

FP27-07 Executive Summary

General Description	Fisheries Proposal FP27-07 requests that the Federal Subsistence Board prohibit the use of dip nets for federally qualified subsistence users within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence within the Upper Copper River mainstem. <i>Submitted by: Southcentral Subsistence Regional Advisory Council</i>
Proposed Regulation	§ ___.27(e)(11) <i>(v) In the Upper Copper River District, you may take salmon only by fish wheels, rod and reel, or dip nets. In the Lower Copper River Area, you may take salmon only by dip nets and rod and reel. All salmon retained from the Lower Copper River Area must be reported to area managers within 48 hours of harvest.</i> <i>* * *</i> <i>(C) Dip nets are prohibited within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence in the Upper Copper River District. This includes:</i> <i>(1) Tulsona Creek, Indian Creek, Chistochina River, O'Brien Creek, Klutina River, Tanada Creek, Slana River, Chitina River, Gakona River, Drop Creek, Sinona Creek, Tazlina River, Boulder Creek, Tonsina River, Yetna Creek, Horse Creek, Cheshnina River, Albondigas Creek, Tobey Creek, Haley Creek, Gulkana River, Fivemile Creek, Liberty Creek, Sanford River, Muskrat Pelt Creek, Little Skrat Creek, Basement Bear Creek, Dry Creek, Klawasi River, Dadina River, Kotsina River, and Ten-Thousand Kings Creek.</i>
OSM Preliminary Conclusion	Oppose FP27-07
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional	

FP27-07 Executive Summary	
Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 support

DRAFT STAFF ANALYSIS

FP27-07

ISSUES

Fisheries Proposal FP27-07, submitted by the Southcentral Alaska Subsistence Regional Advisory Council (Southcentral Council), requests to prohibit the use of dip nets for federally qualified subsistence users within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence within the Upper Copper River mainstem (**Figure 1, Table 1**).

Proponent Statement

The Southcentral Council states that closing these areas will help limit harvest within sensitive areas, which may be targeted for easy harvest and potential overharvest of salmon. Wild stocks stop and rest in these areas before continuing upriver, and there has not been enough study of the importance of these areas. Adoption of this proposal will protect salmon stock diversity and reduce harvest in disproportionately high rates in easily accessible areas frequented by large numbers of fishers. The proponent states that while returns on these tributaries may be small today, the genetic diversity these stocks provide may be important for resilience and adaptation to environmental change. The proponent intends to submit a similar proposal to the Alaska Board of Fisheries (BOF) and asks that, if the Federal proposal passes, the Federal Subsistence Board (Board) defer implementation until the BOF takes action.

Current Federal Regulation (36 CFR 242.27 and 43 CFR 51.27)

§____.27(e)(11)

(v) In the Upper Copper River District, you may take salmon only by fish wheels, rod and reel, or dip nets. In the Lower Copper River Area, you may take salmon only by dip nets and rod and reel. All salmon retained from the Lower Copper River Area must be reported to area managers within 48 hours of harvest.

Proposed Federal Regulation

§____.27(e)(11)

(v) In the Upper Copper River District, you may take salmon only by fish wheels, rod and reel, or dip nets. In the Lower Copper River Area, you may take salmon only by dip nets and rod and reel. All salmon retained from the Lower Copper River Area must be reported to area managers within 48 hours of harvest.

* * *

(C) Dip nets are prohibited within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence in the Upper Copper River District. This includes:

(1) Tulsana Creek, Indian Creek, Chistochina River, O'Brien Creek, Klutina River, Tanada Creek, Slana River, Chitina River, Gakona River, Drop Creek, Sinona Creek, Tazlina River, Boulder Creek, Tonsina River, Yetna Creek, Horse Creek, Cheshnina River, Albondigas Creek, Tobey Creek, Haley Creek, Gulkana River, Fivemile Creek, Liberty Creek, Sanford River, Muskrat Pelt Creek, Little Skrat Creek, Basement Bear Creek, Dry Creek, Klawasi River, Dadina River, Kotsina River, and Ten-Thousand Kings Creek.

Existing State Regulation

5 AAC 01.620 Lawful gear and gear specifications.

Fish may be taken by gear listed in 5 AAC 01.010(a) unless restricted in this section or under the terms of a subsistence fishing permit.

(b) Salmon may be taken only by the following types of gear:

(1) In the Glennallen Subdistrict by fish wheels or dip nets;

5 AAC 77.591. Personal Use Fishery—Prince William Sound Area—Copper River Personal Use Dip Net Salmon Fishery Management Plan.

(c) Salmon may be taken only with dip nets.

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 43 CFR §51.3. The area affected by this proposal is the entirety of the mainstem Copper River within the Upper Copper River District, which is within and adjacent to the exterior boundaries of Wrangell-St. Elias National Park and Preserve (**Figure 1**; see also page 75, Prince William Sound Area in the Federal Subsistence Fish and Shellfish Management Regulations Booklet).

The Upper Copper River District is comprised of the Chitina and Glennallen Subdistricts. The Subdistricts are geographically defined in the same way in Federal and State regulation. The Chitina Subdistrict consists of all waters of the mainstem Copper River downstream of the downstream edge of the Chitina-McCarthy Road Bridge to an east-west line crossing the Copper River approximately 200 yards upstream of Haley Creek, as designated by the Alaska Department of Fish and Game (ADF&G) regulatory markers, a distance of approximately ten miles (**Figure 1**). The Glennallen Subdistrict consists of all waters of the mainstem Copper River from the mouth of the Slana River downstream to the downstream edge of the Chitina-McCarthy Road Bridge, approximately 120 miles. Tributaries of the Upper Copper River District within the extent of Federal public lands and waters are listed in **Table 1**.

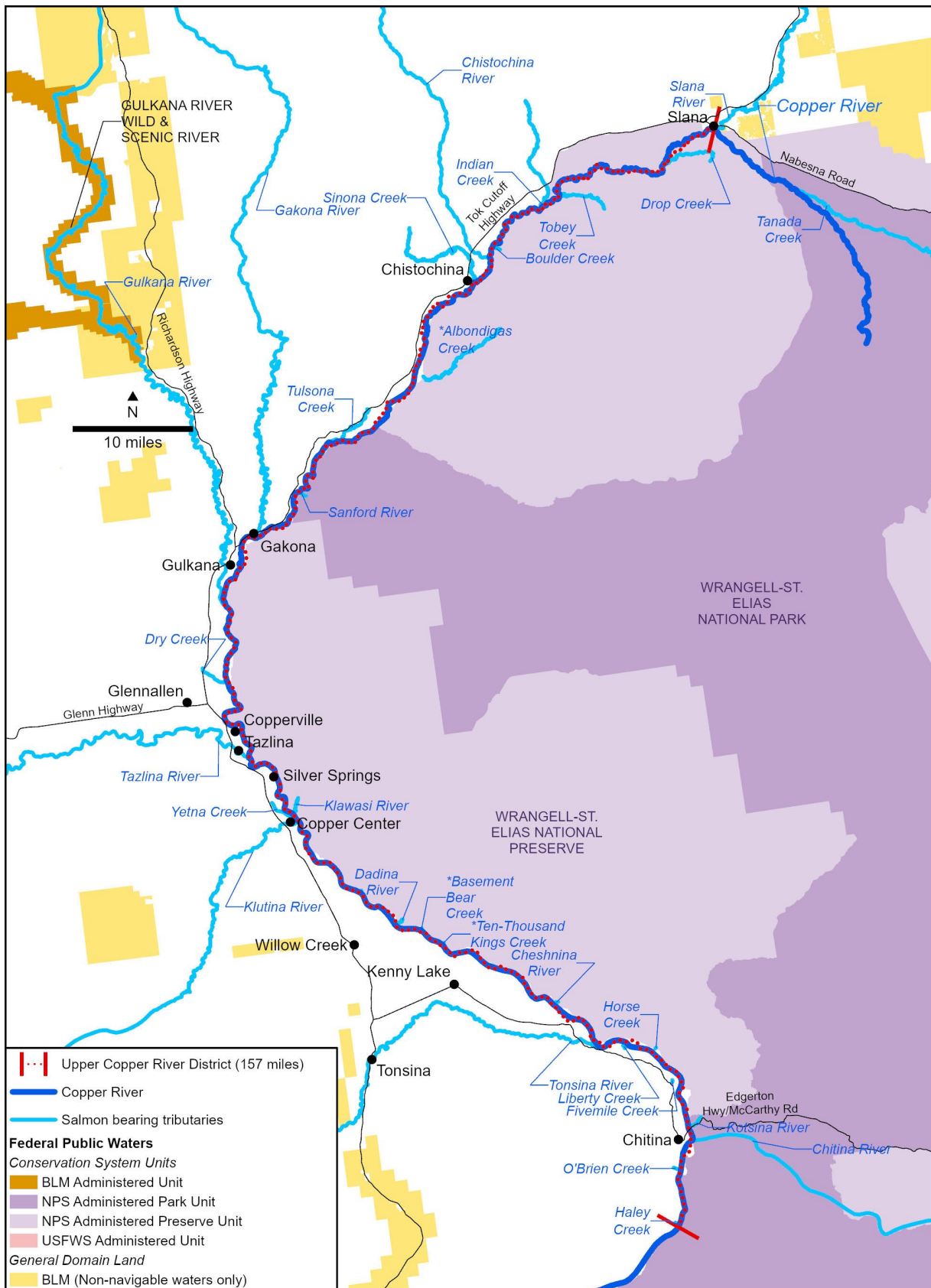


Figure 1. Map of the Upper Copper River District with tributary locations.

Table 1. Salmon bearing rivers and tributaries in the Upper Copper River District. Information within the species column denotes species codes: K – King, S – Sockeye, CO – Coho Salmon, and activity codes: s – spawning, r – rearing, p – present, m – migration (Giefer and Graziano 2024).

