

## FP25-10 Executive Summary

<p><b>General Description</b></p>	<p>Proposal FP25-10 requests that the Federal Subsistence Board remove the Bristol Bay area-wide closure to the taking of fish within 300 feet of the mouths of streams used by salmon. <i>Submitted by: Bristol Bay Native Association.</i></p>
<p><b>Proposed Regulation</b></p>	<p><b>§ __.27(e)(5) Bristol Bay Area</b></p> <p style="text-align: center;">* * *</p> <p><i>(ii) You may not take fish from waters within 300 feet of a stream mouth used by salmon.</i></p>
<p><b>OSM Conclusion</b></p>	<p><b>Support</b> Proposal FP25-10 with <b>modification</b> to allow the harvest of nonsalmon fish species at the mouths of rivers, streams, and creeks and prohibit the harvest of salmon.</p> <p>The modified regulation should read:</p> <p><b>§ __.27(e)(5) Bristol Bay Area</b></p> <p style="text-align: center;">* * *</p> <p><i>(iv) You may not take <del>fish</del> <b>salmon</b> from waters within 300 feet of a stream mouth <del>used by salmon.</del></i></p>
<p><b>Bristol Bay Subsistence Regional Advisory Council Recommendation</b></p>	
<p><b>Interagency Staff Committee Comments</b></p>	
<p><b>ADF&amp;G Comments</b></p>	
<p><b>Written Public Comments</b></p>	<p>None</p>

**DRAFT STAFF ANALYSIS**  
**FP25-10**

**ISSUES**

Proposal FP25-10, submitted by the Bristol Bay Native Association, requests that the Federal Subsistence Board (Board) remove the Bristol Bay area-wide closure to the taking of fish within 300 feet of the mouths of streams used by salmon.

**DISCUSSION**

The proponent states that taking many different fish species near stream mouths is a common, year-round practice for multiple user groups. The proponent further states that the intent for conservation can be achieved by the existing regulation, “*Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses*” (50 CFR 100.27(b)(4)).

**Existing Federal Regulation**

§ \_\_.27(e)(5) *Bristol Bay Area*

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(ii) *You may not take fish from waters within 300 feet of a stream mouth used by salmon.*

**Proposed Federal Regulation**

§ \_\_.27(e)(5) *Bristol Bay Area*

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~~(ii) *You may not take fish from waters within 300 feet of a stream mouth used by salmon.*~~

**Existing State Regulation**

*Article 6—Bristol Bay Area*

*AAC 01.325. Waters closed to subsistence fishing*

(a) *Except for the western shore of the Newhalen River, waters within 300 feet of a stream mouth used by salmon are closed to the subsistence taking of fish.*

**Relevant Federal and State Regulation**

These regulations are listed in **Appendix 1**.

## **Extent of Federal Public Lands/Waters**

For purposes of this discussion, the phrase “Federal public waters” is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. Federal public waters of the Bristol Bay Area comprise fresh waters within and adjacent to the Togiak National Wildlife Refuge, Becharof National Wildlife Refuge, Alaska Peninsula National Wildlife Refuge, Alagnak Wild and Scenic River corridor, Katmai National Preserve, and Lake Clark National Park and Preserve. Most of Katmai National Park and Preserve is closed to subsistence uses. On general domain lands managed by the Bureau of Land Management in the Bristol Bay Area Federal subsistence regulations apply only to non-navigable waters (**Figure 1**). Bristol Bay commercial salmon districts are not in Federal fisheries management jurisdiction.

## **Customary and Traditional Use Determinations**

Residents of the Nushagak District and the freshwater drainages flowing into the district have a customary and traditional use determination for salmon and freshwater fish in the Nushagak District including drainages flowing into the district (see **Figure 2**).

Residents of the Naknek and Kvichak river drainages have a customary and traditional use determination for salmon and freshwater fish in the Naknek River drainage.

Residents of the Kvichak River drainage have a customary and traditional use determination for salmon and freshwater fish in the Kvichak River drainage.

Residents of the Togiak District, freshwater drainages flowing into the district, and the community of Manokotak have a customary and traditional use determination for salmon and freshwater fish in the Togiak District, including drainages flowing into the district.

Residents of South Naknek, the Egegik District, and freshwater drainages flowing into the district have a customary and traditional use determination for salmon and freshwater fish in the Egegik District, including drainages flowing into the district.

Residents of the Ugashik District and freshwaters drainages flowing into the district have a customary and traditional use determination for salmon and freshwater fish in the Ugashik District, including drainages flowing into the district.

Residents of the Bristol Bay Area have a customary and traditional use determination for all fish in the remainder of the Bristol Bay Area.



Figure 1. Map of Bristol Bay Fisheries Management Area (ADF&G 2024).



## **Regulatory History**

### Background

Understanding the background of sport, commercial, and subsistence regulations helps us understand why they were adopted by the U.S. Fish and Wildlife Service before Alaska statehood, the State of Alaska, and the Federal Subsistence Management Program.

The Bristol Bay area is unique in that it has a combination of some of the world's largest salmon runs as well as large numbers of game fish. As a result, both commercial and sport fishing industries are well developed in the area. These fisheries are easy to access relative to other areas of rural Alaska off the road system by way of long runways where jets can land at King Salmon, Iliamna, and Dillingham. Fishing lodges, guiding services, and air taxis are commonly located nearby these communities (Dye and Borden 2018, Elison et al. 2023). Fishing regulations have therefore had to find a compromise between these growing industries and subsistence.

From the late 1970s to mid-1980s, the recreational freshwater sport fishery in Bristol Bay rapidly increased, putting pressure on fish stocks. For example, freshwater sport fishing effort in the Nushagak watershed had a phenomenal increase once professional sport fishing guides discovered the area's Chinook Salmon runs. Region-wide, sport freshwater bag and size limits as well as area and season restrictions were implemented for game fish targeted by sport fishermen. Subsistence fishing in some areas was closed to avoid large harvests of game fish species (Nelson 1987, Dye and Borden 2018).

Sport fishery managers were concerned about the effects of subsistence fisheries on game fish, especially Rainbow Trout, for which the area is known for its abundance and very large fish. Sport regulations for Rainbow Trout are very restrictive including low harvest limits of one or two fish with unbaited, single hook artificial lures or catch-and-release fishing to maintain healthy stocks. Until 1994, under State management a customary and traditional use determination for Rainbow Trout had not been adopted, and subsistence regulations could not be implemented. Subsistence regulations restricting the possible harvest of Rainbow Trout reflected this prohibition. Since 1993 in State regulations, Rainbow Trout caught incidentally to other species may be retained by subsistence users, and in 1994 subsistence uses of Rainbow Trout by Bristol Bay residents were recognized by the State (Dye and Borden 2018).

