980, through the passage of the Alaska National Interest Lands Conservation Act (P.L. 96-487, 94 Stat. 2371).\textsuperscript{18} Pub. L. 92-203 (ANCRA), Dec. 18, 1971, 85 STAT. 701.\textsuperscript{19} BLM was investigating state selections that existed at the time giving it the authority to make a navigability determination on lands within a unit of the National Wildlife Refuge System (Becharof).
of a lake meets the criteria for navigability, the lake is navigable from shore to shore. The BLM's historical records contain sufficient use information to support such a finding. Boats up to 32 feet were reportedly used on the lake prior to 1959. The lake formed an integral link in the transportation route used by Kanatak villagers seeking employment opportunities in the Egegik canneries. Local natives from Egegik have traditionally used skiffs and fishing boats to reach their trapping cabins around the lake. According to Pilot Point elder Nefotic Neketa, people used 28-foot double-ended wooden boats and skiffs on Becharof Lake to transport people to Ruth Lake and Kanatak Pass. The supporting historical evidence aside, there can be little doubt that Becharof Lake, at 40 miles long and 600 feet deep, would obviously possess the necessary physical attributes to support a conclusion of being susceptible to navigation.

Ruth Lake & Outlet

The last water link in the Kanatak Crossing includes Ruth Lake and its outlet. Both waterbodies are located at the base of Mt. Becharof and at the west end of the low-lying Kanatak Pass. The lake and outlet are hydrologically connected to Bellim Bay (Becharof Lake), allowing for water-based travel to the base of the pass and making it possible for boats to navigate the entire width of the Alaska Peninsula, save for the last eight miles of overland crossing to tidewater on the Pacific Ocean side.

Based on interviews with local individuals, the BLM on Jan. 24, 1984, concluded there was sufficient evidence to determine the Ruth Lake and River navigable based upon a long history of use by area natives and trappers. The State Fish and Game biologist Dick Russell noted the remains of an old village on the northeastern corner of Ruth Lake, a location that coincides with the approximate location of the Kanatak overland trail. Trappers traveled down Ruth River with supplies and furs, which were transferred, presumably to other boats, at Bellim Bay (Becharof Lake). According to local resident, Aleck Griechen, “years ago” people dragged 18-foot skiffs by horse-drawn trailers from Kanatak Village to Ruth Lake. In a BLM interview, local area hunting and fishing guide Jerry Yeiter affirmed that Ruth River and Lake were part of the old portage between Bristol Bay and Kanatak.

Other Federal Agencies

Other federal agencies including the FWS, National Oceanic and Atmospheric Administration (NOAA) and the COE have conducted navigability research on the Becharof/Egegik System in support of their respective missions. On Sept. 29, 1995, the COE asserted its jurisdiction when it listed Becharof Lake and Egegik River as navigable water bodies. In Oct. 1996, the FWS released a detailed analysis of the historical and physical character of the Egegik River and

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22 BLM Memorandum, Deputy State Director for Conveyance Management (960) to Chief, Branch of State Adjudication (964), Final Navigability Determination for State Selections- Ugashik Quadrangle, Jan. 24, 1984.
24 Ibid.
Becharof Lake watershed but stopped short of any conclusions relating to navigability. On Nov. 10, 2012, NOAA concluded that the “Egegik River is navigable to small boats for its entire length into and across Becharof Lake, although tidal to the foot of the rapids.” The U.S. Coast Guard has not addressed the navigability of either waterbody. 

**Background Information**

Historically, the earliest Yup‘ik inhabitants occupied many of the river mouths along Bristol Bay. The settlement at the mouth of the Egegik River was reportedly the most southerly Yup‘ik speaking Eskimo village. The area’s rich salmon resources provided their primary means of subsistence with the Alaska Peninsula’s caribou herds contributing an important secondary food source. On the Pacific side of the Alaska Peninsula, the largely Aleut people along the Shelikof Strait subsisted primarily on sea mammals and fish. Overland trails across the Alaska Peninsula’s Aleutian Range provided important trade routes linking the two groups.