Name	Species	Name	Species
Tulsona Creek	Kr	Cheshnina River	Kr
Indian Creek	Krs	Albondigas Creek*	Kp
Chistochina River	Kp, Sp	Tobey Creek	Kp
O'Brien Creek	COr	Haley Creek	COr, Krs, Ss
Klutina River	COp, Kpr, Sp	Gulkana River	Krs, Sp
Tanada Creek	Kp, Sp	Fivemile Creek	Kr
Slana River	Kp, Spr	Liberty Creek	Kr
Chitina River	COp, Kp, Sp	Sanford River	Kr
Gakona River	Kp, Sp	Muskrat Pelt Creek*	Kr, Sr
Drop Creek	Ks	Little Skrat Creek*	Sr
Sinona Creek	Ks	Basement Bear Creek*	Kr, Sr,
Tazlina River	COp, Kp, Sp	Dry Creek	Kr
Boulder Creek	Kr	Klawasi River	COr, Kr
Tonsina River	COp, Kp, Sp	Dadina River	COr, Kr
Yetna Creek	COr, Kr	Kotsina River	Kr, Ss
Horse Creek	COr, Kr	Ten-Thousand Kings Creek*	Kr

* Local name noted

Customary and Traditional Use Determinations

The Upper Copper River is split into three sections for Board's recognized customary and traditional use determinations for salmon.

In the Chitina Subdistrict of the Upper Copper River District by residents of Cantwell, Chickaloon, Chisana, Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Gakona Junction, Glennallen, Gulkana, Healy Lake, Kenny Lake, Lower Tonsina, McCarthy, Mentasta Lake, Nabesna, Northway, Paxson-Sourdough, Slana, Tanacross, Tazlina, Tetlin, Tok, Tonsina, and those individuals that live along the Tok Cutoff from Tok to Mentasta Pass, and along the Nabesna Road.

In the Glennallen Subdistrict of the Upper Copper River District by residents of the Prince William Sound Area and residents of Cantwell, Chickaloon, Chisana, Dot Lake, Dry Creek, Healy Lake, Northway, Tanacross, Tetlin, Tok, and those individuals living along the Alaska Highway from the Alaskan/Canadian border to Dot Lake, along the Tok Cutoff from Tok to Mentasta Pass, and along the Nabesna Road.

In the vicinity of the Native Village of Batzulnetas, that is waters of the Copper River and Tanada Creek between National Park Service regulatory markers, by residents of Dot Lake and Mentasta Lake.

Regulatory History

In 2001, the Federal Subsistence Management Program incorporated State subsistence regulations for this area when the Program initially began managing Federal fisheries on the Copper River. Although numerous changes have occurred in the regulations since that time, most were not specific to closure of areas within the district to dip netting.

Under Federal regulations, the Upper Copper River District is separated into two parts: the Chitina Subdistrict and the Glennallen Subdistrict. In the Upper Copper River District, the Federal season runs from May 15 through September 30. The harvest limits and allowable gear are the same between the two subdistricts (**Table 2**). Federally qualified subsistence users may obtain permits for both subdistricts; however, the harvest limits may not be combined. The allowable gear includes rod and reel, dip nets, and fish wheels. The annual harvest limit for a household of one is 30 salmon (including no more than 5 Chinook Salmon by dipnet and 5 Chinook Salmon by rod and reel). Upon request, permits will be issued for up to 200 salmon total (the Chinook Salmon limit does not change). The annual harvest limit for a household of two or more persons is 60 salmon plus 10 salmon for each additional person in a household over the two people (including no more than 5 Chinook Salmon by dip net and 5 Chinook Salmon by rod and reel). Upon request, permits will be issued for up to 500 salmon total; the Chinook Salmon limit does not change (FSMP 2025).

The ADF&G manages a personal use fishery in the Chitina Subdistrict and a subsistence fishery in the Glennallen Subdistrict of the Upper Copper River District. State permittees must choose between fisheries (subsistence or personal use) and methods (dip net or fish wheel if subsistence fishing) when they get their permits. The State personal use fishery in the Chitina Subdistrict is managed separately from the Glennallen Subdistrict subsistence fishery, with State subsistence receiving priority over personal use (ADF&G 2024). In the Chitina Subdistrict personal use fishery, dip nets are the only allowable gear, a permit fee is charged, and harvest limits differ from those for the subsistence fisheries. Chitina personal use fishery permit holders must report their harvest online no later than October 15 or they will be denied a permit for the fishery the following year.

There are also Federal and State subsistence fisheries in the vicinity of the Native Village of Batzulnetas, which require a permit from either the National Park Service (Federal) or from the State. Only residents of Dot Lake and Mentasta Lake are eligible for the Federal subsistence fishery at Batzulnetas. Batzulnetas is much more difficult to access by highway vehicle than other harvest locations in the region, which results in very low participation and harvest within the subsistence fishery.

In 2017, the BOF considered several proposals related to dip netting in the Upper Copper River District. Proposal 13, submitted by the Ahtna Tene Nene' Customary and Traditional Use Committee. This proposal would have prohibited dipnetting from boats in State subsistence and personal use fisheries in the Glenallen Subdistrict. The BOF rejected this proposal, stating that because there was not a conservation concern for salmon this regulation would have limited impact (Alaska Board of Fisheries 2017a). Testimony on this proposal highlighted the increasing number of users dip netting

from boats in the Copper River (Alaska Board of Fisheries 2017a). In the rationale for their proposal, the proponent stated:

“Individuals are dip netting from a boat targeting schools of salmon. When they find a school of fish they take their limit within a short limit of time, not allowing for escapement. Subsistence fishermen are catching salmon away from the shoreline of the Copper River, salmon rest in holes away from the shoreline in high water and are susceptible to being easily caught in dip nets from boats using electronics. Once a holding hole is located, a boat with electronics makes multiple passes until the fish are cleaned out. When the water drops, there are no fish left to continue to the spawning beds...If this keeps up, our Chinook [Salmon] stocks will be depleted in a very short time.... Fishing from a boat is not a customary and traditional method and means to harvest fish. This new method is causing unintended overharvest and allocation issues that must be addressed... (Alaska Board of Fisheries 2017b).

In 2021, the Board rejected the same proposal. Fisheries Proposal 21-13 requested that the Board prohibit fishing with dipnets from boats in the Upper Copper River District. In line with the Southcentral Subsistence Regional Advisory Council (Southcentral Council), the Board rejected this proposal, stating that prohibiting the use of dipnets would make Federal regulations more restrictive than State regulations and would have minimal conservation benefits since most harvest by federally qualified subsistence users occurred via fishwheel (FSB 2021). However, the Board did adopt FP 21-14, which requested the Board prohibit the use of fish finders while fishing from boats or other watercraft in the Upper Copper River. In line with the Eastern Interior Subsistence Regional Advisory Council (Eastern Interior Council), the Board stated this proposal would have limited negative impact on subsistence opportunity and would respond to issues raised by subsistence users (FSB 2021).

A variation of the current proposal, as well as several other proposals related to dip netting in the Upper Copper River District were previously submitted to the BOF during the 2021 regulatory meeting for the Prince William Sound/ Upper Copper River and Upper Susitna Rivers Finfish and Shellfish (ADF&G 2021a). Proposal 8, submitted to the BOF request no dip netting in the confluence 500 yards below and 100 yards above any river or stream in the upper Copper River. The BOF did not pass Proposal 8, with a vote of 0–6. During deliberations, BOF members discussed several concerns. One major issue was enforcement: it was unclear whether the closure area would extend all the way across the mainstem Copper River (perpendicular to the flow), or if the 100-yard and 500-yard distances from the up- and downriver demarcation points would be measured in an arc into the mainstem. Both approaches would be difficult to implement. Physical signage could deteriorate, be vandalized, or become overgrown. If boundaries were marked by distance from the confluence, buoys or floating markers would be needed, or boats would require electronic navigation aids to avoid closure areas. The BOF also noted that annual changes in river geomorphology could alter the locations of tributary confluence holding areas relative to the designated closure areas. Additionally, harvest effort in this area is low compared to the Chitina Subdistrict. These factors contributed to the unanimous decision not to adopt the proposal.

Other proposals considered by BOF in 2021 included proposals to prohibit guiding in subsistence finfish fisheries (Proposal 7), to prohibit dipnetting from a boat in the Glenallen Subdistrict (Proposal 9), to prohibit dipnetting from a boat in the Upper Copper Rivers District (Proposal 10), to prohibit dipnetting from a moving boat in a portion of the Chitina Subdistrict (Proposal 11), to prohibit dipnetting from a boat when within 50 feet of a person dipnetting from shore in the Chitina Subdistrict (Proposal 12), to prohibit dipnetting from a boat within 75 feet of an operating fishwheel in the Glenallen Subdistrict (Proposal 13), to prohibit the use of gillnet mesh in dip nets (Proposals 14 & 15), to prohibit the use of depth or fish finders on boats in the Upper Copper River District (Proposal 16), and to establish specific permit and bag limits when dipnetting from a boat in the Glenallen Subdistrict (Proposal 17) (ADF&G 2021a). Of these, the only proposal that carried was Proposal 7, a prohibition on the use of guiding in subsistence finfish fisheries. This proposal was modified so that transport services, but not services that assist with the take of salmon, may still be used in the Glenallen Subdistrict subsistence fisheries (ADF&G 2021a).

Proposal 51 submitted by the Wrangell-St. Elias National Park and Preserve, was brought before the BOF during the 2024 Prince William Sound Finfish and Shellfish meeting and sought to reduce commercial salmon fishing opportunity in the Copper River District to address concerns about early run Chinook and Sockeye salmon conservation and unmet subsistence needs in the upper river. The proposal emphasized that early timing stocks are disproportionately harvested before reaching upriver subsistence users and highlighted that escapement and subsistence harvest goals have often not been met. After review and public testimony, the Board adopted amended language that delays the commercial fishing opening until after May 21 and adds complementary restrictions in the personal use fishery to support Chinook Salmon escapement. This action reflects the BOF's recognition of conservation concerns identified by the proponent and participating regional councils and demonstrates how regulatory adjustments have been used to balance commercial opportunity with subsistence access and stock stability.