In 2003, in response to these restrictive State regulations, described above, the Federal Subsistence Board adopted regulations allowing rod and reel subsistence harvest of Rainbow Trout with harvest limits in federally managed subsistence fisheries in the Bristol Bay Area (§ \_\_\_\_ .27(e)(5)(xiii) and (xiv); 68 Fed. Reg. 29, 7277 [February 12, 2003]; see regulation in **Appendix 1**).

At the same time, increasing compliance with subsistence salmon harvest permit requirements (implemented in 1963) gave fishery managers a tool to measure the harvest of salmon for subsistence, and in the 1980s subsistence harvests in the Nushagak District specifically was shown to be increasing, especially for Chinook Salmon, primarily due to increased fishing effort, local population increases, and

yearly influx of non-watershed participants in the subsistence fishery.<sup>1</sup> Commercial fishery managers were concerned about the effects of increasing subsistence and sport salmon harvests on salmon escapement and commercial fishing (Nelson 1987).

See more **Background** information under Regulatory History in the analysis of Proposal FP25-11, a request to include drift gillnets, beach seines, and dip nets to legal methods and gear types in the Bristol Bay Area.

### Regulations

In 1934 the U.S. Bureau of Fisheries implemented a “personal use” salmon fishing regulation specifically prohibiting the use of dams, barricades, fences, traps, fish wheels, or other obstructions where streams were less than 1,000 feet wide or within 500 yards of the mouth of any creek, stream, or river into which salmon run in Alaska (except the Karluk, Ugashik, Kuskokwim, and Yukon rivers). Personal use meant salmon harvested for personal use and as dog food (Seitz 1990).

In 1960 after statehood, the Alaska Department of Fish and Game (ADF&G) inherited U.S. Fish and Wildlife Service “personal use” regulations, which they codified in State regulations as “subsistence” (Nelson 1987, Seitz 1990).

In 1965, ADF&G implemented the regulation that is the focus of this analysis, “*Waters within 300 feet of any stream mouth utilized by salmon are closed to all subsistence fishing*” (5 AAC 01.325, Seitz 1990).

In 1980, ADF&G implemented a regulation that affected residents of the Lake Iliamna area, “*From September 1 through June 14, subsistence fishing with a net is prohibited in the following waters and within one-fourth mile of the terminus of those waters. . .*”, which includes a list of 18 streams that drain into Iliamna Lake (5 AAC 01.325<sup>2</sup>; see regulation in **Appendix 1**). The intent of this regulation was to protect Rainbow Trout in these streams from harvest by residents for subsistence purposes with nets that when used efficiently can take many more fish than other methods such as by ice fishing. At the same time, more enforcement of these regulations at the Newhalen River lagoon, an area used by many residents to harvest fish, resulted in an outpouring of opposition to these regulations (Morris 1986).

In 1981, because of this opposition, described above, the State regulation was modified, “***Except for the western shore of the Newhalen River, waters within 300 feet of a stream mouth used by salmon are closed to the subsistence taking of salmon***” (5 AAC 01.325(a)<sup>3</sup>; new language emphasized in bold; **Appendix 1**). This allowed the subsistence fishery at the mouth of the Newhalen River to legally continue.

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<sup>1</sup> In 1985 all residents of Alaska became eligible to subsistence fish in the Bristol Bay Region under State regulations until 1986 (Madison v. ADF&G 696 P.2d 168 1985). In 1989 the State recognized all residents of Alaska as subsistence users and therefore eligible to participate in any State subsistence fishery, including in the Bristol Bay Region (McDowell v. State of Alaska 785 P.2d 1 1989).

<sup>2</sup> State of Alaska July 1980 Register 74 page 5-16.

<sup>3</sup> State of Alaska July 1982 Register 82, page 5-16.



In 1992, the Federal Subsistence Management Program promulgated regulations governing the harvest of fish for subsistence uses in Federal non-navigable public waters. These regulations included, “*Except for the western shore of the Newhalen River, waters within 300 feet of a stream mouth used by salmon are closed to the subsistence taking of salmon*” that was adopted from State regulations (§\_\_\_26(e)(5)(xiii)<sup>4</sup>).

Between 1992 and 1997, the Federal Subsistence Board adopted a statewide regulation allowing the harvest of fish by rod and reel with harvest limitations (§\_\_\_100.27(b)(16); 62 Fed. Reg. 242, 66238 [December 17, 1997]; **Appendix 1**)

In 1999, the Board revisited Federal subsistence fishing regulations with an eye to adopting regulations to apply on navigable waters in addition to non-navigable waters. To reduce confusion, the Board also eliminated regulations covering areas where there is no Federal jurisdiction. The regulation at §\_\_\_26(e)(5)(xiii) was revised to “*You may not take fish from waters within 300 feet of a stream mouth used by salmon.*”<sup>5</sup> The exception of the Newhalen River was removed from the regulation because these waters are outside of Federal subsistence fishing jurisdiction.

In 2003, the Board agreed with the Bristol Bay Regional Advisory Council recommendation and adopted a regulation that allows the take of Rainbow Trout in the Bristol Bay Area by rod and reel or jigging gear,<sup>6</sup> daily harvest limit of two per day/two in possession with no size limit from April 10 through October 31 and five per day/five in possession with no size limit from November 1 through April 9. Additionally, if you take Rainbow Trout incidentally in other subsistence net fisheries, or through the ice, you may retain them for subsistence purposes (§\_\_\_27(e)(5)(xiii) and (xiv); 68 Fed. Reg. 29, 7277 [February 12, 2003]). The proposal was submitted by the Bristol Bay Council (OSM 2002).

In 2021, the Bristol Bay Native Association submitted a proposal, FP21-08, identical to this proposal, FP25-10, to remove the regulation, “*You may not take fish from waters within 300 feet of a stream mouth used by salmon*” (§\_\_\_26(e)(5)(xiii)). The Bristol Bay Council said the proposal was too broad in scope and did not address specific issues stemming from salmon management and conservation concerns (OSM 2021). The Board rejected the proposal when it adopted Council recommendations for all the proposals on its consensus agenda with no commentary (OSM 2021).

The prohibition against fishing within 300 feet of stream mouths does not exist in the Federal subsistence regulations or State subsistence regulations for any of the other 12 fisheries management areas in Alaska.

Currently, the harvest of fish within 300 feet of a stream mouth used by salmon is legal under only State sport fishing regulated legal gear and harvest limits, ice fishing included. This regulation that was implemented to protect salmon escapements also affects the ability of subsistence users to harvest nonsalmon fish using traditional methods such as by ice fishing at the mouths of streams.

