

**FEDERAL FISHERIES CLOSURE REVIEW**  
**FCR21-04**

**Closure Location:** Jim River—all fish

**Current Federal Regulation**

**Yukon-Northern Area**

§ \_\_.27(e)(3)

*(i) Unless otherwise restricted in this section, you may take fish in the Yukon-Northern Area at any time...You may subsistence fish for salmon with rod and reel in the Yukon River drainage 24 hours per day, 7 days per week, unless rod and reel are specifically otherwise restricted in this paragraph (e)(3).*

*(ii) For the Yukon River drainage, Federal subsistence fishing schedules, openings, closings, and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060 [Emergency Orders]), unless superseded by a Federal special action.*

\*\*\*

*(v) Except as provided in this section, and except as may be provided by the terms of a subsistence fishing permit, you may take fish other than salmon at any time.*

\*\*\*

*(viii) In Subdistrict 4A after the opening of the State commercial salmon fishing season, you may not take salmon for subsistence for 12 hours immediately before, during, and for 12 hours after each State commercial salmon fishing period; however, you may take Chinook salmon during the State commercial fishing season, with drift gillnet gear only, from 6:00 p.m. Sunday until 6:00 p.m. Tuesday and from 6:00 p.m. Wednesday until 6:00 p.m. Friday.*

\*\*\*

*(ix) You may not subsistence fish in the following drainages located north of the main Yukon River:*

\*\*\*

*(C) Jim River including Prospect and Douglas Creeks.*

\*\*\*

*(xiii) You may take salmon only by gillnet, beach seine, dip net, fish wheel, or rod and reel, subject to the restrictions set forth in this section.*

\*\*\*

*(xvii) Unless otherwise specified in this section, you may take fish other than salmon by set gillnet, drift gillnet, beach seine, fish wheel, long line, fyke net, dip net, jigging gear, spear, lead, or rod and reel, subject to the following restrictions, which also apply to subsistence salmon fishing:*

\*\*\*

*(B) You may not use an aggregate length of set gillnet in excess of 150 fathoms, and each drift gillnet may not exceed 50 fathoms in length.*

*(C) In Districts 4, 5, and 6, you may not set subsistence fishing gear within 200 feet of other fishing gear operating for commercial, personal, or subsistence use . . . .*

*(xviii) In District 4, from September 21 through May 15, you may use jigging gear from shore ice.*

**Closure Dates:** Year-round

**Current State Regulations**

**Yukon Area—Subsistence**

*5 AAC 01.225 Waters closed to subsistence fishing*

\*\*\*

*(b) The following drainages located north of the mainstem Yukon River are closed to subsistence fishing:*

\*\*\*

*(4) Jim River, including Prospect Creek and Douglas Creek;*

### **Yukon Area—Sport**

*5 AAC 73.010. Seasons, bag, possession, and size limits, and methods and means for Yukon River Area*

*(a) Except as otherwise specified in this section or through an emergency order issued under AS 16.05.060, sport fishing is permitted year round in the waters of the Yukon River Area.*

*(b) Except as otherwise specified in (c) of this section, the following are the general bag, possession, and size limits for finfish and shellfish in the waters of the Yukon River Area:*

*(1) king salmon 20 inches or greater in length: the bag and possession limit is three fish, of which only two fish may be 28 inches or greater in length;*

*(2) salmon, other than king salmon: the bag and possession limit is 10 fish, with no size limit;*

*(3) Arctic char/Dolly Varden and lake trout:*

\*\*\*

*(B) in all flowing waters: the bag and possession limit is 10 fish of all species combined, of which only two fish may be 20 inches or greater in length, and of which only two fish may be lake trout;*

\*\*\*

*(5) Arctic grayling: the bag and possession limit is five fish, with no size limit;*

*(6) sheefish: the bag and possession limit is 10 fish, with no size limit;*

*(7) northern pike: the bag and possession limit is 10 fish, with no size limit;*