Table 2. Overview of current salmon subsistence and personal use fisheries in waters of the Copper River (FSMP 2021, ADF&G 2024).

Jurisdiction	Fishery	Allowable Gear	Season	Salmon Limits
Federal	Upper Copper River District: Glennallen Sub-district ^a	Fish wheels; Dip nets; Rod and reel	May 15 – Sep. 30	1-person ^b : 30 salmon, up to 200 salmon (only 5 Chinook by dip net and 5 Chinook by rod and reel); 2-person or more ^b : 60 salmon, plus 10 for each additional household member, up to 500 salmon
Federal	Batzulnetas	Copper River: Fish wheels; Dip nets; rod and reel Tanada Creek: Dip nets; Fyke nets; spears; rod and reel	May 15 – Sep. 30	Copper River: no limit Tanada Creek: no limit for Sockeye taken by dip net, spear, or rod and reel, no (0) Chinook, and <1,000 Sockeye by Fyke net
Federal	Lower Copper River Area ^a	Dip net; rod and reel No dip netting from a boat	Jun. 1 – Sep. 30	1-person: 15 salmon; 2-person or more: 30 salmon, plus 10 for each additional household member; up to 5 of total can be Chinook
State (Subsistence)	Upper Copper River District: Glennallen Sub-district	Fish wheels; Dip nets	Jun. 1 – Sep. 30	1-person ^b : 30 salmon (of which no more than five may be Chinook if taken by dip net), up to 200 salmon via permit; 2-person or more ^b : 60 salmon (of which no more than five may be Chinook if taken by dip net), plus 10 for each additional household member, up to 500 salmon via permit
State	Batzulnetas	Copper River: Fish wheels; Dip nets Tanada Creek: Dip nets; Spears	Jun. 1 – Sep. 1	1-person: 30 salmon, up to 200 salmon via permit; 2-person or more: 60 salmon, plus 10 for each additional household member; no (0) Chinook harvests in this Area
State (Personal Use)	Upper Copper River District: Chitina Subdistrict	Dip nets	Jun. 10 – Sep. 30 ^c	1-person: 25 salmon; plus 10 for each additional household member; one of which can be a Chinook

^a Total combined harvest; see regulation for details

^b Per household, a maximum of 5 Chinook Salmon by dip net and 5 Chinook Salmon by rod-reel can be counted towards the total salmon limit.

^c See regulations for open period specifications within this season.

Current Events

During the March 17, 2026 meeting of the Southcentral Council, the Southcentral Council declared it intends to submit an identical proposal at the appropriate time to the BOF and asks that, if this proposal is to pass, that the FSB defer the implementation of resulting Federal regulation until such time as the BOF is able to take action on the identical proposal (SCRAC 2026). And, if the BOF does not pass the identical proposal, the Council's intent is for the FSB to reject this proposal. This statement was made in response to concerns about proposing Federal subsistence regulations that would be more restrictive than State regulations. The next Prince William Sound Finfish and Shellfish meeting cycle occurs 2027–2028 with proposals to change regulations accepted in April 2027 and later taken up by the BOF in 2028.

This proposal includes a stipulation from the proponent that it must first be adopted by the BOF before the FSB considers it (or acts upon it), which creates practical challenges because the two regulatory systems operate on different cycles and timelines. Although the State's Prince William Sound finfish and shellfish regulatory cycle will not convene until 2028 and the Federal cycle for the 2029–2031 period begins in 2028 as well, the sequence of events within each process does not fully align. The BOF must complete its proposal review, Advisory Committee input, staff analysis, and regulatory meeting before any State action is finalized, while the FSB begins its proposal intake and analysis earlier in the year. This means that even if both cycles occur within overlapping calendar years, the FSB may reach points in its process that require State action that has not yet occurred. As a result, a requirement for State adoption prior to Federal consideration may delay or prevent the proposal from advancing within the Federal process until the timelines line up closely enough for the necessary State decision to occur in time.

Biological Background

This proposal would limit dipnetting within 500 yards downstream and 100 yards upstream of any salmon bearing river or stream tributary confluence in the Upper Copper River District. Biological concerns focus primarily on Chinook (*Oncorhynchus tshawytscha*) and Sockeye salmon (*Oncorhynchus nerka*). Coho Salmon (*Oncorhynchus kisutch*) are not included in this analysis because, although they use the same migration corridors and tributary confluences as staging and orientation sites, their return timing differs from that of Chinook and Sockeye salmon. In the Copper River, Coho Salmon typically arrive from July through September and use tributaries throughout the district for spawning during late summer and into fall (Giefer and Evers 2025).

The Copper River supports a diverse array of stock-structured salmon populations, among which Chinook and Sockeye salmon are the primary species harvested in Federal subsistence fisheries. A stock-structured population is one made up of multiple genetically and geographically distinct spawning groups, often tied to specific tributaries or run timing, that are often managed individually to protect the diversity underlying the species' overall productivity. These species provide essential subsistence, personal use, and sport harvest opportunities in the Upper Copper River District, while contributing to key ecological processes throughout the watershed. Management integrates in-season sonar passage data, mark–recapture estimates and permit based harvest reporting to balance harvest opportunities with escapement needs.

Adult salmon ascend the Copper River from the Gulf of Alaska and enter tributaries throughout the Upper Copper River district, including the Klutina, Tonsina, Gulkana, and headwater streams. Early running stocks often migrate to the furthest upriver tributaries, with confluence areas along the way serving as staging and resting sites (Schwanke and Piche 2023). The same confluence areas and tributary mouths provide hydraulic refugia, thermal gradients, and orientation cues; adult Chinook and Sockeye salmon are frequently observed holding at confluences before entering tributaries, which has potential to make these areas biologically sensitive to concentrated harvest (SCRAC 2020, 2021; Schwanke and Piche 2023, AITRC 2025).

The portfolio effect (Schindler et al. 2010) described for Bristol Bay Sockeye Salmon also applies on a smaller spatial scale in the Copper River, where salmon originating from individual tributaries in the Upper Copper River District may contribute to overall population stability in much the same way that discrete populations stabilize regional returns in Bristol Bay. Each tributary supports salmon populations that fluctuate somewhat independently through time. This weak synchrony mirrors the dynamics observed in Bristol Bay, where asynchronous populations and diverse age structures buffer variability in total returns. As a result, even when conditions in one tributary reduce productivity, other populations can offset those declines, producing more consistent annual run sizes for the broader Copper River system. Maintaining diversity among tributaries therefore supports long term stability of salmon returns and helps ensure that ecological and fishery benefits persist even as environmental conditions change.

At the same time, fishing in confluence areas raises concerns because these locations can hold high numbers of salmon from individual tributaries, creating the possibility of removing a large portion of a single population in a short period. However, confluence areas often support mixed stock aggregations, where some salmon are staging before entering the adjacent tributary while others are simply resting before continuing their migration upriver into completely different systems. Early running stocks may pause in these sites while en route to distant spawning tributaries, and the hydraulic refugia, thermal gradients, and orientation cues at confluences attract adult Chinook and Sockeye salmon from multiple sources. This means that although these areas are biologically sensitive and harvest could disproportionately affect the tributary immediately upstream, the fish present are not exclusively from that tributary. As a result, management discussions must weigh both views, recognizing that confluence areas hold vulnerable concentrations of salmon while also functioning as shared migratory spaces for several distinct populations.

Copper River Chinook Salmon typically spend 1–3 years rearing in freshwater, followed by 2–4 years at sea, returning as 4–7-year-old adults (Scannell et al. 2025) and enter during late spring through early summer in May through June, with stock specific run timing documented by radio telemetry (2002–2004) and upriver distribution mapped at the tributary level (Savereide 2005). These fish are especially associated with long-distance migrations (up to 300 miles) towards upper basin spawning habitats (Savereide 2005, Schwanke and Piche 2023).

Sockeye Salmon are predominantly lake-rearing in systems such as Klutina, Gulkana, and Copper lakes. They rear for 1–3 years in freshwater and return as age 3–6 mature fish (Scannell et al 2025). Adult Sockeye Salmon enter the Copper River late spring through mid-summer and compose the majority of Miles Lake sonar counts. Migration past the sonar generally begins in May and extends through July, with roughly two weeks' average travel time (variable with discharge) from Miles Lake to the lower boundary of the Upper Copper River District (ADF&G 2026). Many Sockeye Salmon spawn in lake associated and clear water tributaries in the upper basin.

Species Return Rates and Escapement

The BOF established management plans designed to provide harvest opportunities while ensuring sustainable numbers of Copper River salmon reach their spawning grounds. These management plans allocate harvest among different fisheries targeting these stocks and are directly based on in-river salmon estimates. In-season management actions designed to limit harvest in specific fisheries are used to meet escapement goals in years when returns are weak.

Salmon returns to the Copper River are currently assessed using three primary methods, each operated by different entities and providing varying levels of detail on run strength and stock performance. ADF&G operates the Miles Lake sonar approximately 52 kilometers upstream from the mouth of the Copper River, and this project provides the in-season salmon passage estimates used to manage the State's personal use, sport, and subsistence fisheries. The sonar is the primary tool for assessing Copper River salmon abundance and runs from mid-May through the end of July. Although all salmon species returning to the Upper Copper River District pass the site, the counts are used mainly to guide in-season management of Sockeye Salmon because Chinook and Coho salmon make up a small portion of the total passage. In recent years, ADF&G has worked to improve its ability to identify and enumerate large Chinook Salmon within the mixed passage of fish at Miles Lake. A species apportionment pilot study began in 2017 using Adaptive Resolution Imaging Sonar (ARIS), which provides higher resolution images that could help distinguish larger Chinook Salmon from smaller Chinook and Sockeye salmon. This technology allows for an estimate of large Chinook Salmon (greater than 30.4 inches in length) moving past the sonar. As of 2026, ADF&G continues to enhance length-based techniques at this long-standing project to improve the precision of large Chinook Salmon enumeration and support better understanding of the size composition of the Chinook Salmon run (Botz and Somerville 2024).