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<sup>4</sup> 57 Fed. Reg. 103, 22564 (May 28, 1992).

<sup>5</sup> 64 Fed. Reg. 64; 1284 (January 8, 1999)

<sup>6</sup> Jigging gear means a line or lines with lures or baited hooks, drawn through the water by hand, and which are operated during periods of ice cover from holes cut in the ice, or from shore ice and which are drawn through the water by hand (§\_\_\_100.25(a) Definitions).



Fines for exceeding bag limits in State sport fishing regulations vary around the state. In the Bristol Bay Area, the fine may be up to \$100 plus \$20 per fish over the bag limit. Nets, fishing tackle, vehicles, sleds, or fish harvest may be seized. Law enforcement may issue a warning (5 AAC 95.700; AS 15.05.160; AS.16.05.190). Information about the number Bristol Bay residents that have been cited was not readily available.

### **Current Events Involving the Species**

Three other proposals were submitted regarding closures and methods and gear types for harvesting salmon for subsistence. Proposal FP25-12 seeks to add snagging (by handline or rod and reel), cast net, spear, bow and arrow, or capturing by bare hand to legal methods and gear types in the Togiak area. Proposal FP25-14 seeks to add drift gillnets, beach seines, and dip nets to legal methods and gear types in the Bristol Bay Area. Proposal FP25-13 seeks to allow set gillnets up to 25 fathoms in the Egegik River.

Additionally, on January 11, 2024, the Wild Fish Conservancy submitted a petition to the U.S. Department of Commerce and National Oceanic Atmospheric Administration (NOAA) to list Alaskan Chinook Salmon as a threatened or endangered species and to designate critical habitat, pursuant to the Endangered Species Act (ESA). The petition cited the effects of roads, mining, pollutants, and other habitat degradation, overutilization for commercial and recreational purposes, and disease and predation as primary factors that warranted listing. The petition also claimed existing regulatory mechanisms may be inadequate to protect Chinook Salmon populations that enter the marine environment of the Gulf of Alaska.

On May 24, 2024, the National Marine Fisheries Service (NMFS) published in the Federal Register their 90-day finding and determined the petition contained substantial information indicating the petitioned action may be warranted (89 Fed. Reg. 102, 45815 [May 24, 2024]).<sup>7</sup> This 90-day finding moved the petition forward to a 12-month status review process, which is a comprehensive review of the best available scientific and commercial information. The finding at the 12-month stage is based on a more thorough review of the available information, as compared to the narrow scope of review at the 90-day stage.<sup>8</sup>

### **Biological Background**

There are numerous fish stocks in the Bristol Bay Area that are targeted by subsistence, sport, and commercial fisheries. In general, all salmon stocks are in a productive period. There are only a few major monitoring projects for in-season abundance in freshwaters and other run indicators used by for managing the commercial salmon harvest in marine waters. There are no specific conservation concerns to report

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<sup>7</sup> <https://www.federalregister.gov/documents/2024/05/24/2024-11381/endangered-and-threatened-wildlife-90-day-finding-on-a-petition-to-list-gulf-of-alaska-chinook>

<sup>8</sup> Information on the status of this review process can be found by going to [www.regulations.gov](http://www.regulations.gov) and searching for agency docket # 240520-0140. For additional information contact Julie Scheurer, NMFS Alaska Region, [Julie.scheurer@noaa.gov](mailto:Julie.scheurer@noaa.gov), (907) 586-7111; or Heather Austin, NMFS, Office of Protected Resources, [heather.austin@noaa.gov](mailto:heather.austin@noaa.gov), (301) 427-8422.

currently for Sockeye, Pink, Chum, and Coho salmon. However, some runs of Chinook Salmon have been depressed for many years. In October 2022, Alaska Department of Fish & Game (ADF&G) recommended that the Nushagak River Chinook Salmon be listed as a stock of management concern at the Bristol Bay Area Alaska Board of Fisheries meeting held in November 2022. This prompted the Alaska Board of Fisheries to adopt the Nushagak River King Salmon Action Plan. The inriver run goal for Chinook Salmon in the Nushagak River is 95,000 and has not been met six of the last seven years. The sustainable escapement goal (SEG) of 55,000 to 120,000 also was not met in four of the last six years (Nushagak River King Salmon – Stock Status and Action Plan 2022).

Other nonsalmon species important to the Bristol Bay region are game species such as Rainbow Trout, which occupy many of the river and lake systems throughout the region. Rainbow Trout are known to gather and travel along with migrating salmon and can congregate in large numbers along with salmon. Dolly Varden, Arctic Char, Arctic Grayling, and Northern Pike are another important fish for the region that are harvested for subsistence and by sport anglers.

### Arctic Grayling

Arctic Grayling *Thymallus arcticus* inhabit clear, cold streams and lakes in the Bristol Bay region. They are a slow-growing fish that reach 12 inches in length by six or seven years of age. The Bristol Bay Area, especially the Ugashik lake system, is known for its trophy-sized grayling. Arctic grayling over winter in deep water. In April and May, they move upstream to tributaries to spawn. Adult fish then swim further upstream and establish territories in pools in summer. In September, the Arctic Grayling begin moving downstream to over wintering areas in deep water. Their tolerance of low dissolved oxygen levels allows grayling to survive the long winters in areas where many salmonids would die. Like salmon, grayling faithfully return every year to the same spawning and feeding areas (Morrow 1980, Ashley 1994a).

### Blackfish

Blackfish *Dallia pectoralis* are a small (average length eight inches) fish that inhabit densely vegetated areas of ponds, rivers, and lakes in the Bristol Bay drainage. They grow slowly and may live up to eight years. Blackfish are bottom dwellers that feed primarily on insects. They spawn from May to August. These fish move between summer habitat in tundra ponds and winter habitat in deeper lakes. The Alaska blackfish are unique because they have a modified esophagus capable of gas absorption, meaning they can exist off atmospheric oxygen. The existence of an air-breathing fish in arctic regions at first seems unlikely as most oxygen problems in the water would be expected to occur in winter--a time when air breathing would not appear to be of any advantage because of the ice cover. However, this capability allows these little fish to live in the small, stagnant tundra or muskeg pools that are almost devoid of oxygen in summer and to survive in the moist tundra mosses during extended dry periods while waiting for rain to fill the tundra pools again (Morrow 1980, Armstrong 1994).

### Burbot

Burbot *Lota lota*, also known as lush, inhabit streams and lakes and are usually concentrated in deep holes through much of the year. They are mostly sedentary, but some move to spawning areas in

shallow water. Spawning usually occurs in January to March in lakes under ice cover. Burbot grow slowly and may reach 20 inches in length after eight years of life. The Burbot is the only representative of the cod (*Gadidae*) family in fresh water in North America (Morrow 1980, Holmes 1994).