*(8) burbot: the bag and possession limit is 15 fish, with no size limit;*

\*\*\*

*(c) The following are the exceptions to the general bag, possession, and size limits, and fishing seasons specified in (a) of this section for the Yukon River Area:*

*(4) in the Dalton Highway corridor (Trans-Alaska Pipeline corridor) within the Yukon River Area, which is described as a corridor five miles wide on each side of the Dalton Highway north of the Yukon River, excluding the Ray River,*

*(A) sport fishing for salmon is closed;*

*(B) lake trout may be taken only by catch-and-release fishing, and may not be possessed or retained; all lake trout caught must be immediately released;*

*(C) the bag and possession limit for northern pike is five fish, of which only one fish may be 30 inches or greater in length;*

### **Relevant Federal Regulations**

#### **§ \_\_.27 (b)**

*(16) Unless specified otherwise in this section, you may use a rod and reel to take fish without a subsistence fishing permit. Harvest limits applicable to the use of a rod and reel to take fish for subsistence uses shall be as follows:*

*\*\*\**

*(ii) Except as otherwise provided for in this section, if you are not required to obtain a subsistence fishing permit for an area, the harvest and possession limits for taking fish for subsistence uses with a rod and reel are the same as for taking fish under State of Alaska subsistence fishing regulations in those same areas. If the State does not have a specific subsistence season and/or harvest limit for that particular species, the limit shall be the same as for taking fish under State of Alaska sport fishing regulations.*

### **Relevant State Regulations**

#### **Yukon Area—Subsistence**

#### **5 AAC 01.230. Subsistence fishing permits**

*(a) Except as provided in this section and 5 AAC 01.249, fish may be taken for subsistence purposes without a subsistence fishing permit.*

**Regulatory Year Initiated:** 1992

**Regulatory History**

In 1992, the Federal Subsistence Management Program promulgated regulations governing the harvest of fish for subsistence uses in non-navigable waters within and adjacent to Federal public lands (57 Fed. Reg. 22940 [May 29, 1992]). These regulations incorporated many provisions from State of Alaska subsistence fishing regulations. The closure under review in this analysis was incorporated into the Federal regulations in this manner, and has not been subsequently modified. In 1999, the Federal Subsistence Board adopted Federal regulations for fish in navigable waters, in addition to non-navigable waters (64 Fed. Reg. 1276 [January 8, 1999]).

**Customary and Traditional Use Determination**

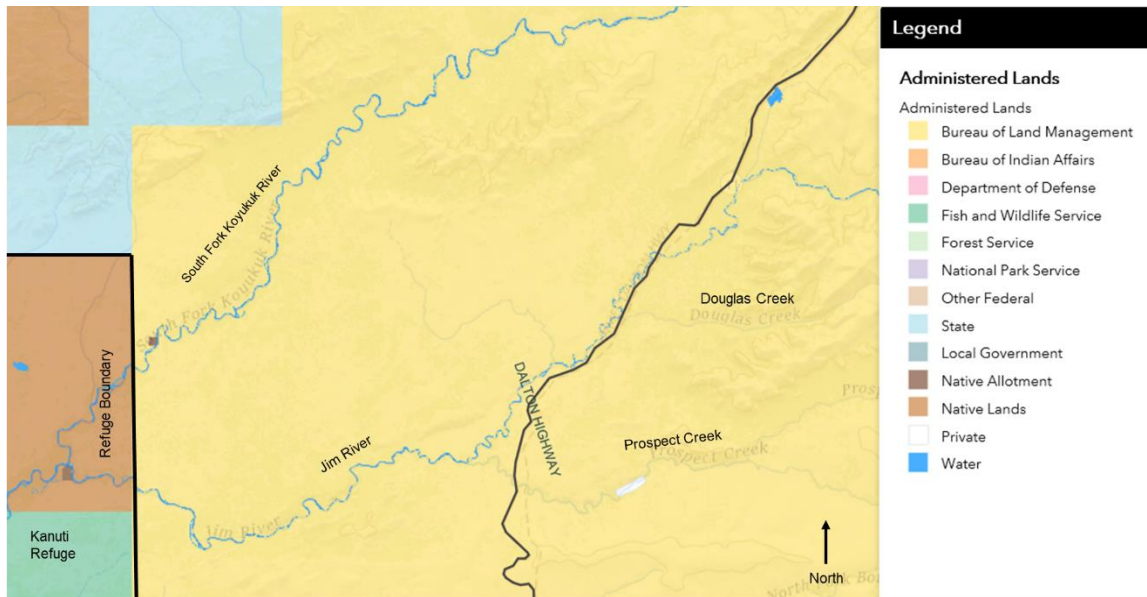
Residents of the Yukon River drainage and the community of Stebbins have a customary and traditional use determination for salmon, other than fall chum salmon, in the Yukon River drainage.

