FP	21-14 Executive Summary				
General Description	Proposal FP21-14 requests that the Board prohibit use of onboard devices that indicate bathymetry and/or fish locations (fish finders) while fishing from boats or other watercraft in the Upper Copper River. <i>Submitted by: Kirk Wilson</i> .				
Proposed Regulation	§27(e)(11) Prince William Sound Area (xi) The following apply to Upper Copper River District subsistence salmon fishing permits: ***				
	(H) While you are fishing from a boat or other watercraft, you may not have onboard any device that indicates bathymetry and/or fish locations (i.e. fish finders).				
OSM Preliminary Conclusion	Oppose				
Southcentral Alaska Subsistence Regional Advisory Council Rec- ommendation					
Interagency Staff Committee Comments					
ADF&G Comments					
Written Public Comments	5 Support				

# DRAFT STAFF ANALYSIS FP21-14

## ISSUES

Proposal FP21-14, submitted by Kirk Wilson of Glennallen, requests that the Federal Subsistence Board (Board) prohibit use of onboard devices that indicate bathymetry and/or fish locations (fish finders) while fishing from boats or other watercraft in the Upper Copper River.

## DISCUSSION

The proponent states that the use of electronic devices that indicate bathymetry and/or fish locations (i.e. fish finders) is contributing to unsustainable harvest practices on the Upper Copper River. According to the proponent, these devices enable fishers to locate and target specific holding areas in the river, which may serve as pooling areas for sensitive stock. It is the proponent's belief that if we do not address this issue, we will continue to see both wild and Gulkana Hatchery brood-stocks fail to meet objectives.

## **Existing Federal Regulation**

§\_\_\_\_\_.27(e)(11) Prince William Sound Area

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(xi) The following apply to Upper Copper River District subsistence salmon fishing permits:

# **Proposed Federal Regulation**

§\_\_\_\_\_.27(e)(11) Prince William Sound Area

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(xi) The following apply to Upper Copper River District subsistence salmon fishing permits:

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(H) While you are fishing from a boat or other watercraft, you may not have onboard any device that indicates bathymetry and/or fish locations (i.e. fish finders).

## **Existing State Regulation**

No relevant existing regulation.

## **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 comprise those waters within and adjacent to the exterior boundaries of Wrangell-St. Elias National Park and Preserve (**Figure 1**).

The Upper Copper River District is comprised of the Chitina Subdistrict and the Glennallen Subdistrict. 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 Alaska Department of Fish and Game (ADF&G) regulatory markers, a distance of approximately ten miles. 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, a distance of approximately 120 miles.

# **Customary and Traditional Use Determinations**

## Glennallen Subdistrict

Rural 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 Nabesna Road have a customary and traditional use determination for salmon in the Glennallen Subdistrict of the Upper Copper River District.

# Chitina Subdistrict

Rural 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 have a customary and traditional use determination for salmon in the Chitina Subdistrict of the Upper Copper River District.

# **Regulatory History**

In 1999, regulations were adopted by the Board when promulgating the initial Federal regulations for fish in *navigable* waters; residents of the Prince William Sound Area were initially listed as having customary and traditional use of salmon in the Glennallen Subdistrict (64 Fed. Reg. 5. 1276-1313 [January 8, 1999]). In 2001, the Board adopted Proposal FP01-15, which established a customary and traditional use determination for salmon in the Chitina Subdistrict. The same year, the Board also adopted a modified version of Proposal FP01-16, submitted by the Copper River Native Association,

which defined seasonal harvest limits as requested, and created a Federal subsistence fishing season from May 15 to September 30.

In 2002, the Board adopted Proposal FP02-17, submitted by Wrangell-St. Elias National Park Subsistence Resource Commission, which requested changes to regulations in addition to a review of eligible subsistence fishers for the Upper Copper River district. The proposal was split into two proposals; Proposal FP02-17a added communities to the customary and traditional use determinations for the Glennallen and Chitina Subdistricts. Proposal FP02-17b allowed those with customary and traditional use determination to obtain a permit for each subdistrict in the same year. Additionally, FP02-17b ensured that combined harvests from both subdistricts would not exceed the harvest limit set for the Glennallen Subdistrict, and allowed for multiple gear types to be specified on each permit. In 2002, the Board created a Federal permit requirement for the Upper Copper River District administered by the National Park Service.

In 2006, the Board took no action on Proposal FP06-20, which was submitted by the Ahtna Tene Nene' Subsistence Committee and requested that fish wheels in the Upper Copper River District be equipped with a live box unless checked every 4 hours. The Southcentral Alaska Subsistence Regional Advisory Council opposed this proposal, and the Eastern Interior Alaska Subsistence Regional Advisory Council recommended no action. The same year, the Board considered Proposal FP06-21, submitted by Ahtna Tene Nene' Subsistence Committee, requesting that fish wheels in the Upper Copper River District be checked and all fish removed every 24 hours. The Southcentral Alaska Regional Advisory Council supported the proposal with modification to require that fish wheels in the Upper Copper River District be checked at least every 48 hours and all fish removed. The Eastern Interior Alaska Subsistence Regional Advisory Council opposed the proposal. The Board adopted Proposal FP06-21 with modification to require fish wheel operators to check their fish wheels every 10 hours.