The first European visit probably occurred when Russian explorer, Gavril Pushkarev set foot on the Alaska Peninsula in 1761. In 1791, Russian pilot and navigator I.A. Bocharov and a party of approximately 30 men conducted the first documented ascent of the Egegik River when his men constructed three large “baidaras,” using two of them to ascend the river to Becharof Lake. After paddling the length of Becharof Lake, the men portaged to the Pacific side of the Alaska Peninsula. Bocharov acted under orders of Russian Merchants, Shelikov and Baranov to seek the shortest path of communication “over the isthmus, giving a detailed description of the route and its adaptability for transporting goods and provisions in case of attacks on the (Shelikov-Golikov) Company by hostile tribes.” Bocharov subsequently produced one of the first maps of the upper Alaska Peninsula in 1791. By 1800, the fur trade, especially sea otter, became the backbone for much of the local economy leading to the establishment of Russian colonies in the areas of Katmai and Chignik.

The large lakes in the Bristol Bay basin, including Becharof Lake, provided ideal habitat for spawning sockeye salmon. Inevitably, this led to the establishment of the region’s commercial fishing industry by the early 1880s. The first Bristol Bay cannery was established by the Arctic

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27 Email, Helfinstine, Jim, USCG, Mar. 24, 2017.

28 Keogh, Pg. 19.

29 Keogh, Wilson, Pg. 14.

30 Keogh, Wilson, Pg. 15.

31 Russian name for a boat used by western Alaska Yupik, consisting of a wooden frame covered with animal skins usually open on top. They were often large enough to carry 30-40 people.


33 Ibid.

34 Oncorhynchus Nerka; Keogh, Pg. 68, “The Egegik River has the second largest sockeye salmon run in Bristol Bay.”
Packing Company on the Nushagak River in 1884. Fifteen years later (1899), the Egegik Packing Company began its operations at the mouth of the Egegik River.  

The Bristol Bay commercial gillnet fishery was dominated by sailboats from the 1880s to the early 1950s. The typical boat was modelled after the “Columbia River type” double-ended sailing gillnetter, a craft that was powered by a single masted sail with a diagonal spirit. The Bristol Bay version was approximately 29 feet long and could pack a load of 1500 to 2000 five to seven pound “money fish,” (sockeye salmon). Different packing companies used sailboats that were somewhat different, depending on the company. The Alaska Packer (cannery) boats (seen at Egegik) typically had a fat bow and fat stern and were referred to as “barnacle boxes.” The fishermen did not think very highly of these craft for sailing but they could carry a big load of fish. A picture of a beached and rotting double-ender Bristol Bay sailboat was taken by Becharof NWR Manager Ronald Hood on a Becharof Lake beach, lending support to accounts of the use of these boats on Becharof Lake by the Alaska Geographic Society (1989:41).

In more recent times the Alaska Department of Fish and Game sent its thirty-two foot research vessel up into Becharof Lake in 1975. The fiberglass boat had a ten-foot beam and drew 3 feet of water, making it among the largest vessels to ascend the Egegik River into Becharof Lake.

**Kanatak Crossing**

Following the purchase of Alaska in 1867, a young Russian transplant, Ivan Petroff, pioneered efforts on behalf of the U.S. Government to explore the Katmai Region. As a special agent for the U.S. Census, Petroff reported on the population and resources of the newly acquired territory. While compiling information for the 1880 Census, Petroff made the following observation during one particular trip he took down the Bering Sea side of the Alaska Peninsula:

> “From this point we turn immediately down the coast as far as Igagik, where we find a settlement of 118 souls, living in the customary manner, and principally devoted to the chase of walrus, at the mouth of the Egegik River, which is the principle route of portage across the peninsula, where the travelers are heavily burdened. They also have a chapel here. (U.S. Dept. of the Interior 1881:45).” (Emphasis added)

The “Kanatak Crossing” served as an important link between Bristol Bay and the Pacific side of the Alaska Peninsula. The trail, cutting through a low mountain pass, formed the shortest

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37 Campbell 1995.
38 Keogh, Pg. 107.
39 Keogh, Pg. 79.
overland route between the now abandoned Aleut village of Kanatak (Kanataq⁴¹), Ruth Lake and Outlet and the eastern end of Becharof Lake. Upon reaching the lake, travelers could easily boat the length of the lake (weather permitting) and down the Egegik River to the village of Egegik at Bristol Bay.