Residents of the Yukon River drainage and the communities of Chevak, Hooper Bay, Scammon Bay, and Stebbins have customary and traditional use determination for fall Chum Salmon in the Yukon River drainage.

Residents of the Yukon-Northern Area have a customary and traditional use determination for freshwater species other than salmon in the Yukon River drainage.

**Extent of Federal Public Lands/Waters**

For purposes of this analysis, the phrase “Federal public waters” is defined as those waters described under 36 CFR §242.3 and 50 CFR §100.3. Approximately three miles of Jim River exist within the Kanuti Refuge boundary, managed by the U.S. Fish and Wildlife Service (**Figure 1**). The remainder of the Jim River, Prospect and Douglas Creeks are on general domain land managed by the Bureau of Land Management (BLM). On general domain lands managed by the BLM, these regulations apply only to non-navigable waters.



**Figure 1.** Lower Jim River drainage land ownership (BLM 2020).

**Closure last reviewed**

There has been no previous closure review.

**Justification for Original Closure (ANILCA Section 815 (3) criteria)**

Section §815(3) of ANILCA states:

*Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law.*

The Federal Subsistence Management Program justification for the original closure in Federal regulations was to minimize disruption to the State’s continuing fish and game management, because of the uncertainty over the resumption of State management of subsistence, yet still fulfill the requirements of the Title VIII of ANILCA (55 FR 27114, June 29, 1990).

**Council Recommendation for Original Closure:**

N/A

**State Recommendation for Original Closure:**

N/A

## **Biological Background**

Coho, Chum, and Chinook Salmon are known to spawn and rear in the Jim River. Aerial surveys have been flown sporadically from 1960 to 2015 to count Chinook and Chum salmon in the Jim River (ADF&G 2020a). The 1960 to 2015 average count of live Chinook Salmon is 120 fish with a range of 0-358 fish. The average number of Chinook Salmon carcasses for these same years is 13 with a range of 0-126. Summer Chum Salmon averaged 278 live fish (range 0-1,484) and 116 carcasses (range 0-1,690). Fall Chum Salmon averaged 103 live fish (0-1,057), and 41 carcasses (0-672). During 2009-2012, and 2015, a mean of 183 Chinook Salmon and 462 Chum Salmon were counted per year (ADF&G 2020a). There is not an escapement goal for any salmon species in this drainage.

According to the Alaska Freshwater Fish Inventory, the predominant resident species found in the Jim River drainage include Arctic Grayling, Burbot, Round Whitefish, and Slimy Sculpin (ADF&G 2020b). Information is limited on Burbot, Round Whitefish, and Slimy Sculpins. In addition, the possibility exists to find a few other species occurring in the drainage, such as Northern Pike and other whitefish species.

