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Memorandum

To: Acting Assistant Deputy State Director for Conveyance Management (960)  
From: Deputy State Director for Conveyance Management (960)  
Subject: Navigability Determination for the Fortymile River Basin

The following is the final navigability determination for water bodies in the Fortymile River Basin.

Navigable

Main Stem, South Fork,  
and Mosquito Fork

To Chicken Creek

This stretch served as an important highway of commerce until about 1908, as an auxiliary and useful highway of commerce until the 1930s, and, as further substantiated by current recreational and mining use, as a potential highway of commerce at the date of Statehood.

North Fork

To the deadend slough which is a remnant of the Kink in Sec. 20, T. 6 S., R. 29 E., Fairbanks Meridian.

In 1900 a miner and his partners on several occasions hauled a boat loaded with 3,000 to 8,000 pounds upstream to the Kink. Other prospectors and trappers have boated to, or nearly to this point, indicating the fork's susceptibility to navigation to the Kink.

Nonnavigable

All other water bodies within the Fortymile drainage are nonnavigable. This determination results from the sparceness or complete absence of use information coupled with the physical characteristics of the water bodies. Portions of some

of these streams have been used by prospectors and possibly by trappers and hunters. However, such use was rare and does not indicate the streams were susceptible to navigation for commerce. Furthermore, some streams could and are used by recreational boaters in kayaks, canoes, and inflatables, some of the larger lakes could be used as landing sites for float or ski planes, and many of these water bodies may be used in their frozen state as the most practical routes of winter travel in roadless areas. Nevertheless, under existing departmental criteria, recreational, aircraft, and frozen state uses by themselves do not make a water body navigable.

## RATIONALE

The criteria used in making these determinations are found in the "Garner Memorandum," the Regional Solicitor's comments on ANCAB's Kandik - Nation decision, and Instruction Memorandum No. AK-81-78, Change 1.

Most of the data which lead to these conclusions are in the Upper Yukon regional report, the Fortymile navigability report prepared by John Cook, and the "Supplemental Use Information for the Fortymile Navigability Report" dated April 15, 1983. Below is a summary of the data for the water bodies here recommended as navigable. For ease of reference, the Highway of Commerce portion has been subdivided into Main Stem, South Fork, and Mosquito Fork and North Fork sections.

Ordinary Condition: Except for the effects of extensive dredging on portions of Chicken Creek, Wade Creek, and upper Walker Fork, less extensive dredging on the South Fork and the main stem, and for the dynamiting of a new channel for North Fork at "The Kink", all of the Fortymile drainage was at the date of Statehood and remains today in its ordinary condition. The Kink refers to a sharp meander twenty-one rivermiles up the North Fork from which miners in 1900 diverted the stream's flow by blasting a passage to straighten the river and expose the Kink's gravel. As a result, the river has since tumbled through a short falls and rapids and left some of the Kink dry.

Highway of Commerce: Main Stem, South Fork and Mosquito Fork -- Although Natives probably floated skin boats or rafts down the Fortymile River, well-documented use began in the 1880's when men poled upriver to prospect and mine. An unconfirmed report by W. H. Pierce indicates one large party of prospectors may have taken boats up into the Mosquito Flats. Henry Davis' reminiscence that he and other prospectors poled and tracked an undescribed water craft to Franklin Creek in 1887 is more credible. By 1896, when Josiah Spurr of the U.S. Geological Survey boated up the river to the lower part of the South Fork, poling boats had become common along the Fortymile. The most extensive use of the drainage came between 1898 and 1900 on the heels of the Klondike gold rush. Among the written accounts of this travel are those of Shad Reid, who boated down the Mosquito Fork in the spring of 1898 from a point about 9 miles below Kechumstuk Creek, Robert Steel, who at the same time as Reid boated down the same fork from a point which may have been as far up as the Mosquito Flats, and Basil Austin, who noted prospectors boating down from Kechumstuk Creek after break-up in 1899 but who built his slim seventeen-foot boat at Chicken.

Austin later that year traveled several times in his vessel between Chicken and the Yukon River.

The most ambitious boat travel on the river occurred in 1900. In 1898 Johannes Peterson and three other men boated up the Fortymile and staked claims at the Kink. Two year later they returned and started up the Fortymile in a steamboat with a twenty-one inch draft. At Steele Creek the current became too swift so the men dismantled the boat, made a smaller one, and on repeated trips pulled it loaded with 3,000 to 8,000 pounds up to the Kink.