#### Longnose Suckers

Longnose Suckers *Catostomus catostomus* are bottom feeders which begin spawning runs in late spring. They move from lakes into inlet streams or from pools in streams to graveled sections. After spawning, adults return to lakes or remain in the rivers, but generally do not undertake any long migrations (Morrow 1980).

#### Northern Pike

Northern Pike *Esox lucius* inhabit lakes, rivers, and sloughs. They may reach a size of 20 pounds or more, and fish weighing up to 30 pounds and measuring 4 feet in length have been caught. Six- to eight-year-old fish weigh an average of about five pounds and are 25 inches long. These fish over winter in deep, slow moving waters of larger rivers or in deeper lakes. In spring, a short migration occurs upstream or inshore to spawning areas. Pike spawn in spring along lake shores or slow-moving portions of streams in shallow, marshy areas after the ice goes out. The adult fish, usually solitary, then occupy "holes" throughout most of the summer. The diet of larger pike is composed almost entirely of fish, including other pike, but shore birds, small ducks, muskrats, mice, shrews, and insects are also eaten. (Morrow 1980, Alt 1994a).

#### Rainbow Smelt

Rainbow Smelt *Osmerus mordax* are found in coastal Alaska waters. Most are saltwater fishes. Populations near the ocean are anadromous. They are found in near shore saltwater environments, also estuaries, inland lakes, and streams. They are typically seven to nine inches in length. Rainbow smelt spawns in spring, principally during darkness (Rook 2004).

#### Dolly Varden/Arctic Char

There are both anadromous and resident (non-migratory) populations of Dolly Varden *Salvelinus malma* in the Bristol Bay region. The closely related Arctic char *Salvelinus alpinus* may also occur in portions of the region. (These are included within the "Dolly Varden" category here because the subtle biological distinction between "char" and "Dolly Varden" is not meaningful to subsistence fishermen in the region.) The anadromous populations of Dolly Varden spawn in clear water streams in October and November. The eggs hatch in March, and the fish rear in streams and grow slowly. In their third or fourth year, as five-inch long smolts, they migrate to the sea in May or June. These anadromous Dolly Varden then spend the rest of their lives moving in April to June from wintering areas in lakes to summer feeding areas in salt water. The return to freshwater occurs in August and September. Mature Dolly Varden (five or six years olds) spawn in their natal streams and then move on to lakes. The mortality rate for spawning

Dolly Varden is about 50 percent. Resident Dolly Varden occur towards the headwaters of the Bristol Bay region. They over winter in deep pools and disperse through tributary streams in the summer. They rarely enter the major rivers, however (Morrow 1980, Hubartt 1994).

### Lake Trout

Lake Trout *Salvelinus namaycush* are Alaska's biggest freshwater fish. They are also the largest representatives of a group of fish known as char and are closely related to Dolly Varden and Arctic Char. Lake Trout can be distinguished from other chars by the absence of pink spots and their deeply forked tail. They are common in the large, deep, cold lakes of the Bristol Bay region, where they spend their entire lives. In spring, when the lake is cold, lake trout can be found near the surface, but they descend deeper as the lake warms in summer. Spawning takes place over clean, rocky lake bottoms from September through November. Eggs hatch early in the following spring. Lake Trout growth varies from place to place depending on diet, water temperature, altitude, and genetics. Alaska Lake Trout can live longer than 40 years (Morrow 1980, Bendock 1994).

### Rainbow Trout

Rainbow Trout *Oncorhynchus mykiss* inhabit lakes and streams in the Bristol Bay Area. Among resident Rainbow Trout, those living in or migrating to large lakes with Sockeye Salmon runs generally grow faster and larger than fish which remain year-round in streams. Adult Rainbow Trout (three years olds) which inhabit lakes move from mid-April to late June to shallow, graveled portions of clear water streams to spawn. Spawning trout are characterized by generally darker coloration. The adults return to the lake about three to six weeks later and will spawn again in subsequent years. Rainbow Trout in the Iliamna and Naknek drainages return to streams in August and September to feed on salmon eggs and to over winter. Other Rainbow Trout spend their entire lives in streams and are non-migratory. Sea-going rainbows are known as Steelhead Trout and are abundant in the larger river systems in the Bristol Bay Region (Morrow 1980, Krasnowski 1987, Ashley 1994b).

### Whitefishes

Whitefishes are a generally abundant group of several related species which inhabit all kinds of freshwater habitats. There are several kinds of whitefish in the Bristol Bay drainage. The most common on the western side of the drainage is the Round Whitefish *Prosopium cylindraceum*. Both the Round Whitefish and the closely related Pygmy Whitefish *Prosopium coulteri* have round cigar shaped bodies. They spawn in rivers and along lake shores in late September and October. The Least Cisco *Coregonus saardinnela* (sometimes called herring) is another common whitefish in the Bristol Bay Area. Some Least Cisco undertake long spawning migrations upstream in September and October to clear streams with gravel bottoms. Lake-dwelling populations of Least Cisco do not migrate. Least cisco are very important in the food chain, as they are eaten by predacious pike and burbot. The Humpback Whitefish *Coregonus pidschian* is closely related to the Least Cisco. In the Bristol Bay Area, they are most common in the Lake Iliamna area. These fish move upstream in summer and fall, and spawn in October in the upper reaches of streams. Also closely related is the Broad Whitefish

*Coregonus nasus*, which is uncommon in the Bristol Bay drainage, although some occur in the upper Nushagak and in the Wood-Tikchik Lakes system (Morrow 1980, Alt 1994b).

## **Cultural Knowledge and Traditional Practices**

### Community Background

See the **Community Background** section under Cultural Knowledge and Traditional Practices in the analysis of Proposal FP25-11, a request to allow the taking of salmon with dip nets, beach seines and drift gillnets in the Bristol Bay Area.

### Subsistence Fishing Patterns

The focus of this section is the harvest of fish at the mouths of rivers and streams in the Bristol Bay Area with a focus on the Lake Clark-Sixmile Lake area and the Togiak-Twin Hills-Manokotak area where freshwater fish harvesting occurs primarily on Federal public lands and waters. A tremendous amount of knowledge and familiarity with best methods and gear types to harvest various fish species during their migrations including net lengths, depths, and mesh sizes, types of sinkers, weights, and lures, preservation techniques, and more exists in the villages. Fish are harvested year-round. Many fish, especially Dolly Varden, Northern Pike, and whitefishes are split and hung to dry during cold weather.