Arctic Grayling are found throughout the Jim River drainage. Current population data for Arctic Grayling in the Jim River is lacking; however, radio telemetry and demographic studies were performed in the 1990s. The estimated number of fish found in a 6.4 km stretch of Prospect Creek near the Dalton Highway was 770 fish with a density of 120 fish/km in 1995 (Fish 1997). The Jim River population was estimated in 1995 and again in 1997. In 1995, the Jim River estimates came from a 10km stretch near the Dalton Highway and were between 5,100 and 5,400 Arctic Grayling >150mm with a density around 240 fish/km. A sample of Arctic Grayling were aged, with an age range between 2 and 15 years. Approximately 32% of the population was 5 years old, the most common age reported from this study (Fish 1997). A similar study was completed in 1997, estimating around 12,000 Arctic Grayling >150 mm over a 21.3 km section of the river located near the Dalton Highway, a density of 566 fish/km. The sampled fish ranged from 2-16 years old, with 19% of the samples being 5 years old, the most common age in during this study (Fish 1997).

## **Cultural Knowledge and Traditional Practices**

### Wiseman and Coldfoot

Wiseman and Coldfoot fall within the traditional boundaries of the Koyukon Athabascan people, and both were established as town sites as the result of the gold mining industry. Wiseman's population was 320 in 1916 but declined to an estimated population of 11 by 2018 (Holen et al. 2012; ADLWD 2019). The population of Coldfoot peaked at 350 between 1902 and 1904, but was completely abandoned by 1930 (Holen et al. 2012). The site was re-established in the 1970s as a result of the construction of the Dalton Highway and the Trans-Alaska Pipeline. As of 2018 there were an estimated eight full-time residents in Coldfoot (ADLWD 2019). The area also includes a small number of residents along the Dalton Highway Corridor in camps, and other isolated households.

Wiseman is a Resident Zone Community of the Gates of the Arctic National Park. In 2011, the only year in which subsistence surveys were conducted, all residents of Wiseman participated in subsistence activities and the per capita harvest of wild resources was 294 pounds (Holen et al. 2012). Eighty-five percent of the community participated in subsistence fishing, and everyone in the community used fish, although in small quantities. Because of local closures, Wiseman residents harvest their salmon from other locations, such as the Copper and Yukon rivers (Holman et al. 2012). Only Sockeye Salmon were harvested, at 12 pounds per capita. No Chinook Salmon were harvested by Wiseman residents that year. However, Chinook Salmon were shared with residents by fishers from outside the community, then distributed among residents.

Wiseman has a documented use and search area for non-salmon fish on the Jim River, within and adjacent to the Dalton Highway Corridor. Wiseman harvested 13 pounds per capita of non-salmon fish in 2011, including Arctic Grayling, Longnose Suckers, and Burbot. According to Holen et al.:

Since the salmon fishing closure was initiated, non-salmon fish have become even more important to Wiseman residents. During the summer months many community members engage in rod and reel fishing for Arctic Grayling and whitefishes along the Koyukuk and Jim rivers in the vicinity of Wiseman (2012: 369).

**Table 1:** Estimated number of nonsalmon fish and corresponding pounds per person harvested by residents of Wiseman in 2011 (ADF&G 2020).

<b>Fish species</b>	<b>Estimated number of fish</b>	<b>Pounds per person</b>
Grayling	111	5.97
Sucker	40	2.15
Whitefish	25	0.96
Char	11	1.10
Burbot	9	1.66
Lake Trout	9	0.96
Northern Pike	4	1.38
Dolly Varden	2	0.13

In 2011, 88% of Coldfoot residents participated in efforts to harvest wild resources. Coldfoot residents are mostly focused on harvesting large land mammals. During the survey year, no residents of the community fished, but 25% of the community received salmon from residents of other communities.

### Evansville and Bettles

Like Wiseman and Coldfoot, Evansville and Bettles fall within the traditional territory of the Koyukon Athabascans. Both communities are sparsely populated today. In the late 1800s, members of several different groups, including Upper and Middle Koyukon, Kobuk Inupiat, prospectors, and traders moved to the area (Holen et al. 2012), and established an intermixed community. In 1945 a U.S. Navy airstrip was built at Bettles Field, five miles upstream of “Old Bettles” (Holen et al. 2012).