The Native Village of Eyak Department of the Environment and Natural Resources operates a long-term mark-recapture project in Baird Canyon and Canyon Creek that provides estimates and a direct assessment of Chinook Salmon abundance in the mainstem Copper River. Baird Canyon and Canyon Creek are located upstream from the Miles Lake sonar site, occurring at approximately 38 and three to four miles respectively. The consistency of the mark-recapture dataset has made it an important in-season index for Copper River fisheries management. Information from this project is evaluated alongside the other indicators that include commercial harvest data, counts from the Gulkana River tower, and aerial survey indices. Together, these measures help managers track the progression of the Chinook Salmon run and guide harvest announcements, emergency orders, and closures across the subsistence, personal use and sport fisheries. Further, this mark-recapture project provides abundance estimates that assist in evaluating the effectiveness of ADF&G emerging ARIS apportionment and large Chinook Salmon enumeration efforts.

Additional information on Copper River tributary populations comes from aerial surveys of nine index streams, flown one to three times per year, in the Upper Copper, Tazlina, Klutina, and Tonsina river drainages, although these surveys offer only relative abundance indices and are limited by timing and water clarity. ADF&G and the Bureau of Land Management jointly operate a counting tower on the

Gulkana River to track Chinook Salmon escapement. The only other tributary level monitoring site is the Tanada Creek weir, which is operated by the Ahtna Intertribal Resource Commission. These projects form the core of the current monitoring network, but they leave substantial gaps in tributary specific escapement data across the wider Copper River watershed.

At least 40 tributaries within six major Copper River drainages have been identified as Chinook Salmon spawning areas (Seeb et al. 2006, 2009). The broad distribution of spawning sites, combined with current technological and funding limitations, makes monitoring individual stocks impractical (Savereide 2005, Schwanke and Piche 2023). As a result, the Copper River watershed does not have stock specific escapement goals and is instead managed under a single system wide escapement goal. The current State Sustainable Escapement Goal for Copper River Chinook Salmon is a range of 21,000 to 31,000 fish, adopted in 2021 (Joy et al. 2021). This goal has been achieved in 7 of the 10 years from 2015 through 2024 (Morella et al. 2024, **Table 3**).

Since 1999, Chinook Salmon in-river abundance has been estimated using mark-recapture methods, and total drainage escapement has subsequently been calculated by subtracting the in-river harvest from those estimates. The total estimated runs and fishery type (commercial, sport, and subsistence harvests and escapement information) for 2014–2023 are displayed in **Appendix 1**.

The State’s Upper Copper River Sustainable Escapement Goal (SEG) is 360,000–750,000 Sockeye Salmon (Morella et al. 2024). During the 2014–2023, 10-year period, the Sockeye Salmon return has met or exceeded the minimum threshold of the SEG range established for the Upper Copper River annually (Morella et al. 2024; **Table 3**). The most recent 10-year average (2013–2023) Copper River Sockeye Salmon total run is 1.98 million fish (Hansen and Sommerville 2024). The total estimated runs and fishery type (commercial, sport, and subsistence harvests and escapement information) for Sockeye Salmon in the Copper River system 2014–2023 are displayed in **Appendix 1** (Botz and Somerville 2024).

Table 3. Estimated Sockeye and Chinook salmon returns and spawning escapements for the Copper River 2014–2024, and the previous 5- and 10-year averages (*Hansen and Somerville 2024; **Piche 2024, ***Scannell et al. 2025). Dash (-) denotes no publicly available or incomplete data at time of the analysis.

Year	Sockeye Salmon Total Run	Upper Copper River Sockeye Salmon Spawning Escapement	Chinook Salmon Total Run	Chinook Salmon Spawning Escapement
2014	3,386,860*	864,169***	35,322*	20,689***
2015	3,209,312*	930,145***	56,174*	26,751***
2016	2,075,016*	513,143***	29,243*	12,430***
2017	1,393,988*	460,295***	56,131*	33,644***
2018	819,279*	495,779***	61,623*	42,678***
2019	2,418,906*	719,526***	64,443*	35,138***
2020	726,495*	348,000***	33,069*	22,054***
2021	1,319,276*	508,715***	30,087*	18,431***

Year	Sockeye Salmon Total Run	Upper Copper River Sockeye Salmon Spawning Escapement	Chinook Salmon Total Run	Chinook Salmon Spawning Escapement
2022	1,470,090*	519,586***	52,176*	29,247***
2023	1,948,506*	689,457***	61,534*	40,872***
2024	-	-	34,499**	18,526***
5-year Average 2019–2023	1,576,655	557,057	-	-
10-year Average 2014–2023	1,876,773	604,882	-	-
5-year Average 2020–2024	-	-	42,273	25,826
10-year Average 2015–2024	-	-	47,898	27,977

Cultural Knowledge and Traditional Practices

Ahtna Athabascan people have harvested Sockeye, Chinook, and Coho salmon in what is now the Upper Copper River District for at least 1,000 years (Workman 1976). Upper Tanana Athabaskans also traditionally fished in the Upper Copper River and maintained long-term kinship and trading ties with the Ahtna (Haynes et al. 1984). Sockeye Salmon are the most important species used in the area, followed by Chinook Salmon. The Ahtna traveled to seasonal camps throughout their territory based upon resource availability. Fish camps were located on the Copper River and several major tributaries (De Laguna and McClellan 1981, Simeone and Miller 2024). Early June and July were the preferred time for fishing Sockeye Salmon runs headed for streams and lakes in the Upper Copper River, as this was the best time for making *ba'*, or dried fish (Simeone and Kari 2002).

There are eight contemporary Ahtna villages (Mentasta Lake, Chistochina, Gakona, Gulkana, Tazlina, Copper Center, Chitina, and Cantwell), almost all of which are located near traditional fishing camps. Other communities situated on or near the banks of the Copper River include Slana, Gakona Junction, Nabesna, Willow Creek, Kenny Lake, and Tonsina. Salmon remain vital to the subsistence way of life for those living in the Upper Copper River Basin (Reckord 1983, Brady et al. 2013). Comprehensive subsistence surveys conducted by ADF&G Division of Subsistence show that salmon comprise a large portion of the annual harvest in most communities along the Copper River drainage (Lavine and Zimpelman 2014, **Table 4**). Salmon made up 78% of the overall subsistence harvest in edible weight in Chitina in 2012, 68% of the overall subsistence harvest in Tazlina in 2013, and 66% of the subsistence harvest in Kenny Lake in 2012 (**Table 3**).

Table 4. Salmon harvest by select communities with a customary and traditional use determination for salmon in the Upper Copper River, during the most recent subsistence survey study year for each (ADF&G 2020, ADF&G 2026).

Community	Survey year	Pounds of salmon per capita	Percentage of overall harvest comprised of salmon
Chitina	2012	191.6	78%
Tazlina	2013	102.1	68%
Kenny Lake	2012	93.6	66%
Gulkana	2013	91.7	64%
Copper Center	2010	129.3	61%
Chistochina	2022	44.6	29%
Glennallen	2013	57.0	58%
Gakona	2012	95.9	56%
McCarthy	2012	45.8	53%
Tonsina	2013	101.8	51%
Slana/Nabesna Road	2023	31.8	27%
Dot Lake	2011	44.2	37%
Mentasta Lake	2022	19.3	28%
Tok	2011	51.3	25%
Cantwell	2012	15.2	15%
Northway	2014	40.8	13%
Dry Creek	2011	17.2	12%

Ahtna fishing technology adapted to local conditions and salmon behavior. The traditional Ahtna/Upper Tanana methods of harvesting salmon included basket dip nets (*ciisi*), platform fish weirs, funnel-shaped basket traps, and salmon spears or harpoons. Dip netting for Sockeye Salmon as well as Chinook Salmon took place from shore or from platforms built over the river. Fish wheels were introduced in the early 1900s, after which they became very popular and replaced some earlier fishing technologies (De Laguna and McClellan 1981). Fish wheels are still the predominant gear used by communities in the Upper Copper River Basin today. For example, in 2013 (the most recent year systematic subsistence household surveys were conducted), Glennallen residents harvested 88% of their salmon (in edible weight) by fish wheel. Gulkana residents took 91% of their salmon harvest by fish wheel, and Tazlina residents took 88% of their salmon harvest by fish wheel (Holen et al. 2015). In contrast, the percent of the salmon harvest taken by dip nets for these communities was quite low, at 3.4% for Glennallen, 2% for Gulkana, and 3% for Tazlina (Holen et al. 2015).

However, in recent years, fewer fish are being harvested by fishwheel, and more are being harvested by dipnets (see **Harvest History** section). Fishwheels have become more challenging to install, maintain, and access due to erosion, flooding events, high-water levels, and increasing number of boats along the Copper River, which can cause wakes that damage fishwheels (Holen et al. 2015, SCRAC 2021: 76-77). Placement of fishwheels is also heavily influenced by complex land status. Prior to the

opening of the Copper River Basin to the road system, the Ahtna had a system of territories dictating access to fishing sites, which formed part of their traditional management system to regulate salmon harvest (Simeone and Kari 2002: 38). After World War II, the Copper River Basin became accessible to Alaska's major population centers, and today it is bisected by the Glenn and Richardson highways. The intersection of strong local traditional fishing, historically abundant Sockeye Salmon runs, and easy access from urban centers has created unique potential for user conflict in the Upper Copper River District (Simeone and Kari 2002, Holen et al. 2015).