The village of Kanatak, situated on the west side of Shelikof Strait, witnessed several episodes of “boom and bust” from at least 1890 to the early 1950s, largely tied to “a series of dramatic but short-lived oil booms in the vicinity.”⁴² By 1922, the village’s population swelled to nearly 200 people. Up to “100 or more” tents, log cabins and frame buildings occupied the new town site. During that same year, with the establishment of a post office a mail route began with sled dogs following a wagon road constructed by the oil companies in the early 1920s. In 1924, the Bureau of Education established a school in Kanatak that continued to operate until the late 1940s or early 1950s.⁴³

In his trip to the Alaska Peninsula during the summer of 1902, biologist Wilford H. Osgood of the U.S. Department of Agriculture provided among the most detailed descriptions of the Egegik-Kanatak portage. From Egegik village, Osgood ascended the Egegik River to Becharof Lake in a canoe. Once on the lake Osgood and his party followed the south shore turning right into the large Arm (most likely Bellim Bay) and southerly to a “small stream to a lake” (presumably Ruth River and Lake). Osgood noted several “barabaras” at the mouth of the stream. Upon leaving the lake, they crossed Kanatak Pass to Portage Bay on the Pacific side of the peninsula.⁴⁴

In its 1954, report the U.S. Army’s COE acknowledged the Kanatak/Becharof Lake portage as integral to the Egegik-Kanatak trade route:

“Becharof Lake is navigable for its entire length of 43 miles and, together with Egegik River and a wagon road extending from the lake to the village of Kanatak on Portage Bay, forms a through trade route between the Pacific Ocean and the Bering Sea.” (Hurley 1932:12).

In a follow-up report, the agency addressed the Kanatak Crossing more closely:

“This is an 8 ¾ mile wagon road, constructed and maintained by the Alaska Road Commission, extending from Kanatak to the upper or south end of Becharof Lake. There was a decided increase in traffic over Becharof Lake and Egegik River since the building of this road, the construction of which was completed in 1925. The inhabitants of Kanatak use this road exclusively in their annual migration to Bristol Bay, sailing

⁴¹ Original name of this Pacific Eskimo settlement, a people linguistically distinct from the distinct from the Yup’ik (Aglrmnit) people who inhabited river mouths of Bristol Bay (including Egegik) at the time of western contact (Report of Investigation for Kanataq, Koniag, Inc., BLM, AA-11774, Parcel A, BIA, ANCSA Office, Anchorage, AK, July 14, 1993).
⁴² BIA, Pg. 32.
⁴³ BIA, Pgs. 10-14.
⁴⁴ Ibid.
down Becharof Lake and Egegik River to Bristol Bay. The winter mail is also carried over this route." (Hurley 1932:16).\textsuperscript{45} 

With the proliferation of canneries at the mouth of the Egegik River, travel between Kanatak and Becharof Lake increased as Kanatak villagers sought summer employment opportunities in the canneries processing salmon. Typically, at the end of the season they would boat back up the Egegik River, across Becharof Lake and cross the overland trail back to Kanatak.