Miner James Geoghegan as well as the USGS's Alfred H. Brooks and Louis M. Prindle noted that men transported supplies up the Fortymile River as far as Chicken for cash in the early twentieth century. However, most freighting in the basin was over the winter ice from the town of Fortymile at the river's mouth in the Yukon territory or by a trail from Eagle which was maintained by the Alaska Road Commission (ARC) beginning in 1907. The system of trails which connected the Fortymile placers came into being not only to improve on the water routes, but as part of government efforts to provide an all-American route from Valdez to the interior and from Eagle to the Fortymile mines. This was of strategic and economic value because without a trail connection to Eagle, the Fortymile drainage was naturally dependent on transportation routes through Canada. Even with government construction and maintenance of the trail to Eagle, it may have survived as an important trade route only through the guaranteed profit John Powers, the primary freighter, received through a mail contract.

Although boat freighting on the Fortymile certainly declined after the peak of the gold rush and probably dropped more after the ARC improved the trail system, there is considerable evidence of boating in the drainage into the 1930s. A cable ferry at Steele Creek and rowboats at Franklin assisted those using the trail system to cross the river. Arthur Purdy, a long-time resident of the basin, stated he boated up to Chicken in 1918, that he once took a boat as far up as Kechumstuk Creek, and that there was "a fair amount of freight and commerce going up and down the South Fork". He last noted such activity in the 1930s. Miner and trapper Paul Bytell and his brother Jim supplied their cabin at Long Bar just below the confluence of the North and South forks from Steele Creek by boat. They may also have boated down from Chicken. Finally, John B. Mertie, Jr. noted in the same year that boats and launches traveled the river up to Steele Creek.

After the 1930s increased air travel completely or nearly completely eliminated boat travel on the Fortymile River for some years. However, in the 1970s and 1980s, the river again served miners as well as recreationists. From 1976 to 1981, 150 to 250 people annually traveled some portion of the drainage, usually in canoes, kayaks, or inflatables rafts. According to the BLM's Fortymile Area Office most only traveled the segment below the O'Brien Creek bridge. The segment below the Mosquito Fork and South Fork bridges was also frequently used.

Until 1980 the vast majority of these people floated the river solely for the travel experience. Since then suction dredging has come into prominence.

Most of these operations are accessed by trail, yet riverboats equipped with propeller or jet motors take miners to claims between Uhler Creek and the South Fork bridge and to claims below the bridge at O'Brien Creek.

North Fork -- To prospect in the Hutchinson Creek area in 1899, Basil Austin and a partner, following directions provided by others presumably familiar with the area, took their seventeen-foot boat up to an unnamed right bank tributary between Wilson and Hutchinson creeks. From Austin's description this tributary is probably that which enters the North Fork in Sec. 15, T. 7 S., R. 29 E., Fairbanks Meridian. While at Wilson Creek they saw other prospectors who had been to Slate Creek, descending the river in boats. Later Austin and his partner boated down from the unnamed creek. In 1900 Johannes Peterson and his partners pulled a boat with 3,000 to 8,000 pounds up to the Kink on repeated trips. In 1936 Paul and Jim Bytell had a boat at their trapping and prospecting cabin at the mouth of Wilson Creek. In 1973, Jules Tileston observed two boats with outboard motors at the lower end of the Kink. In the late 1970s and early 1980s about three parties each year floated the Middle Fork and North Fork from Joseph. Except for a float trip in 1982 from Slate Creek, there is no evidence of recent travel on the North Fork above the Middle Fork.

Commercial Craft: Poling boats and wooden riverboats were the customary commercial craft on the Fortymile River and other Yukon River tributaries at the date of Statehood. Propeller, not jet, motors were the standard boat engines at that time. Miners and trappers supplied their claims and headquarter sites on the Fortymile by poling boats beginning at least by the 1890s. These narrow, tapered boats were constructed of whipsawed lumber, measured twenty to thirty feet long with a two-and-one-half- to three-foot beam at the gunwales, and could carry as much as a ton. Riverboats were eighteen to twenty-four feet long and four to five feet wide with a flat bottom and square bow. They were constructed from wooden planks. The boats used on the Fortymile and its North, South and Mosquito forks in this century were of the poling boat and riverboat construction.

Seasonal Variation: Although seasonally low water made boating in the Fortymile drainage more difficult, it does not appear to have substantially hampered travel in the segments here determined navigable. Even just prior to freeze-up, miners would navigate the river.