While it is easy for outsiders to access the Copper River Basin, access to fishing sites is relatively limited. Traditional territories have given way to private property and Ahtna Regional and Village corporation land. "As a result, much of the land along the Copper River has become private property and access to the river is severely limited" (Simeone and Kari 2002: 45). This circumstance has led to a concentration of non-local fishers at Chitina above and below the bridge and at a few other locations, such as Copperville and the Chitina Airport, where there are short swaths of State-managed lands with river access. While harvest reports do not systematically document where dip netting occurs, available information indicates dip netting locations include Chitina below the bridge, and on and at the mouth of the Klutina River, O'Brien Creek, Hayley Creek, Terral Creek, Eskaleta Creek, and Kotsina River (SCRAC 2020, 2021; ADF&G 2021b, Cohen 2026a, pers. comm., Pister 2026, pers. comm.).

Even prior to privatization of land, good dip net sites were valued, and, according to oral history, there were no good dip sites located on the Upper Copper River above the village of Chistochina (Simeone and Kari 2002). Fishing from a boat with dip nets is generally more productive than fishing from shore because users can move to areas that would otherwise be inaccessible, including some tributaries. D-framed dip nets are often used from boats, which can be pulled parallel to the river bottom. Because of the strong current in the Upper Copper River, salmon travel where the current is weakest and rest in areas of slower water. When sufficiently far from shore, these pooling areas are accessible only by boat and would otherwise go undisturbed (SCRAC 2020, 2021). Some evidence indicates that Ahtna have historically placed fish wheels near areas with large eddies (Simeone et al. 2007: 27).

According to testimony provided at Southcentral Council meetings and ethnographic research, people have long observed that salmon would rest in these eddies when water levels were higher and then proceed upstream when water levels dropped (SCRAC 2020: 145, Simeone et al. 2007). In the past, the drop in water levels would result in an influx of salmon harvested at fishwheels. As dip netting from boats has become more common, fishwheel owners and operators have observed reduced harvest and have expressed concern that fewer salmon are making it to their spawning grounds (SCRAC 2020: 145). Testimony provided at Southcentral Council meetings has highlighted the increased dip netting in the Upper Copper River subdistrict. In discussing Council comments on BOF proposals related to commercial guiding and dip netting in the Upper Copper River District in 2021, one Council member stated:

"This is what has increased over the last decades, really, or even less than a decade. There's been people dip netting from boats on the Copper for many decades but...the guiding above the bridge at Chitina has increased, I mean, I don't know, a thousand

times in the last...10 years... You know when I first started running around out there a lot 20 years ago, there was none, there was a little bit below the bridge in the fishery and now there's 10 boats or more in the subsistence fishery above the bridge... and a lot of these comments apply to [Proposal] Number 8 to the tributary mouth thing, that's something where there's been one or two boats that have done it for years and now there's lots and they can—if the fish are—if they're all wadded up there it can be pretty easy pickens. That's probably not one that makes any difference in the grand scheme of conservation, but it definitely causes conflict... And really, in the last two years it's the first time I've seen—actually even just the last year, guiding, dipnet charters at every—well, the Klutina and Gulkana mouths specifically are the ones where people do most of it and now they're—the guides that showed up there, it's conflicting with other users, all, you know, whether it's fishwheel people that are up and down, you know, they can't put it [fishwheels] within a certain distance of the mouth and sportfish users and everybody else... I think it's something that if there were enough people that figured it out, which there isn't at this point, you know, one guy running up and down there isn't a big deal but the fish get very concentrated, especially at the Gulkana River mouth at times and the king salmon, particularly, could be really, really affected..." (SCRAC 2021: 67-75).

A member of the public also spoke on this issue:

"So I reside in Copper Center. My fishwheel, if you were on the highway would be on Mile 103.7 Old Richardson Highway. I inherited this camp from my grandmother so it's been in our family for at least 30 years that I know of... They [boats] line up river drifting down and pulling fish in with dipnets, I can see this over and across from my fishwheel, there's a nice island over there, nice pool where the fish can hold up and this summer we had a lot of high water so we had a lot of fish holding up waiting for low water and, you know, they sit in those holes to rest. So dip netters are able to find—these dipnetters from boats are able to find these holes. I believe it's not a traditional customary practice to fish in this manner. I also know some of these boat owners and they're also using a fishwheel while dipnetting at the same time. I've also seen people dipnetting ...where the Klutina meets the Copper. I believe this doesn't give the opportunity for the fish to make it to the spawning areas." (SCRAC 2020: 149)

Public comments submitted to BOF on this topic also noted that more people are dip netting from a boat in the Glenallen Subdistrict, with population access points at O'Brien Creek, Terral Creek, Eskaleta Creek, and Haley Creek (ADF&G 2021b). One fishing guide stated that dip netting at the mouths of tributaries along the Copper River "seems akin to shooting fish in a barrel" and may pose conservation concerns (ADF&G 2021b: 649). Echoing statements provided at Southcentral Council meetings, public comments noted that guided services provide important access to "thousands of users" (ADF&G 2021b: 281). One comment noted that "subsistence and personal use are able to harvest salmon at the mouths of tributaries, next to subsistence fish wheels, near folks dip netting from shore. It all adds up to a dangerous situation. Dip netting should be done from shore as it traditionally was done." (ADF&G 2021b: 458).

The issue of dip netting at the mouths of tributaries is a concern to local users not only because of the conflict it can generate, but also because of local knowledge related to salmon populations. In their documentation of Traditional Ecological Knowledge of salmon in the wider Upper Copper River drainage, Simeone and Kari (2002) show that the Ahtna named salmon runs specifically. Ahtna oral histories and traditional knowledge identify different seasonal runs that vary in their spawning grounds, arrival timing, body size, coloration, and fat content, and families' harvest and preservation practices were shaped by these observed differences. Fish that arrive early in the season are often used for smoking and drying due to their higher oil content, whereas fish that arrive later are used fresh or are frozen (Simeone and Miller 2024).

According to Kari (1986), "Each run is named for a side stream or place, and the Ahtna say they can discern the differences among fish from various locations" (Kari 1986, cited in Simeone and Kari 2002: 24). For instance, Katie John described Mentasta fish as rounder than other salmon, Suslota salmon as smaller than salmon harvested in other locations, salmon spawning in Bear Valley (called *kolgiis Na'*) as bigger than Whitefish but similar in appearance to the salmon that spawn in Suslotina Creek (called *tsek'ohwtsedle*), and Sockeye Salmon that spawn in Copper Lake (called *dzahnii luugu'*) as having a hump (Simeone et al. 2007: 45). Simeone et al. (2007) note that these observations are akin to ecological studies demonstrating that salmon adapt to different spawning habitats and that these adaptations are reflected in the morphology of different salmon stocks.

Ahtna place names often reflect patterns of traditional use and sometimes referenced fish, animals, or plants that could be found in the area (Simeone and Miller 2024). Based on observed differences in salmon populations, Ahtna Elder Katie John reported the loss of several stocks of salmon in her lifetime, which she called "missing fish." One of these stocks was *natael luugu* (meaning 'roasted salmon fish'), which are large Sockeye Salmon that spawn in Tanada Lake that are notable for their size and bright shiny color (Simeone et al. 2007). A list of Ahtna-identified salmon stocks is provided in **Appendix 1**.

Recent genetic analyses complement these traditional observations, demonstrating that at least twelve Copper River Sockeye Salmon populations can be genetically differentiated not just by run timing, but by tributary and geographic area (Barclay et al. 2026). The distinct groups, which may not fully capture genetic diversity of Copper River drainage Sockeye Salmon populations, included Copper/Tanada Lakes, Slana, Gulkana, East Fork Gulkana, Tazlina, Klutina Lake, Klutina Lake outlet, Tonsina Lake outlet, Chitina, Copper Delta, Main Bay/North Prince William Sound, and other (Barclay et al. 2026). These genetic findings and earlier radiotelemetry studies reinforce "that Ahtna people have historically managed harvest timing to match the phenology of different salmon groups, select preferred stocks, and maintain reliable food supplies across the season" (Barclay et al 2026: 3).

Harvest History

Salmon fisheries in the Copper River primarily harvest Chinook and Sockeye salmon, with smaller harvests of Coho Salmon. These stocks are taken in several fisheries, including commercial and State subsistence gillnet fisheries in the marine waters near the mouth of the Copper River. Additional

harvest occurs in a new Federal subsistence dip net and rod and reel fishery in the lower Copper River, in personal use dip net and Federal subsistence fisheries in the Chitina Subdistrict of the Upper Copper River District, in State and Federal subsistence fisheries in the Glennallen Subdistrict, in State and Federal subsistence fisheries in the Batzulnetas area, and in sport fisheries throughout various tributaries. State subsistence fishing for Copper River stocks is limited to three areas listed in **Table 2**: marine waters of the Copper River District, the Glennallen Subdistrict within the Upper Copper River District, and the Batzulnetas area. Among these areas, the Upper Copper River District has the highest participation and harvest (Botz and Sommerville 2024). Federal subsistence fisheries occur in the Upper Copper River District, including both the Glennallen and Chitina subdistricts, the Batzulnetas area, and the Lower Copper River Area.

The estimated annual salmon harvest by State subsistence permit holders in the Upper Copper River District (Glennallen Subdistrict) averaged 53,091 Sockeye Salmon and 2,667 Chinook Salmon for the previous 10-year period (2014–2023) (**Appendix 2; Tables A1 & A2**). During this time dip net permits comprised about 75% of State Glennallen subsistence permits issued (Hansen and Somerville 2024). The Chitina Subdistrict personal use fishery averaged harvests of 145,505 Sockeye Salmon and 1,616 Chinook Salmon from 2014–2023 (Botz and Somerville 2024, **Appendix 2; Tables A1 & A2**).