The importance of freshwater fish species is described in this passage describing people living in Nondalton, “Stories about the importance of these [freshwater fish] species when multiple salmon runs or terrestrial game species were minimal or absent, for dietary diversity, and as a source of fresh food abound in the oral historic record. Obtaining these fish during all seasons was also a source of considerable pleasure” (Ellanna, and Balluta 1992: 27).

Fishing traditions are diverse throughout the region although there are a few prevalent strategies. One such strategy is using efficient methods and gear types at the mouths of creeks and streams where fishes such as Rainbow Trout, Grayling, Humpback Whitefish, Round Whitefish, Least Cisco, Longnose Suckers, and Dolly Varden migrate (**Table 1**). These freshwater fish species were traditionally harvested with nets in spring and fall during fish migrations up or down streams to spawn, over winter, and forage. Foraging for salmon eggs is common to all these freshwater species and therefore salmon-bearing streams have runs of freshwater fishes during certain times of the year if habitat conditions are conducive to their needs.

The harvest of fish for subsistence in the Bristol Bay Area is well documented (VanStone 1967, Wolfe et al. 1983, VanStone 1984, Fall et al. 1986, Wolfe et al. 1986, Fall and Morris 1987, Gross 1991, BBNA and ADF&G 1996, Fall et al. 1996, Seitz 1996, Coiley-Kenner et al. 2003, Krieg et al. 2005, Fall et al. 2010, Fall et al. 2012, Hutchinson et al. 2020, Jones and Cunningham 2020, Jones et al. 2021, Jones and Neufeld 2022).

Nets are still used for this purpose in much of Bristol Bay Region and is well documented, for example, in the Togiak area. Large quantities of pike and Dolly Varden are harvested in the late spring and fall when they are netted near the mouths of local creeks and sloughs.

**Table 1.** Traditional taxonomy of nonsalmon freshwater fish species used for subsistence purposes in the Bristol Bay Area (Fall et al. 1996, Jones and Neufeld 2022.)

Common English name	Scientific name	Yup'ik name	Dena'ina name
Arctic Grayling	<i>Thymallus arcticus</i>	<i>Nakrullugpak</i>	<i>Ch'dat'an</i>
Alaska Blackfish	<i>Dallia pectoralis</i>	<i>Culugpauk, Can'giiq</i>	<i>Huzhegh</i>
Burbot	<i>Lota lota</i>	<i>Manignaq</i>	<i>Ch'unya</i>
		<i>Atgiaq</i>	<i>Qak'elay</i>
Dolly Varden	<i>Salvelinus malma</i>	<i>Yugyaq, Anerrluaq, Anyuk</i>	
Lake Trout	<i>Salvelinus namaycush</i>	<i>Cikignaq</i>	<i>Zhuk'udghuzha</i>
Longnose Sucker	<i>Catostomus catostomus</i>	<i>Cungartak</i>	<i>Duch'ehdi</i>
Northern Pike	<i>Esox lucius</i>	<i>Cuukvak</i>	<i>Ghelguts'i</i>
Rainbow Smelt	<i>Osmerus mordax</i>	<i>Iqalluaq</i>	
Rainbow Trout	<i>Oncorhynchus mykiss</i>	<i>Talaariq</i>	<i>Tuni</i>
Broad Whitefish	<i>Coregonus nasus</i>	<i>Akakiik</i>	<i>Telay</i>
Humpback Whitefish	<i>Coregonus pidschian</i>	<i>Uraruq</i>	<i>Q'untuq'</i>
Round Whitefish	<i>Prosopium cylindraceum</i>	<i>Uraruq, Cavirrutnaq</i>	<i>Hesten</i>
Least Cisco	<i>Coregonus sardinella</i>	<i>Cavirrutnaq</i>	<i>Ghelguts'i k'una</i>

In the Nondalton area, people traditionally took grayling with nets, but these “trout” nets are not used as much anymore and instead grayling are taken with hook and line. People are using “trout” nets less than in the past and are harvesting less fish with them. “Trout” nets are described as pieces of Pink Salmon gear (4-1/2-inch mesh size) and are used during open water periods to harvest primarily Dolly Varden, Lake Trout, and an occasional Rainbow Trout (locally called “trouts”). Large pike are taken with Chinook Salmon gear set across sloughs. The creeks and streams where fish migrate and seasons of migrations are well known by residents, and spawning congregations are the focus of harvest.

In Nondalton, Dolly Varden, Humpback Whitefish, Lake Trout, and Grayling are the bulk of the freshwater fish harvest. These fish species are a source of fresh food that can be harvested throughout the year. Blackfish and Longnose Suckers, known as “starvation food,” are always available, and people ate them when they had no other food. Suckers are also harvested for dog food. Once salmon arrive in large numbers, other fish are not observed.

In Igiugig, fishing for whitefishes with a subsistence net is most productive in the spring and fall. Whitefishes caught in spring with a net are an important food source, especially when the previous year’s salmon harvests are insufficient. People in Aleknagik harvest Least Cisco, Pike, and Dolly Varden in

seine nets in late fall (October and November) at the mouth of Aleknagik Lake. Most whitefish harvests in the Bristol Bay Area occur right before freeze-up and right after breakup, when nets are set near stream mouths and lake outlets. People near the coast dipnet for smelt at the mouths of rivers before freeze-up in September and October.

Traditional methods and gear types for harvesting fishes are deeply imbedded in village cultures and have a substantial and important role in the health and well-being of people. For example, all over the Bristol Bay Region people are out ice fishing in rivers, streams, and lakes in winter and spring. Especially common is to see women and children ice fishing at favorite spots nearby their home villages. During sunny and cold spring days, many people are ice fishing. When ice is thin and unsafe, subsistence harvest of some fish species goes down in those years.

When lakes were frozen, ice fishing is a productive method, and most fishing locations are generally adjacent to each village. Species such as trouts, Round Whitefish, and pike are taken with hook and line through the ice, and night or set hooks may be used to harvest burbot.

In Nondalton, women, young children, and elders fish through the ice on Sixmile Lake and at the mouths of rivers in the vicinity of the village. In the Iliamna Area, the mouth of the Newhalen River is the site of a large ice fishing effort most years. Newhalen is experiencing a renewed interest in subsistence activities, and children there love to go fishing.

In Manokotak, mid-February through early March is the most popular time for jigging by men, women, and children. Pike are dried in large quantities in the spring because they make excellent and easily transported food to take to spring camps and to us on commercial fishing boats. People jig for smelt through the ice in the Igushik River near the village, or further down river near the mouth, where larger fish can be caught.