Use of the portage continued well into the twentieth century. In 1924, the U.S. Geological Survey investigators Walter R. Smith and Arthur R. Baker documented the continued use of the portage by villagers from Kanatak travelling to jobs at the cannery at Egegik.\textsuperscript{46} In 1931, anthropologist, Ales Hrdlicka commented that with favorable tides and other conditions "one could reach Kanatak by this route in ten hours (presumably starting from Egegik)."\textsuperscript{47} Kodiak resident and author, Wilson F. Erskine, noted in 1960 that many fishermen traveled to the Bering Sea Sockeye fishery by way of the Kanatak Pass and that Becharof Lake and its outlet were navigable by small boats.\textsuperscript{48}

**Transportation**

Prior to the arrival of the airplane, most travel in the region occurred via overland trails and on the areas numerous lakes and rivers. In 1923, the Alaska Road Commission (ARC) began constructing roads (or more specifically, wagon trails) in the Bristol Bay area. Spurred by the discovery of local oil prospects the ARC listed and improved the previously mentioned 8¾-mile, wagon road from the village of Kanatak on Shelikof Strait (Pacific Ocean) across the spine of the Alaska Peninsula to Becharof Lake.\textsuperscript{49}

Boat travel on the Egegik River had already been well established by the time the U.S. War Department, undertook a project in 1932 to improve the river's channel in the short, but sometimes treacherous, stretch of rapids below Becharof Lake. Several large boulders strewn amongst the rapids created hazardous conditions for boat travel, and a plan was made to blast them to pieces in hopes of creating a safer channel for boats travelling to and from Becharof Lake. By 1941, the boulders were blown-up in order to create a 3-foot channel through the rapids.\textsuperscript{50} In its 1954 report, the COE revealed that while a 100-foot wide, 3-foot deep channel had been successfully created, further boulder removal work was necessary, specifically targeting four large boulders inside the first turn near the outlet from Becharof Lake.\textsuperscript{51}

\textsuperscript{45} Keogh, Pg. 22.
\textsuperscript{46} Tuttle, Dwight W., Alaska's Kodiak Island – Shelikof Strait Region, Pg. 31, BLM, Anchorage, Alaska, 1983.
\textsuperscript{47} Ibid.
\textsuperscript{48} BLM Memo. Jan. 24, 1984, Pg. 3.
\textsuperscript{49} Stirling, Pg. 81. BIA, Pg. 8.
\textsuperscript{50} COE 1954 report, Pg. 70, Keogh, Pg. 21.
Summary

The Egegik River, Lake Becharof and Kanatak Portage (including Ruth Lake and its unnamed Outlet) were historical links in a continuous route of travel and trade between the Pacific Ocean side and the Bering Sea side of the Alaska Peninsula. Egegik Village, at the mouth of its namesake river, became an important processing center for the region’s bountiful anadromous fishery. The local canneries provided summer employment for people on both sides of the Alaska Peninsula. Kanatak Villagers seasonally traveled the route to work at the Egegik canneries before returning with their supplies at the end of the season to their homes at Kanatak.

The evidence of past use of the Ruth River and Lake, while not extensive, is persuasive enough to conclude that these water bodies were susceptible to being navigable, especially when their relationship to the Kanatak Crossing is considered.

According to multiple sources, the Egegik River is tidally influenced for all but the uppermost mile or two below Lake Becharof making this stretch of river navigable in law.

Conclusions

The Federal test of navigability is found in *The Daniel Ball*, 77 U.S. (10 Wall.) 557 (1870). There, the U.S. Supreme Court stated: “Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of 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.”


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After reviewing the available historical and physical evidence and applying the aforementioned standards, we conclude that the non-tidal upper two miles (approximate) of the Egegik River and the entirety of Becharof Lake were navigable in fact at the date of statehood. Tidal influence affects the remainder of the Egegik River and is therefore, navigable in law from the upper extent of tidal influence (approximately two miles below Becharof Lake) down to its mouth at Bristol Bay. Ruth River and Ruth Lake are determined to be susceptible to being navigable because of their proximity and the historic role these water bodies played as a link in the Egegik-Kanatak crossing. Accordingly, we recommend that the BLM grant the State’s application for a recordable disclaimer of interest for the submerged lands therein.