Construction on the airstrip drew people back into the area. Evansville was established as a mixed, primarily Alaska Native settlement, adjacent to Bettles Field. Evansville can only be reached by plane



during most of the year, although an ice road connects it to the Dalton Highway between January and March (Holen et al. 2012). In 2018, Evansville had an estimated population of eight and Bettles had an estimated population of 11 (ADLWD 2019).

In the 2011 subsistence surveys, 85% of Evansville residents participated in gathering wild resources. Harvest effort for most resources focused on the area in the immediate vicinity of Evansville; however, this is not the case for salmon, which are not abundant in the vicinity of Evansville or Bettles. According to Holen et al.: “The Koyukuk River is a principal tributary of the Yukon River and Evansville’s position on the most northern branch of the Koyukuk River means that relatively few spawning salmon survive the migration to reach the vicinity of Evansville on the South Fork” (2012: 255-256).

Salmon reaching the vicinity of Evansville have historically been of poor quality, and were used primarily to feed dogs. When use of dog teams declined, so did local salmon fishing efforts. In 2011, eight percent of households participated in salmon fishing, and salmon made up 14% of the wild resource harvest by weight (Holen et al. 2012). However, the entire salmon harvest came from locations quite distant to Evansville, perhaps due to especially poor runs on the Yukon and its tributaries near Evansville. In 2011, nonsalmon fish were taken in the vicinity of Evansville, as well as from lakes to the north of the village. Nonsalmon fish caught include Lake Trout and Arctic Grayling.

Evansville residents stated that local fish are now of extremely low quality, which they attribute to warming river temperatures as well as increased levels of silt and debris in the water. Some residents noted that over-regulation of set nets have prevented people from following traditional fishing practices in their area (Holen et al. 2012).

Bettles, adjacent to Evansville, is located on the margin of the Kanuti National Wildlife Refuge. In 2011, 88% of residents participated in harvesting wild resources, and 100% used these resources (Holen et al. 2012). In 2011, 13% of residents fished for salmon, catching only Chum Salmon. More people (25%) fished for nonsalmon fish, including Arctic Grayling, Northern Pike, and Lake Trout (Holen et al. 2012).

### **Harvest History**

There is no legal Federal or State subsistence harvest in the Jim River drainage. However, it is open to sport fishing. During years when sport fishing for Chinook Salmon isn’t closed or restricted by Emergency Order, Chinook Salmon can be harvested with a limit of 3 per day, 3 in possession over 20 inches (only 2 can be over 28 inches), and 10 per day, 10 in possession for under 20 inches). Other salmon (Chum and Coho are the species most likely to be encountered) have a 10 per day, 10 in possession limit. Arctic Char, Dolly Varden, and Lake Trout can be harvested in the Jim River with a limit of 10 per day, 10 in possession (only 2 can be 20 inches or longer). Grayling have no size limit and have a limit of 5 per day, 5 in possession. Sheefish and Northern Pike have a limit of 10 per day, 10 in possession. In addition, Burbot have a 15 per day, 15 in possession limit on the river.

The Jim River crosses the Dalton Highway Corridor. In this area, sport fishing for salmon is closed. In addition, retention of Lake Trout is prohibited and the limit of Northern Pike is 5 per day, 5 in possession (only one of which may be 30 inches or longer).

There is no subsistence harvest to report in this system as it is closed to subsistence fishing. However, the regional Federal subsistence regulations for the Yukon Area would apply if the closure is removed. Fishing for salmon would be allowed, and Federal subsistence fishing schedules, openings, closings, and fishing methods would be the same as those issued by State emergency order for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by a Federal special action. Salmon could be taken by gillnet, beach seine, dip net, fish wheel, or rod and reel. Fish other than salmon could be taken under any gear listed in the fishing regulations. Subsistence rod and reel harvests would be limited by State sport fishing harvest and possession limits.