In the Togiak area, to hook fish during the winter, people use snow machines to reach fishing areas along the Togiak River. They chop holes about one and a half feet wide through about eight to twelve inches of river ice. Jigging lines are made of nylon filament, attached to short sticks with notches on either end for winding the line. Fishermen use unbaited treble hooks with flashers and feathers. The lure is animated a few inches above the river bottom with short, up and down jigging motions. Fish are pulled straight up through the ice hole. Production groups include mixed sex groups or groups of females. People of all ages jig for freshwater fish, from young people to elders, and fishing groups include relatives and friends.

Subsistence fishing within 300 feet of the mouth of a river or stream used by salmon is currently not legal in the Bristol Bay Area in State and Federal regulations. However, these same areas near stream mouths remain open to sport fishing, but low harvest limits and inefficient methods such as unbaited, artificial lures or catch-and-release are common. Additionally, sport fishing closes from April 10



through June 7 in some areas to protect Rainbow Trout from harvest. State sport fishing regulations for the Bristol Bay Region are detailed and lengthy and may be accessed at *5 AAC 67— Bristol Bay Area*.<sup>9</sup>

In brief, Federal public waters that are closed to sport fishing from April 10 through June 7 are the Alagnak (Branch) River drainage that flows into the Kvichak River, Sixmile Lake including the Tazimina River drainage, and the Negukthlik and Ungalikthluk river drainages running into Togiak Bay (**Figure 1**; see Relevant State Regulations for sports fishing in **Appendix 1**).

## Harvest History

### Salmon Subsistence Harvest

Bristol Bay Region communities are heavily reliant on salmon for subsistence uses, and salmon comprises a large part of subsistence harvests of wild resources (ADF&G 2024b). The average subsistence harvest in the Bristol Bay Region from 2011 to 2020 is estimated at 117,035 salmon, which includes an average Sockeye Salmon harvest of 90,741. Harvest levels are consistently highest in the Nushagak and Naknek-Kvichak areas (Jones and Neufeld 2022). Recent 2021 estimated salmon harvests are described in **Table 2**.

**Table 2.** The estimated harvest of salmon for subsistence purposes, by species and districts, Bristol Bay Region, 2021 (Jones and Neufeld 2022).<sup>10</sup>

Areas and River Systems	Chinook Harvests	Sockeye Harvests	Coho Harvests	Chum Harvests	Pink Harvests	Total Harvests
Naknek-Kvichak District	195	30,740	561	111	73	31,680
<i>Naknek River Subdistrict</i>	191	14,580	405	111	73	15,360
<i>Kvichak River Subdistrict</i>	4	16,160	156	0	0	16,320
Egegik District	24	355	20	0	0	399
Ugashik District	5	812	12	2	2	833
Nushagak District	5,349	43,712	5,133	1,077	79	55,350
Togiak District	114	3,159	585	72	20	3,949
Total	5,686	78,779	6,311	1,262	174	92,211

### Nonsalmon Fish Subsistence Harvest

Not all subsistence harvests of fish other than salmon are annually monitored by ADF&G; however, subsistence harvest surveys can provide an estimate of harvest and use for the year a survey was conducted. **Table 3** in **Appendix 2** describes the estimated harvest of nonsalmon fishes (including marine fish species), Rainbow Trout, and unknown trout. Most households from every community reported using nonsalmon fish during each study year. This use ranged from 41% of households in Port Alsworth to

<sup>9</sup> <https://www.law.cornell.edu/regulations/alaska/title-5/part-2/chapter-67>

<sup>10</sup> Preliminary data. Due to rounding, the sum of columns and rows may not equal the estimated. Sum of sites may exceed district totals and sum of districts may exceed area total because permittees may use more than one site.

100% of households in Clarks Point and Ugashik. Sharing of nonsalmon fishes was also very common in the region. Estimated annual per person harvests by weight of nonsalmon fish have ranged from a low of 4 pounds per person in Port Alsworth to a high of 338 pounds per person in Togiak (ADF&G 2024b).

The level of Rainbow Trout harvest for subsistence is of specific interest to sport fishery managers and fishermen. A harvest trend is not evident through time from the 1980s when the earliest community household surveys were conducted to the present, and harvest levels fluctuate yearly based primarily on fishing conditions such as weather and ice conditions (**Table 3 in Appendix 2**). In some communities during some years, almost all households that participated in surveys reported harvesting Rainbow Trout, while in others few households have. Total estimated harvest amounts and per person harvest rates are highest in the Lake Iliamna area,<sup>11</sup> based on the results of these surveys (ADF&G 2024b).

The direct targeting of Rainbow Trout is illegal under State regulations although when harvested incidentally when harvesting other fish species, they may be retained under State regulations in **Appendix 1**. On Federal public lands, federally qualified subsistence users may target Rainbow Trout with rod and reel. Daily harvest and possession limits are two per day/two in possession with no size limit from April 10 through October 31 and five per day/five in possession with no size limit from November 1 through April 9. If you take Rainbow Trout incidentally in other subsistence net fisheries, or through the ice, you may retain them for subsistence purposes under Federal regulations (**Appendix 1**).

### Sport Harvests Game Species

The Bristol Bay Management Area consists of some of the most premier fishing opportunities for sport anglers who travel far at times to fish these waters not just for salmon, but other game species such as Rainbow Trout, Dolly Varden, Arctic Char, Arctic Grayling, and Northern Pike. Angler days and harvest are monitored by the ADF&G through a Statewide Alaska Sport Fishing Survey. The Bristol Bay Management Area became known as a premier fishing destination as early as the 1930s. Angler effort increased from 25,000 angler-days in 1977 to a peak of 116,000 angler-days in 1995. During the years of 2016 through 2021 there was 74,243 angler-days of which about half of these were guided trips. Much of these angler-days were on the Naknek River, Nushagak River, and Togiak River. The top four species harvested by sport anglers from highest to lowest in 2021 was Sockeye Salmon (33,052), Coho Salmon (13,480), Chinook Salmon (5,873), and Dolly Varden/Arctic Char (2,177). Other notable species harvested were Rainbow Trout (406), Arctic Grayling (555), Chum Salmon (728), and Northern Pike (765) (ADF&G 2024c).

Sport catch rates for Bristol Bay Area, which includes Eastern, Central and Western areas are substantial and likely under-reported. An average catch rate for all three regions between 2016 and 2020 was 45,075 Chinook Salmon, 52,403 Coho Salmon, 46,485 Sockeye Salmon, 57,864 Dolly Varden, 32,883 Arctic Grayling, and 155,665 for Rainbow Trout (Borden and Adickes 2022).

While much of the anglers are practicing catch-and-release, released fish may suffer mortality. Preliminary results indicating 5-day mortality of catch-and-release Chinook Salmon in the Nushagak

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<sup>11</sup> These Iliamna area fisheries are not within the jurisdiction of Federal fisheries management.