The yearly Federal subsistence harvest estimates for the Upper Copper River District (Chitina, Glennallen, and Batzulnetas Subdistricts combined) averaged 20,037 Sockeye Salmon and 899 Chinook Salmon, 2016–2025 (**Appendix 2; Tables A3–A5**).

Over the 2015–2025 period, fish wheel harvest share declined from 90.1% in 2015 to 69% in 2025, while dip net share increased from 9.7% to 31.0%, indicating a clear shift in the proportion of harvest taken by each gear type over time (**Table 5**). The five-year average (2021–2025) shows fish wheel accounting for 73.6% of harvest and dip net accounting for 26.4%, reflecting a continued gradual decrease in fish wheel reliance paired with an increase in dipnet contribution (**Table 5**). In contrast, the 10-year average 2016–2025 shows fish wheels comprising 79.2% of harvest and dipnet comprising 20.7%, demonstrating that while fish wheels have historically dominated the Upper Copper River Federal subsistence harvest, the most recent five years exhibit a notable shift toward greater dip net use. It is worth noting that Federal harvest reports do not distinguish whether dip netted fish were harvest by users fishing from the riverbank or from a boat.

Council testimony further indicates that variable and often extreme river conditions in recent years, including record-low water levels accompanied by debris strikes as well as periods of high water contributing to bank erosion, have complicated fishwheel operation and maintenance in the Upper Copper River District (SCRAC 2023: 158, 2025: 120,140, 2026:105-106). Additionally, changes to Federal management strategy in the Chitina Subdistrict beginning in 2018, which decoupled Federal subsistence fishing periods from the State’s schedule, have provided some community members without fishwheel access a more practical means of meeting their subsistence needs through dip netting (SCRAC 2025)

Table 5. Federal subsistence fish harvest in all Upper Copper River fisheries harvest by gear type¹ (Cohen 2026b, pers. comm.). Total harvest includes Sockeye Salmon, Chinook, Coho Salmon, Steelhead/Rainbow Trout, and “Other species”.

Year	Total Harvest ²	Fish Wheel %	Fish Wheel Total ²	Dip Net %	Dip Net Total ²	Rod and Reel %	Rod and Reel Total ²
2010	17,700	90.3%	15,978	9.6%	1,697	0.1%	25
2011	19,387	88.4%	17,142	11.4%	2,206	0.2%	39
2012	17,958	90.4%	16,228	9.4%	1,684	0.3%	45
2013	21,382	85.9%	18,369	14.1%	3,013	0.0%	0
2014	26,284	89.3%	23,458	10.8%	2,825	0.0%	3
2015	29,849	90.1%	26,900	9.7%	2,883	0.2%	66
2016	22,035	90.0%	19,820	10.0%	2,197	0.1%	18
2017	21,550	96.2%	20,724	3.7%	804	0.1%	19
2018	23,476	83.4%	19,579	16.5%	3,878	0.1%	19
2019	23,411	79.0%	18,485	21.0%	4,909	0.1%	16
2020	17,266	75.9%	13,098	24.1%	4,159	0.1%	9
2021	21,132	70.8%	14,951	29.2%	6,175	0.0%	6
2022	18,603	80.2%	14,919	19.8%	3,676	0.0%	7
2023	22,231	70.6%	15,695	29.4%	6,536	0.0%	1
2024	22,076	77.5%	17,109	22.5%	4,967	0.0%	0
2025	19,197	69.0%	13,246	31.0%	5,951	0.0%	0
5-yr. Avg. 2021–2025	20,648	73.6%	15,184	26.4%	5,461	0.0%	3
10-yr. Avg. 2016–2025	21,098	79.2%	16,763	20.7%	4,325	0.0%	10

¹ This table reflects entries to the online database from 2011 through **2/24/2026**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Alternatives Considered

One alternative considered was to prohibit the use of dip nets by non-federally qualified subsistence users within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence within the Upper Copper River mainstem. This would obviate the need for the BOF to adopt a similar proposal and provide priority consumptive use to federally qualified subsistence users. This alternative would prevent Federal users from being more restricted than State users as all waters within the Upper Copper River District, including the Chitina and Glennallen subdistricts, are Federal public waters within and adjacent to the exterior boundaries of Wrangell-St. Elias National Park and Preserve. However, this alternative introduces enforcement issues specific to demarcation of the dip net exclusion area as discussed in the Regulatory History section above. This includes uncertainty about how the boundaries would be defined on the water, difficulty maintaining or relying on physical

markers, the need for buoy or navigation-based systems if measurements are taken from the confluence and annual shifts in river features that could change the intended conservation areas.

Another alternative considered was to prohibit use of dip nets by all users (federally and non-federally qualified subsistence users) within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence within the Upper Copper River mainstem. Although this alternative would not provide priority consumptive use for federally qualified users it would support the Southcentral Council's concerns for protecting salmon stock diversity as well as reducing the potential for disproportionate harvest of salmon in these areas. Additionally, this alternative would eliminate the need for a similar proposal to be submitted to the BOF given the reason stated in the previous alternative considered. As with the previous alternative considered (prohibit the use of dip nets by non-federally qualified subsistence users) this alternative includes the same uncertainty with defined boundaries on the water, maintaining or relying on physical markers, the need for buoy or navigation-based systems if measurements are taken from the confluence and annual shifts in river features that could change the intended conservation areas.

Effects of the Proposal

The majority of salmon taken under Federal regulations in the Upper Copper River District are taken by fish wheel, rather than by dip net. Although fish wheels have historically accounted for most of the salmon harvested under Federal regulations in the Upper Copper River District, recent harvest data show a noticeable shift, with the most recent five years indicating increasing reliance on dip nets and a corresponding decrease in fish wheel use. Dip netting, including from boats, takes place primarily under State permits (Hansen and Somerville 2024). Because boats are not widely used to fish for salmon under Federal subsistence permits in the Upper Copper River District, adopting this proposal would have limited effect on shore- or boat-based dip netting practices. For those fishers who dip net under Federal subsistence permits, this regulatory change could be bypassed by using a State subsistence permit in the Glennallen Subdistrict or a State personal use permit in the Chitina Subdistrict unless non-federally qualified subsistence users were also restricted (See Alternative Considered section). However, State personal use permits offer substantially lower harvest limits than Federal subsistence permits (**Table 2**).

If this proposal is adopted, regulations for both State personal use in the Chitina Subdistrict and subsistence fishing in the Glennallen Subdistrict would be less restrictive regarding the use of dip nets than under the Federal subsistence fishery on the Upper Copper River, unless implementation of the change were paused until a similar change was adopted by the BOF as requested by the Southcentral Council. Prohibiting the use of dip nets, within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence within the Upper Copper River mainstem, under both State and Federal regulations could alleviate some conflict between user groups. However, there are no fish wheels in the Chitina Subdistrict for either State or Federal users and prohibiting the use of dipnets within the Subdistrict would not alleviate any conflicts. However, in the absence of State action, adopting this proposal would make Federal regulations more restrictive than State regulations, while not eliminating the practice of concern or contributing to conservation of salmon stocks.

Additionally, dip netting may represent an increasingly important method for federally qualified subsistence users to efficiently harvest salmon within the Upper Copper River mainstem given complications with fishwheel operation and maintenance due to changing river conditions and complex land ownership status. Although there is evidence of tributary-specific stock diversity as documented by Traditional Ecological Knowledge and genetic stock composition estimates, adoption of this proposal could unnecessarily restrict dip netting without a clear, demonstrated tributary-specific conservation concern. However, it is important to note current monitoring efforts are focused on system-wide escapement rather than tributary-specific production.

If this proposal is not adopted, federally qualified subsistence users may continue to dipnet at the mouths of tributaries. Local reports and testimony on recent Federal and State proposals suggest this practice is affecting subsistence fishwheel harvests and may be unsustainable for tributary-specific stocks, which have been long recognized by traditional knowledge holders and more recently identified in genetic analyses.

OSM Preliminary Conclusion

Oppose Proposal FP27-07

Justification

The proposal would have limited effect on Federal subsistence harvest practices in the Upper Copper River District. Despite the trend showing of increased dip net use, at present a majority of federally qualified subsistence users (5-year average of about 75%) harvest salmon with fish wheels rather than dip net. However, it would create more restrictive Federal dipnetting regulations than those in State subsistence and personal use fisheries. Users would still be able to dip net in these areas, under State regulations in the Glennallen Subsistence and Chitina Personal Use fisheries, meaning the proposal would not achieve the intended conservation benefit.

Concerns about missing fish in areas such as Cobb Lakes, Bone and King Salmon creeks highlight gaps in monitoring across many Copper River tributaries. Limited assessment efforts reduce understanding of individual stock contributions within the drainage, yet Chinook and Sockeye salmon escapement levels remain largely within State established goals with no clear evidence of a systemwide conservation concern. However, information exists to suggest to the contrary, that systemwide conservation concerns exist for Copper River Chinook Salmon, particularly in lieu of Proposal 51 adopted by the BOF to reduce commercial salmon fishing in the Copper River District to address early-run Chinook and Sockeye salmon conservation concerns and unmet subsistence needs in the upper river.

The Southcentral Council submitted this proposal during its 2026 winter meeting as a proactive measure to reduce harvest pressure in sensitive areas that may be vulnerable to concentrated effort and potential overharvest. They noted that a companion proposal will be submitted to the BOF and asked if this proposal is adopted by the Board, implementation be deferred until the BOF takes action during the next call for proposals for the Prince William Sound Management Area. However, it is the position

of OSM that restricting federally qualified subsistence users before non-federally qualified users is counter to the Alaska National Interests Land Conservation Act and the Board should not adopt regulations more restrictive than State regulation. Additionally, deferred implementation is not possible; once the Board adopts a proposal, that proposal becomes part of the Code of Federal Regulations (CFR) and implementation occurs once the proposed rule is published in the CFR. If the Board is leaning towards adopting this proposal, the Board may defer their decision until after the 2027–2028 Prince William Sound Finfish and Shellfish meeting cycle. The Board may not adopt a regulation and have it deferred to a later date contingent upon the BOF approving a similar proposal. This proposal seeks conservation outcomes that will likely not be achievable through this action, and which relies on future actions by the BOF to align Federal and State regulations, creating uncertainty about its effectiveness and implementation.