### **OSM PRELIMINARY CONCLUSION**

- maintain status quo**
- modify or eliminate the closure**

The preliminary conclusion is to modify the closure in order to allow Federally qualified subsistence users to use rod and reel to harvest fish in the Federal waters of Jim River, Prospect Creek, and Douglas Creeks. Limits would be the same as those listed under the ADF&G sport fishing regulations.

#### **The modified regulation should read:**

##### **Yukon-Northern Area;**

§ \_\_.27(ix)(C)

\*\*\*

*(ix) You may not subsistence fish in the following drainages located north of the main Yukon River:*

\*\*\*

*(C) ~~Jim River including Prospect and Douglas Creeks.~~*

\*\*\*

(xii) *You may take salmon only by gillnet, beach seine, dip net, fish wheel, or rod and reel, subject to the restrictions set forth in this section.*

\*\*\*

**(D) *In the Jim River including Prospect and Douglas Creek, by rod and reel only.***

\*\*\*

(xvii) *Unless otherwise specified in this section, you may take fish other than salmon by set gillnet, drift gillnet, beach seine, fish wheel, long line, fyke net, dip net, jigging gear, spear, lead, or rod and reel, subject to the following restrictions, which also apply to subsistence salmon fishing:*

\*\*\*

**(G) *In the Jim River including Prospect and Douglas Creek, by rod and reel only.***

## **Justification**

Currently this drainage is closed fishing by Federally qualified subsistence users and remains open to other uses. There is likely a small amount of harvest under restricted State sport fishing, predominately near the Dalton Highway. This system should be open to limited subsistence harvest. If this closure is modified to open to subsistence harvest, OSM recommends the harvest be restricted to rod and reel and low harvest and possession limits on salmon in order to protect healthy populations in the system.

## **LITERATURE CITED**

ADF&G. 2000. Community subsistence information system, ADF&G Div. of Subsistence. <https://www.adfg.alaska.gov/sb/CSIS/>. Retrieved June 2, 2020.

ADF&G. 2020a. AYK data base management system. Available online at: [https://www.adfg.alaska.gov/CF\\_R3/external/sites/aykdbms\\_website/Default.aspx](https://www.adfg.alaska.gov/CF_R3/external/sites/aykdbms_website/Default.aspx)

ADF&G. 2020b. Alaska freshwater fish inventory. Available online at: <https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.interactive>. Retrieved July 17, 2020.

ADF&G. 2020c. Yukon River drainage sport fishing regulations. Available online at: [http://www.adfg.alaska.gov/static/regulations/fishregulations/PDFs/northern/2020northern\\_sfregs\\_yukon.pdf](http://www.adfg.alaska.gov/static/regulations/fishregulations/PDFs/northern/2020northern_sfregs_yukon.pdf)

ADLWD: Alaska Department of Labor and Workforce Development, Research and Analysis Section. 2019. Alaska population overview: 2018 Estimates. <https://live.laborstats.alaska.gov/pop/estimates/pub/18popover.pdf>

Bureau of Land Management. 2020. Bureau of Land Management online mapping tool.

<https://www.arcgis.com/apps/webappviewer/index.html?id=e84f3526f6ab4299a229bedad0626550&extent=-20004640.4804%2C7462403.0538%2C-12568846.3688%2C11708632.8491%2C102100>. Retrieved: July 16, 2020.

Fish, J. T. 1997. Stock assessment of Arctic grayling in the Jim River and other streams adjacent to the Dalton Highway, 1995 – 1997. Alaska Department of Fish and Game, Fishery Manuscript Series No. 97-3, Anchorage, Ak.

Holen, D., S.M. Hazell, and D.S. Koster, eds. 2012. Subsistence harvests and uses of wild foods by communities in the eastern Interior of Alaska, 2011. ADF&G, Division of Subsistence Technical Paper No. 372. Anchorage, AK.