River sport fishery as an estimated 6.6% (Borden and Dye 2018). Regulations have been enacted to single hook in areas to help mitigate this mortality for Rainbow Trout and Chinook Salmon.

### **Effects of the Proposal**

If Proposal FP25-10 is adopted, the existing prohibition on taking fish within 300 feet of a stream mouth used by salmon will be rescinded for federally qualified subsistence users in the Bristol Bay Area. Subsistence users will be able to continue harvesting fish in these areas as they have done traditionally and continue to do today. Most affected will be villages in the Togiak, Twin Hills, and Manokotak area and the village of Nondalton, which are situated with the Togiak National Wildlife Refuge and the Lake Clark National Park and Preserve, respectively. There is a similar restriction in State subsistence regulations, and removal of the existing prohibition will make Federal regulations less restrictive.

If adopted, the harvest of fish near stream mouths by federally qualified subsistence users may increase. As pre-spawned salmon often hold or become bank-oriented in concentrated areas near stream mouths where they will be more susceptible to harvest. However, it is unknown how much additional harvest could occur if this restriction is removed. Conversely, this may create a situation that is detrimental to smaller salmon stocks and resident species if the harvest is large or multiple users target the same river mouth. There is a general regulation that prohibits obstructing more than one-half the width of any stream with any gear used to take fish, which would provide some level of conservation to these stocks. Additionally, seasonal concentrations of Rainbow Trout, Arctic Grayling, Humpback Whitefish, Round Whitefish, Least Cisco, and Dolly Varden harvests at streams mouths may increase if efficient methods and gear types such as nets are used. Documented harvests however are occurring for primarily nonsalmon fish species with small seine nets, dip nets, and by ice fishing, methods and gear types that are less likely to have negative impacts on fish conservation than gillnets.

If Proposal FP25-10 is not adopted, Federally qualified subsistence users will continuing traditional fishing practices at the mouths of river and streams use by salmon, potentially subject to enforcement of the regulation.

### **OSM PRELIMINARY CONCLUSION**

**Support** Proposal FP25-10 **with modification** to allow the harvest of nonsalmon fish species at the mouths of rivers, streams, and creeks and prohibit the harvest of salmon.

The modified regulation should read:

***§\_\_\_\_.27(e)(5) Bristol Bay Area***

\* \* \*

*(iv) You may not take ~~fish~~ **salmon** from waters within 300 feet of a stream mouth ~~used by salmon~~.*

## **Justification**

Much of the sensitivity of allowing fishing near the mouths of rivers and streams concerns protecting from disturbance and harvest pre-spawning salmon congregating and holding near the mouths of streams. The purpose of the OSM recommended modification is to protect salmon from fishing activity while they are migrating. Documented harvesting at the mouths of rivers and streams occurs mainly during fall, winter, and spring when salmon are not present. Nonsalmon fish species are the target of these fisheries with small seine nets, dip nets, and by ice fishing, methods and gear types that are less efficient than gillnets. Subsistence fishing has traditionally occurred in these areas as nonsalmon fish species such as Dolly Varden, Arctic Grayling, Northern Pike, trouts, and whitefishes are migrating to and from spawning areas. People are heavily reliant on harvests of these fish species, which are a significant portion of overall harvests of wild resources for subsistence uses in Bristol Bay Area communities.

The popular activity of ice fishing at these locations is managed through sport fishing regulations with low bag limits, limited gear types, or catch and release fishing. Currently, much of this ice fishing activity is illegal, although enforcements efforts appear to be rare, except in the Lake Iliamna area. Rainbow Trout, a species important to sport fisheries, are often not the target of these subsistence fisheries but is just one species of many that subsistence users are seeking to harvest.

Adopting this proposal with the OSM modification will provide federally qualified subsistence users additional legal subsistence opportunity to harvest nonsalmon fish while still protecting pre-spawned salmon congregating and holding near the mouths of streams. Currently there is no conservation concern for four of the five salmon species available in the Bristol Bay Area, with exception to Chinook Salmon, which have been listed as a stock of management concern for the Nushagak River.

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## APPENDIX 1

### Relevant Federal Regulations

#### *50 CFR 100.27 Subsistence taking of fish*

\* \* \*

*(b) Methods, means, and general restrictions.*

*(1) Unless otherwise specified in this section or under terms of a required subsistence fishing permit (as may be modified by regulations in this section), you may use the following legal types of gear for subsistence fishing:*

- (i) A set gillnet;*
- (ii) A drift gillnet;*
- (iii) A purse seine;*
- (iv) A hand purse seine;*
- (v) A beach seine;*
- (vi) Troll gear;*
- (vii) A fish wheel;*
- (viii) A trawl;*
- (ix) A pot;*
- (x) A longline;*
- (xi) A fyke net;*
- (xii) A lead;*
- (xiii) A herring pound;*
- (xiv) A dip net;*
- (xv) Jigging gear;*
- (xvi) A mechanical jigging machine;*
- (xvii) A handline;*
- (xviii) A cast net;*
- (xix) A rod and reel; and*
- (xx) A spear.*

*(4) Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses.*

\* \* \*

*(14) Except as provided elsewhere in this section, you may not take rainbow/steelhead trout.*

\* \* \*

*(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:*

*(i) If you are required to obtain a subsistence fishing permit for an area, that permit is required to take fish for subsistence uses with rod and reel in that area. The harvest and possession limits for taking fish with a rod and reel in those areas are the same as indicated on the permit issued for subsistence fishing with other gear types.*

*(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.*

*\* \*\**

*(18) Provisions on ADF&G subsistence fishing permits that are more restrictive or in conflict with the provisions contained in this section do not apply to Federal subsistence users.*

*\* \* \**

*(c) Fishing permits and reports.*

*(1) You may take salmon only under the authority of a subsistence fishing permit, unless a permit is specifically not required in a particular area by the subsistence regulations in this part, or unless you are retaining salmon from your commercial catch consistent with paragraph (d) of this section.*

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*\* \* \**

*(iii) You may not subsistence fish with nets in the Tazimina River and within one-fourth mile of the terminus of those waters during the period from September 1 through June 14.*

*(iv) Unless otherwise specified, you may take salmon by set gillnet only.<sup>12</sup>*

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<sup>12</sup> Conditions (A) through (E) allow additional gear in Togiak River, Sixmile Lake, and Lake Clark.