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WRITTEN PUBLIC COMMENTS



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July 28, 2026

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Dear Mr. Chairman Christianson and Board Members,

On behalf of the Ahtna Intertribal Resource Commission (AITRC) Fish & Wildlife Committee, thank you for the opportunity to submit comments for the 2027-2029 Subsistence Fisheries Regulations for the Federal Subsistence Board. AITRC advocates for the eight federally recognized Tribes in the Ahtna Territory, working in partnership to protect and strengthen the Ahtna People's continued customary and traditional use of fisheries, wildlife, and natural/cultural resources across its territory.

The enclosed comments reflect the unified input of AITRC's member Tribes that make up our Fisheries and Wildlife Committee, and our professional staff. These positions are grounded in generations of Indigenous knowledge and lived experience managing and relying upon species such as the Copper River Salmon. Our comments, support, and opposition aim to ensure that subsistence resources remain accessible, sustainable, and managed in ways that reflect the priorities of the Indigenous communities who depend on them.

We appreciate the Board's continued engagement with Tribal voices and hope these comments assist in your deliberations. Thank you for your service and for considering the perspectives of AITRC and the Atnahwt'aene.

Tsin'aen,


Karen Linnell,
AITRC Executive Director

Proposal 27-06

AITRC opposes Proposal 27-06, submitted by the Wrangell-St. Elias National Park and Preserve Subsistence Resource Commission, which seeks to recognize customary and traditional (C&T) use for the area along McCarthy Road to Dan Creek and Kennecott.

AITRC staff and the Fisheries and Wildlife Committee are concerned that extending recognition to a location rather than evaluating individual users could weaken the standard for customary and traditional use. In our view, residents with long-term, consistent subsistence use should pursue individual recognition or apply for a state subsistence permit, rather than support a location-based change of this kind.

As noted above, the proposal seeks recognition for a place rather than for the people who may qualify through established use. This distinction is especially important in a rapidly growing area that increasingly includes recreational and part-time residents.

Section 16.05.940 (7) Customary and Traditional means the non-commercial, long-term, and consistent taking of, use of, and reliance upon fish or game in a specific area and the use patterns of that fish or game that have been established over a reasonable period of time, taking into consideration the availability of the fish or game;

AITRC believes many current residents do not meet the threshold for a federal regulatory change that would recognize this location for customary and traditional use. For that reason, the Fisheries and Wildlife Committee urges the Federal Subsistence Board to reject the proposed change.

- Residents with long-term, consistent subsistence use may seek individual customary and traditional use permits, if appropriate.
- Eligible residents may also apply for a state subsistence permit.
- A location-based designation should not substitute for demonstrating established customary and traditional use by the individuals seeking recognition.

Proposal 27-07

AITRC supports proposal 27-07 submitted by the Southcentral Regional Advisory Council's proposed addition;

Proposed Federal Regulation (addition)

36 CFR 242.27(e)(11)

(v) In the Upper Copper River District, you may take salmon only by fish wheels, rod and reel, or dip nets. In the Lower Copper River Area, you may take salmon only by dip nets and rod and

reel. All salmon retained from the Lower Copper River Area must be reported to area managers within 48 hours of harvest.

(A) In the Lower Copper River Area, you may not dip net from a boat.

(B) In the Lower Copper River Area, the salmon fishery opens on June 1 and closes on September 30.

(C) Dip nets are prohibited within 500 yards below and 100 yards above any salmon bearing river or stream tributary confluence in the upper Copper River

AITRC supports this proposed regulation change because it addresses conservation concerns in easily accessible fishing areas near major tributary confluences. These locations can place disproportionate pressure on specific salmon stocks, particularly those that are easiest to reach.

- Dip netting near major tributary confluences can disproportionately affect tributary-specific salmon stocks.
- Highly accessible sites may attract concentrated harvest pressure, increasing conservation risks.
- For example, the Klutina River may experience increased transporter pressure from nearby fishing guides during periods of conservation measures, such as sport fishing closures in that tributary.

Conclusion

In conclusion, AITRC respectfully urges the Federal Subsistence Board to consider these comments in a manner that protects the long-term sustainability of Copper River salmon and upholds the customary and traditional subsistence uses of the Ahtna people. AITRC opposes Proposal 27-06 because a location-based designation should not replace the established requirement to demonstrate long-term, consistent customary and traditional use by qualified individuals. AITRC supports Proposal 27-07 because it provides an important conservation measure for salmon-bearing tributary confluences and helps reduce concentrated harvest pressure on vulnerable salmon stocks.

AITRC appreciates the Board's consideration of these comments and remains committed to working collaboratively to ensure that federal fisheries management reflects Indigenous knowledge, Tribal priorities, and responsible stewardship for future generations.

APPENDIX 1

Table A1. Ahtna-recognized salmon stocks as documented by Simeone et al. (2007) and associated 2026 Anadromous Waters Catalog (AWC) status. AWC status codes denote species present and activity: K – King, S – Sockeye, CO – Coho Salmon, and activity codes: s – spawning, r – rearing, p – present, m – migration. (Giefer and Evers 2026 2024). NA indicates no AWC record for that location, or location was not specifically identified. Discrepancy between Ahtna knowledge and AWC status may reflect limited sampling or changes in stock presence over time.

Species	Name	Location	AWC Status
Chinook	<i>Ts'itael luugge</i> ('flows straight fish')	Sanford River	Kr
	<i>Sdzedi luuge</i> ('? fish')	Caribou Creek	NA
	<i>Taltsogh luugge</i> ('yellow water fish')	Tulsona Creek	Kr
	<i>Kediteni luugge</i> ('fish of water flows against a place')	Sinona Creek	Ks
	<i>Tsedghaazi luugge</i> ('rough rock fish')	Boulder Creek	Kr
	<i>Tsedghaazi ggaay luugge</i> ('small rough rock creek')	Unnamed creek above Boulder Creek	NA
	<i>Nataghilen luugge</i> ('fish of current flows down')	East fork of Chistochina River	Krs, Sp
	<i>Di'idaedl luugge</i> ('fish swim in (river) fish')	Indian Creek/River	Krsp
	<i>Tsedghaan' luugge</i> ('moldy rock fish')	Unnamed creek north of Boulder Creek	NA
	<i>Luk' ece 'e luugge</i> ('king salmon fish')	Unnamed creek south of Drop Creek	NA
	<i>C'alts'iis luuggu</i> ('abraded (rough) fish')	Ahtell Creek	Krsp
	<i>C'eggaan' ts'en luugu</i> ('arm bone fish')	Bone Creek	Ksp, Ssp
	<i>Luk'etu' luuggu</i> ('fish soup fish')	Granite Creek	Sp
	<i>Saas k' eti'itaan luuggu</i> ('trail goes on sand fish')	Alteration Creek	Ss
	<i>Kentsiina</i> ('Tonsina king')	Lower Tonsina River	COp, Krp, Spr*
Sockeye	<i>Sas luuggu</i> ('sand sockeye')	Suslota Creek	Sspr
	<i>Tsikohstedl luuggu</i> ('? small fish')	Suslotina Creek	NA
	<i>Mendaes luugu</i> ('shallow lake fish')	Mentasta Lake	Ss
	<i>Natael luugu</i> ('roasted salmon fish')	Tanada Lake	Ss
	<i>Dzahnii luuggu</i> ('rarely mentioned fish')	Copper Lake	Srs
	<i>Tsiis luuge</i> / <i>Dadzele</i> ('dog fish like')	Mouth of the Tonsina River	COp, Kp, Spr*, Kr
	<i>Kolgiis luugu</i> ('? fish')	Bear Valley Creek	NA

*Refers to data for Tonsina River (212-20-10080-2331).

APPENDIX 2

Table A1. Estimated harvest by end user and spawning escapement for Copper River and Copper River Delta **Chinook Salmon**, 2014–2023 (Botz and Somerville 2024).

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10-yr Avg (2014-2023)
Commercial harvest ^a	10,207	22,506	12,348	13,834	7,618	19,148	5,880	7,512	12,262	10,682	12,200
Commercial, home pack ^a	768	1145	727	744	85	742	225	278	534	587	584
Educational ^a	36	50	50	86	40	31	14	17	13	9	35
Subsistence (drift gillnet) ^b	153	167	73	778	1,356	808	657	624	887	948	645
Subsistence (Batzulnetas)	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen)	1,365	2,212	2,075	2,935	4,531	3,429	2,222	1,685	2,968	3,246	2,667
Federal subsistence (Glen.)	420	402	396	431	3,137	886	670	505	852	673	837
Personal use (Chitina)	719	1,570	711	1,961	1,273	2,611	751	832	2,214	3,515	1,616
Federal subsistence (Chitina)	14	15	15	12	101	78	96	113	99	154	70
Sport harvest	931	1,343	327	1,731	1,280	1,565	967	90	342	1,466	1,004
Upriver spawning escapement	20,709	26,764	12,485	33,655	42,242	35,145	21,587	18,431	32,005	40,254	28,328
Total est. Chinook run size	35,322	56,174	29,243	56,133	61,663	64,443	33,069	30,087	52,176	61,534	47,984

^a Numbers are from fish ticket data. Homepack numbers for Sockeye Salmon are voluntarily reported but are legally required.

^b Data are reported harvest from returned state and federal subsistence permits.

Table A2. Estimated harvest by end user and spawning escapement for Copper River and Copper River Delta **Sockeye Salmon**, 2014–2023 (Botz and Somerville 2024).