Accessibility: In the late nineteenth and early twentieth centuries the Fortymile River was most commonly accessed from the Yukon. The now-deserted town of Fortymile grew up at the mouth of the river in Canada to serve as a commercial center and transshipment point. The Taylor Highway now offers access to the Fortymile at a bridge over Logging Cabin Creek, Milepost 49 on the West Fork of Dennison Fork, the Mosquito Fork above Chicken, the South Fork near Wall Street Creek, and the main stem at O'Brien Creek. A winter trail from the Taylor Highway reaches the Mosquito Fork near Kechumstuk. Wheeled planes can land at airstrips near Mitchel's Ranch on the Mosquito Fork, Joseph on the Middle Fork, near Gold Run Creek and Happy New Year Creek, tributaries of Slate Creek, and at several other locations downstream.

/s/ ROBERT W. FAITHFUL

Enclosure  
Map

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State of Ak. Nav. Proj.

## Memorandum

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTIN REPLY REFER TO:  
2628 (270)

TO : State Director (962)

FROM : District Manager, Fairbanks

SUBJECT: Fortymile River Navigability Report/Draft Navigability Policy

8304a.  
Date: April 15, 1983

Attached is the use information requested as a supplement to the Fortymile River navigability recommendations prepared by the Fortymile Resource Area. The data available primarily covered the years from the mid-1970's to the present, we believe that this adequately reflects river use.

In addition, a draft navigability policy document was transmitted for our review. Generally, the various criteria, legal opinions, and decisions included were considered in the formulation of our original Fortymile River navigability recommendations. It is our impression that the intent of the draft policy is to shift emphasis to certain navigability criteria, and away from other criteria. The object seemed to be towards determining more of the river navigable than would be justified under existing policy. However, partially due to the rough nature of the policy draft, we are uncertain as to whether or not a policy shift is actually being undertaken, and would appreciate clarification.

Whenever new navigability policy or guidelines are officially approved, we will, when requested, reevaluate our recommendations for the Fortymile River consistent with the new, approved policy.

We appreciate the opportunity to review the draft policy; we hope the supplemental information is adequate.

*Carl D Johnson*

Enclosure

*what about existing  
criteria & policy*

*has state contact  
made?*

SUPPLEMENTAL USE INFORMATION FOR THE  
FORTY MILE NAVIGABILITY REPORT

The following is a collection of post 1959 information on the Fortymile River. This information was collected at the request of the Alaska State Office, to supplement the Fortymile Navigability Report. The use information was collected from records and personal knowledge of the Fortymile Area staff.

Government Use

During the last few years the Bureau of Land Management has had an ongoing river patrol program. These trips were used to take inventories of structures, mining and recreational activities, vegetation, wildlife and various compliance checks.

Number of Government Float Trips by River Segment and Year

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
South Fork	6	10	6	11	6
Middle Fork	2	0	1	2	2
North Fork	0	0	0	0	1
Mosquito Fork	1	0	0	0	3
Other	0	0	-	2	2

All government use on the river system were one way float trips with rafts, canoes and kayaks. The graph breaks down the government use on the river by its major tributaries. Access was gained by various means.

The South Fork was accessed by the Taylor Highway at either the Mosquito Fork or South Fork bridges. The Middle Fork was accessed by the Joseph airstrip in T. 6S., R. 23 E., C.R.M. Alaska. This is the only access point for the Middle Fork. The Fortymile Bridge-to-Eagle trips were accessed via the Taylor Highway.

The North Fork was accessed by air at the Slate Creek Mine. Gear and boats were helicoptered a mile and a half to Slate Creek then floated to the North Fork. This access is restricted due to the private ownership of the airstrip at the mine. The only other access is via the airstrip at Gold Run Creek, which would require a 1 1/2 mile portage. The party and gear would have to float down Gold Run Creek to Slate Creek to the North Fork, which could only be done at high water. The only other access is by helicopter.

*see also for  
Mosquito FK?*

## Mining Use

There are a number of Federal placer claims along the Fortymile River and its tributaries. The Majority of these claims are accessed by cross-country moves, existing trails, and by over-the-ice moves. To accurately depict the mode of access to these claims, the following narrative is provided.

### South Fork

Starting at Chicken and going downstream, there is one mining operation on the left limit\* of the river. This operation is accessed via the Taylor Highway by trails and roads. The next claim block is located up Atwater Creek on the right limit of the river. Access is by cross-country move, crossing the ice on the South Fork approximately 1 mile upstream of the South Fork Bridge. The next block of claims start at the South Fork Bridge on the right limit and extend downriver. A claim block is also located on the left limit about 1/2 mile down from the bridge. These claims, known as Riffle Mining, are accessed by trails from the Taylor Highway.