\* \* \*

(v) *The maximum lengths for set gillnets used to take salmon are as follows:*

(A) *You may not use set gillnets exceeding 10 fathoms in length in the Egegik River;*

(B) *In the remaining waters of the area, you may not use set gillnets exceeding 25 fathoms in length.*

\* \* \*

(ix) *You may take fish other than salmon, herring, and capelin by gear listed in this part unless restricted under the terms of a subsistence fishing permit.*

(x) *You may take salmon only under authority of a State subsistence salmon permit (permits are issued by ADF&G) except when using a Federal permit for fyke net and lead.*

\* \* \*

(xiii) *You may take Rainbow Trout only by rod and reel or jigging gear.<sup>13</sup> Rainbow trout daily harvest and possession limits are two per day/two in possession with no size limit from April 10 through October 31 and five per day/five in possession with no size limit from November 1 through April 9.*

(xiv) *If you take Rainbow Trout incidentally in other subsistence net fisheries, or through the ice, you may retain them for subsistence purposes.*

## **Relevant State Subsistence Regulations**

### ***Article 6—Bristol Bay Area***

#### ***5 AAC 01.320—Lawful gear and gear specifications***

\* \* \*

(l) *Subsistence fishing by the use of a hook and line attached to a rod or pole is prohibited, except when fishing through the ice.*

#### ***5 AAC 01.325 Waters closed to subsistence fishing***

\* \* \*

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<sup>13</sup> *Jigging gear means a line or lines with lures or baited hooks, drawn through the water by hand, and which are operated during periods of ice cover from holes cut in the ice, or from shore ice and which are drawn through the water by hand (§\_\_\_100.25(a) Definitions).*

*(c) From September 1 through June 14, subsistence fishing with a net is prohibited in the following waters and within one-fourth mile of the terminus of those waters<sup>14</sup>:*

- (1) Lower Talarik Creek;*
- (2) Middle Talarik Creek;*
- (3) Upper Talarik Creek;*
- (4) Pete Andrew Creek;*
- (5) Zacker Creek;*
- (6) Newhalen River;*
- (7) Roadhouse Creek;*
- (8) Alexi Creek;*
- (9) Taziminia River;*
- (10) Young's Creek;*
- (11) Chekok Creek;*
- (12) Tomkok Creek;*
- (13) Nick G. Creek;*
- (14) Copper River;*
- (15) Kakhonak River;*
- (16) Gibraltar River;*
- (17) Dennis Creek;*
- (18) Belinda Creek.*

#### **Relevant State Sport Fishing Regulations<sup>15</sup>**

***5 AAC 67.022—Special provisions for seasons, bag, possession, and size limits, and methods and means in the Bristol Bay Area***

...

*(e) In the Kvichak River drainage, excluding the Alagnak River drainage, the following special provisions apply:*

...

*(3) in the Kvichak River drainage, including all waters of Lake Iliamna within a one-half mile radius of its outlet, but excluding Lake Clark and its tributaries upstream of Sixmile Lake,*

*(A) from April 10 through June 7 all sport fishing is closed;*

...

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<sup>14</sup> Tazimina River (situated in Lake Clark National Preserve) is the only Federal public waters on this list.

<sup>15</sup> Only includes sport fishing regulation that apply to Federal public waters.

*(4) in all flowing waters of the Kvichak River drainage, excluding Lake Clark and its tributaries upstream of Sixmile Lake, and including all waters of lakes within a one-half mile radius of all inlet and outlet streams, and excluding those waters in lakes not within a one-half mile radius of inlet or outlet streams,*

*(A) from April 10 through June 7, all sport fishing is closed;*

...

*(10) in the Tazimina River from the falls, downstream to one mile upstream of its outlet into Sixmile Lake,*

*(A) from April 10 through June 7, all sport fishing is closed;*

...

*(f) In the Alagnak River drainage, the following special provisions apply:*

...

*(4) in the Alagnak River drainage, excluding those waters in lakes not within a one-half mile radius of inlets or outlet streams,*

*(A) sport fishing is closed from April 10 through June 7;*

...

*(i) In the Negukthlik and Ungalikthluk River drainages,<sup>16</sup> the following special provisions apply:*

*(1) from April 10 through June 7, all sport fishing is closed;*

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<sup>16</sup> Togiak Bay drainages.

## APPENDIX 2

**Table 3.** The estimated number of nonsalmon fishes, rainbow trout, and unknown trout harvested based on household surveys, by number of fish and study year (black cell=question not asked; ADF&G 2024b).

Community	Study year	Nonsalmon fishes	Rainbow trout	Unknown trout
<i>Western Bristol Bay</i>				
Aleknagik	1989	8,749	95	
	2008	2,303	48	0
Clarks Point	1989	1,927	0	
	2008	567	49	0
Dillingham	1984	35,652	1,897	
	2010	7,022	554	51
	2021	36,493	323	0
Ekwok	1987	7,340	205	
Koliganek	1987	17,743	435	
	2005	7,408	163	
Manokotak	1985	26,229	194	
	1994		182	
	1999	14,740	89	11
New Stuyahok	2008	28,023	87	0
	1987	12,718	389	
	2005	8,451	123	5
Togiak	1999	32,577	897	18
	2008	14,962	256	31
	2016	2,309	353	
	2017	10,524	187	
	2019	30,585	181	
Twin Hills	1999	6,966	42	0
	2017	734	13	
	2019	6,508	0	
<i>Iliamna/Lake Clark</i>				
Levelock	1988	6,581	280	
	1992	7,279	395	48
	1996	3,028	576	0
	2003		256	
	2005	520	82	9
Igiugig	1983	4,484	293	0
	1992	4,704	709	24
	2003		273	8
	2005	1,224	314	
Kokhanok	1983	10,668	1,538	0
	1992	18,325	1,937	1,961
	2003		1,256	0
	2005	3,129	1,222	0
Iliamna	1983	2,133	139	1,386
	1991	5,031	1,312	130
	2003		158	
	2004	1,783	284	42
Newhalen	1983	2,222	227	945
	1991	4,203	1,163	148
	2003		1,122	
	2004	3,077	812	381

Community	Study year	Nonsalmon fishes	Rainbow trout	Unknown trout
Nondalton	1973	4,888	193	
	1980	3,183	225	
	1981	6,475	525	
	1983	44,259	3,613	257
	2003		440	14
	2004	3,935	529	258
Pedro Bay	1982	2,131	179	0
	1996	1,626	79	139
	2003		94	
	2004	724	142	0
Port Alsworth	1983	654	0	0
	2004	898	0	0
	<i>Alaska Peninsula</i>			
Egegik	1984	4,612	92	
	2014	97	4	0
King Salmon	1983	8,878	1,680	4
	2007	867	154	
Naknek	1983	16,797	1,318	
	2007	9,668	599	0
Pilot Point	1987	1,004	12	
	2014	94	0	0
South Naknek	1983	7,383	205	
	1992	2,703	172	17
	2007	266	12	0
Ugashik	1987	1,318	0	
	2014	122	0	0