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10-yr Avg (2014-2023)
Commercial harvest ^a	2,050,007	1,750,762	1,175,100	586,079	46,524	1,283,736	102,269	404,638	601,009	862,002	886,213
Commercial, home pack ^a	12,072	10,590	9,598	8,289	1,545	8,016	1,455	3,625	4,172	6,162	6,552
Commercial, donated ^a	0	0	0	0	0	0	0	15	0	0	2
Educational ^a	186	91	203	217	6	18	7	6	2	34	77
Subsistence drift gillnet ^b	1,675	1,403	1,075	2,448	5,189	6,163	7,091	5,338	5,828	6,326	4,254
Federal subsistence (PWS/Chugach NF) ^b	76	152	234	127	96	116	41	19	197	134	119
Subsistence (Batzulnetas)	146	0	0	256	468	209	67	120	41	211	152
Subsistence (Glennallen Subdistrict) ^b	75,501	81,800	62,474	39,859	39,359	60,257	34,577	42,638	46,343	48,106	53,091
Federal subsistence (Glennallen) ^b	23,034	26,896	19,365	16,251	16,734	16,130	11,234	14,847	14,174	14,696	17,336
Personal use (Chitina Subdistrict) ^c	157,215	223,080	148,982	132,694	7,7051	171,203	78,022	143,301	154,996	168,501	145,505
Federal subsistence (Chitina) ^d	1,664	2,345	1,321	1,600	3,491	4,210	3,406	5,415	2,948	6,031	3,243
Upriver sport harvest ^e	18,179	9,619	7,801	9,768	2,965	9,379	3,896	6,907	5,871	3,658	7,804
Delta sport harvest ^e	174	130	246	200	22	2,033	413	1,899	2,370	1,347	883
Upriver spawning escapement ^f	864,784	929,931	513,300	465,190	478,679	718,700	362,032	506,816	517,652	690,349	604,743

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	10-yr Avg (2014-2023)
Delta spawning escape- ment ^g	12,8410	133,330	103,100	113,000	116,940	123,650	111,240	174,150	110,150	131,550	124,552
Hatchery broodstock/ex- cess	53,737	40,123	32,341	17,083	30,306	15,552	10,786	9,562	5,004	10,880	22,537
Total esti- mated sockeye salmon run size	3,386,860	3,210,252	2,075,140	1,393,061	819,375	2,419,372	726,536	1,319,296	1,470,757	1,949,987	1,877,064

^a Numbers are from fish ticket data. Homepack numbers for Sockeye Salmon are voluntarily reported but are legally required.

^b Data are reported harvest from returned state and federal subsistence permits.

^c Data are expanded harvest from returned state and federal subsistence permits.

^d Data are reported harvest, 2002–2004, and expanded harvest, 2005–2017, from returned state and federal subsistence permits.

^e Upriver and Copper River Delta sport harvest data are from statewide sportfish harvest surveys.

^f Beginning in 1999 Sockeye Salmon spawning escapement is based on the total number of fish past the Miles Lake sonar minus the Chinook Salmon inriver midpoint abundance estimate, upriver subsistence, personal use, sport, hatchery broodstock and onsite hatchery surplus

^g Delta spawning escapement estimated by doubling the peak aerial survey index.

Table A3. Estimated harvest of Sockeye, Chinook, and Coho salmon by Federally qualified subsistence users in the Upper Copper River District, as reported for the **Glenallen Subdistrict** 2010–2025¹. SS = Sockeye Salmon, KS = King Salmon, CS = Coho Salmon, SH/RBT = Steelhead Rainbow Trout (Cohen 2026b, pers. comm.).

Year	Per- mits Is- sued	% Permits Reported	SS Reported Harvest	SS Harvest Estimate ²	KS Reported Harvest	KS Harvest Estimate ²	CS Reported Harvest	CS Harvest Estimate ²	SH/RBT Reported Har- vest	SH/RBT Harvest Es- timate ²	Other Species Reported Harvest	Other Species Harvest Estimate ²	Total Har- vest Es- timate ²
2010	269	87.7	12,849	14,651	300	342	64	73	39	44	22	25	15,136
2011	277	87.7	14,163	16,145	701	799	53	60	5	6	248	283	17,293
2012	275	92.0	14,461	15,718	371	403	78	85	40	43	104	113	16,363
2013	273	89.0	15,834	17,789	331	372	24	27	6	7	62	70	18,264
2014	315	90.5	21,603	23,877	399	441	23	25	10	11	52	57	24,412
2015	325	92.3	24,695	26,753	384	416	13	14	7	8	201	218	27,408
2016	320	82.8	15,884	19,181	369	446	9	11	5	6	332	401	20,044
2017	338	85.2	15,691	18,415	399	468	1	1	7	8	468	549	19,442
2018	335	91.3	15,287	16,736	2,432	2,662	0	0	4	4	41	45	19,448
2019	343	89.8	15,873	17,677	849	945	0	0	3	3	53	59	18,685
2020	376	89.9	11,456	12,744	682	759	0	0	6	7	54	60	13,569
2021	355	86.5	13,117	15,168	434	502	0	0	5	6	28	32	15,708
2022	297	83.5	12,133	14,530	743	890	2	2	13	16	48	57	15,495
2023	290	85.2	12,971	15,229	572	672	8	9	9	11	16	19	15,939
2024	293	80.9	14,170	17,518	370	457	0	0	0	0	16	20	17,995
2025	323	96.9	13,647	14,083	351	362	22	23	0	0	10	10	14,478
5-yr. Avg. 2021- 2025	312	87	13,208	15,306	494	577	6	7	5	6	24	28	15,923
10-yr. Avg. 2016- 2025	327	87	14,023	16,111	720	815	4	5	5	6	107	125	17,062

¹ This table reflects entries to the online database from 2010 through 2/24/2026. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that were reported.

Table A4. Estimated harvest of Sockeye, Chinook, and Coho salmon by Federally qualified subsistence users in the Upper Copper River District, as reported for the **Chitina Subdistrict** 2010–2025¹. SS = Sockeye Salmon, KS = King Salmon, CS = Coho Salmon, SH/RBT = Steelhead Rainbow Trout (Cohen 2026b, pers. comm.).

Year	Per- mits Is- sued	% Permits Reported	SS Reported Harvest	SS Harvest Estimate ²	KS Reported Harvest	KS Harvest Estimate ²	CS Reported Harvest	CS Harvest Estimate ²	SH/RBT Reported Har- vest	SH/RBT Harvest Es- timate ²	Other Species Reported Harvest	Other Species Harvest Estimate ²	Total Har- vest Es- timate ²
2010	92	85.9	2,061	2,399	17	20	33	38	1	1	0	0	2,459
2011	85	85.9	1,766	2,056	13	15	8	9	0	0	0	0	2,081
2012	89	93.3	1,332	1,427	6	6	8	9	1	1	0	0	1,443
2013	99	90.9	1,999	2,199	17	19	8	9	1	1	10	11	2,239
2014	113	94.7	1,549	1,636	14	15	68	72	3	3	0	0	1,726
2015	111	92.8	2,231	2,404	13	14	14	15	7	8	0	0	2,441
2016	128	80.5	1,549	1,925	16	20	33	41	0	0	4	5	1,991
2017	132	79.5	1,454	1,828	12	15	7	9	0	0	0	0	1,852
2018	132	91.7	3,144	3,430	92	100	28	31	0	0	0	0	3,561
2019	181	90.6	4,053	4,473	75	83	20	22	0	0	0	0	4,578
2020	215	89.3	3,249	3,638	76	85	23	26	0	0	0	0	3,749
2021	194	91.8	4,765	5,193	99	108	3	3	0	0	0	0	5,304
2022	177	87.6	2,555	2,918	91	104	37	42	0	0	2	2	3,066
2023	196	86.7	5,138	5,924	131	151	5	6	0	0	0	0	6,081
2024	202	88.6	3,461	3,906	82	93	1	1	0	0	0	0	3,999
2025	251	97.2	4,160	4,279	76	78	60	62	0	0	0	0	4,419
5-yr. Avg. 2021- 2025	204	90	4,016	4,444	96	107	21	23	0	0	0	0	4,574
10-yr. Avg. 2016- 2025	181	88	3,353	3,751	75	84	22	24	0	0	1	1	3,860

¹ This table reflects entries to the online database from 2011 through 2/24/2026. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that were reported.

Table A5. Estimated harvest of Sockeye, Chinook, and Coho salmon by Federally qualified subsistence users in the Upper Copper River District, as reported for **Batzulnetas Area** 2010–2025¹ (Cohen 2026b, pers. comm.). SS = Sockeye Salmon, KS = King Salmon.

Year	Permits Issued	Percentage of Permits Reported	SS Reported Harvest	SS Harvest Estimate ²	CS Reported Harvest	CS Harvest Estimate ²	Other Species Reported Harvest	Other Species Harvest Estimate ²
2010	3	100.0	106	106	0	0	0	0
2011	3	66.7	9	14	0	0	0	0
2012	3	66.7	101	152	0	0	0	0
2013	3	100.0	862	862	5	5	12	12
2014	2	100.0	146	146	0	0	0	0
2015	4	100.0	0	0	0	0	0	0
2016	0	N.A.	0	0	0	0	0	0
2017	1	100.0	254	254	2	2	0	0
2018	1	100.0	468	468	0	0	0	0
2019	1	100.0	209	209	0	0	0	0
2020	1	100.0	67	67	0	0	0	0
2021	1	100.0	120	120	0	0	0	0
2022	2	100.0	41	41	0	0	0	0
2023	2	100.0	211	211	0	0	0	0
2024	2	100.0	80	80	0	0	1	1
2025	3	100.0	300	300	0	0	0	0
5-yr. Avg. 2021-2025	2	100	150	150	0	0	0	0
10-yr. Avg. 2016-2025	1	100	175	175	0	0	0	0

¹ This table reflects entries to the online database from 2010 through 2/24/2026. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.