In the past, the Napoleon Creek claims have been accessed by overland routes. However, these claims are presently being accessed by over-the-ice moves from the South Fork Bridge. There are claims located at Franklin, which have been accessed in the past by two overland routes, one from Chicken and the other from Steel Dome. There are no other active Federal placer claims on the South Fork.

### Main Stem

The only active claims are located below the Fortymile Bridge to the Canadian border. These claims are accessed by cross-country moves and trails in addition to over-the-ice moves. In the past, cross-country moves and trails were the preferred mode of access, but presently it has become more popular to use this segment of the Fortymile River in its frozen state as a transportation route.

There is one inactive placer claim on Long Bar approximately 3 miles downstream from the confluence of the South Fork and North Fork. It is anticipated that access to these claims would be by cross-country move from the Taylor Highway at Steel Dome.

\* left limit or right limit is determined when looking downstream.

## Middle Fork, North Fork, Mosquito Fork

The Middle and North Forks host no mining activity. The Mosquito has little mining activity, with those claims accessed by overland routes. However, those tributaries of the Mosquito, Middle, and North Forks in the Mt. Warbelow area are actively mined. Access to these tributaries is via trails and cross-country moves from Chicken.

Those claims located on tributaries of the South Fork and main stem, on the right limit, are accessed from the Taylor Highway via cross-country and trails. These tributaries include; Jack Wade, Gilliland Creek, Polly Creek, Canyon Creek, etc.

## Other Uses

As a practical matter, other uses may be separated into two types; recreational floating, and mining by suction dredgers. Below is a chart depicting the total number of these users on the Fortymile River. The figures are estimates obtained from resource area personnel.

### NUMBER OF OTHER USERS

### ON THE FORTY MILE RIVER

<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
250	250	150	150	150	250	500

## Suction Dredging

Previous to 1980 little suction dredging took place on the Fortymile. However, since 1980 there has been an increasing number of suction dredgers using the river, reaching the greatest numbers during the summer of 1982.

In 1982, the Bureau issued 23 permits for long-term camping on the Fortymile. These permits were issued to suction dredgers who were camping at one particular site for more than 10 days. There was an average of 5 people in the party at each permit site, totaling approximately 115 people. It should be pointed out that approximately the same number of people limited their stay at any one place to less than 10 days and did not need a permit. Roughly half of the river users in 1982 were suction dredgers. The majority of these were concentrated in two areas; the Mosquito Fork just above Chicken to the South Fork Bridge, and the main stem at and below the Fortymile Bridge at O'Brien.

Twenty-one of the 23 long-term camping permits were issued on the South Fork. Thirteen were issued on the Chicken to South Fork Bridge segment of the river. Access to these dredge sites were by trails and roads extending off the Taylor Highway.

198  
fig.

There were 8 permits issued below the South Fork Bridge to Uhler Creek. The camps were accessed by riverboats, both prop and jet, rafts, and canoes from the South Fork Bridge. The remaining 2 permits were issued below the Fortymile Bridge at O'Brien. Access was by riverboat.

Suction dredging on the Middle Fork and North Fork are virtually non-existent, with the exception of one suction dredger operating at the Kink. Supplies, equipment, and the party were flown into the campsite. The group did try to run the river to the Kink with a jetboat. However, they had to abandon this endeavor without reaching their destination, due to boat damage sustained on impassable portions of the river.

#### Recreational Floaters

The vast majority of the recreational users during 1976 to 1980 were recreational floaters. During 1980 the number of recreational floaters started to decrease and numbers of recreational miners began to increase. By 1981 only half of the total users were utilizing the river for recreational floating. It is estimated that 50% to 60% of the approximate 250 floaters who utilize the Fortymile River concentrate their activities on the main stem from the Fortymile Bridge to the Canadian border. Access to the river is via the Taylor Highway at the bridge.

The next most popular float trip is from the South Fork Bridge or Mosquito Fork Bridge to the Fortymile Bridge. Access is gained at either one of these bridges.

The Middle Fork of the Fortymile receives very light recreational use. On an average, 3 parties per year use this segment of the river and float to the confluence of the South Fork and North Fork, and on to the Fortymile Bridge. These trips are usually done at highwater, otherwise portaging and load lightening is necessary. Access to this segment of the river is via the Joseph Airstrip.

There has been no recorded recreational floating use of the upper section of the North Fork, due to limited public access.

#### Other Uses

Trapping of furbearing animals remains an important component of the lifestyle of the Fortymile area. Snow machines are used on trails or on the ice of the Fortymile River and its tributaries. Airplanes are also used for transportation of supplies and equipment.