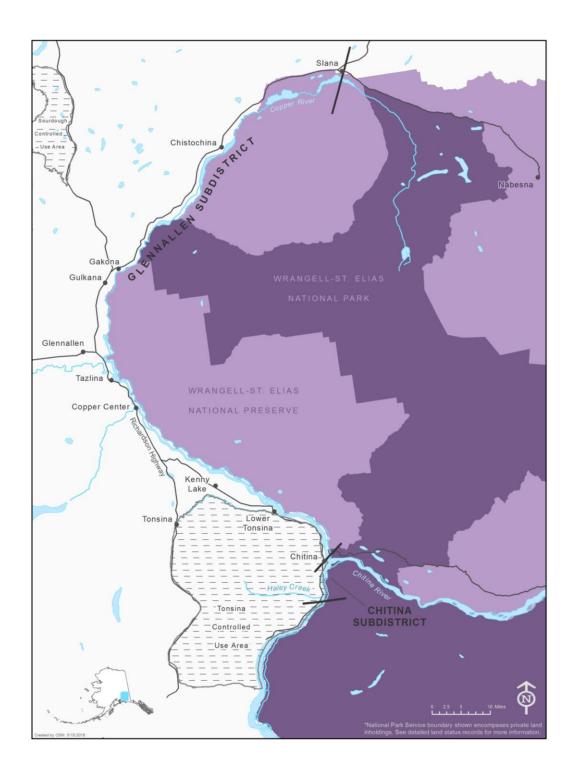
That year the Board also considered Proposal FP06-22, submitted by the Ahtna Tene Nene' Subsistence Committee, which requested that fyke nets be allowed to harvest up to 1,000 salmon in Tanada Creek upstream of the weir and that incidental harvests of other fish be allowed. The Board adopted this proposal with modification recommended by the Southcentral Alaska Regional Advisory Council to limit use to only one fyke net after consultation with in-season manager, to require that the subsistence user be present during use, and to ensure that Chinook Salmon incidentally caught be released unharmed.

In 2007, the Board considered and rejected Proposal FP07-14, which was submitted by Cris Grimwood of Cordova. This proposal requested a three month opening in the lower Copper River using dip net or rod and reel with eggs. It was opposed by the Southcentral Alaska Regional Advisory Council. The same cycle, the Board considered and rejected Proposal FP07-15, submitted by the Ahtna Tene Nene' Subsistence Committee, which would have required that fish wheels be removed to above the high water mark at the end of the season. Both the Southcentral Alaska and the Eastern Interior Alaska Regional Advisory Councils opposed. Finally, in 2006, the Board considered and rejected FP07-16, submitted by the Ahtna Tene Nene' Subsistence Committee, which would have required that fish wheels be at least 200 feet apart. The Southcentral Alaska Regional Advisory Council opposed the proposal, and the Eastern Interior Alaska Regional Advisory Council Alaska Regional Advisory Council opposed.

In 2019 the Board adopted Proposals FP19-15 and FP19-16, both of which were submitted by Wrangell-St. Elias National Park and Preserve. Proposal FP19-15 requested that requirements to check fish wheels on the Upper Copper River be transferred from the wheel owner to the operator. Proposal FP19-16 clarified regulatory language, changing specifications for permits so that one unit of gear *per person* could be operated at one time, rather than one unit of gear at one time. The Southcentral Alaska and the Eastern Interior Alaska Subsistence Regional Advisory Councils both supported these proposals.

Currently, Federal Regulations for the Upper Copper River District (Glennallen and Chitina Subdistricts) require users to have a subsistence fishing permit and allow the use of fish wheel, dip net, and rod and reel gear for the take of salmon. Households of Federally qualified subsistence users who have a customary and traditional use determination in both subdistricts may be issued one permit for each in any given year.

State regulations allow subsistence fishing in the Glennallen Subdistrict but not in the Chitina Subdistrict. The Chitina Subdistrict is designated as a personal use fishery. Under State regulations, permits can only be issued for either the Glennallen Subdistrict salmon subsistence fishery or the Chitina Subdistrict salmon personal use fishery in the same year, but not both. Fish wheels or dip nets are allowed in the Glennallen Subdistrict but not both in the same year, and only dip nets are allowed in the Chitina Subdistrict under State regulations. Fish finders or bathymetry devices are not currently addressed in State subsistence or personal use regulations, either under general provisions, or specific to the Upper Copper River District.



**Figure 1.** Upper Copper River drainage, showing exterior boundary of Wrangell-St. Elias National Park and Preserve as well as the Chitina and Glennallen Subdistricts of the Upper Copper River District.

## **Current Events**

In 2017, the State Board of Fisheries (BOF) considered but rejected Proposal 13 for the Glennallen Subdistrict, submitted by the Ahtna Tene Nene' Customary and Traditional Use Committee. If approved by the Board, this proposal would have prohibited dip netting from boats in State subsistence and personal use fisheries of the Upper Copper River District. Use of fish finders and dip nets from boats (submitted as separate proposals in both the state and Federal regulatory cycles) are interconnected issues, in that fish finders may be used during periods of high water to locate areas likely to serve as pooling areas for salmon, which are then fished efficiently with dip nets from boats.

In the original proposal to the BOF, the proponent stated,

"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" (Ahtna Tene Nene' Customary and Traditional Use Committee 2017: 13).

Rationales for support and opposition were offered by members of the public and the BOF during discussion of the proposal, and are of relevance for consideration of the current proposal to prohibit use of fish finders under Federal subsistence permits. One member of the public in opposition to prohibiting fish finders stated that their technological capacity has been overstated:

"We will occasionally see fish on the sonars, but we use the sonar in large part to determine whether we are going to strike bottom, abandoned nets, fish wheels...navigating the Copper River is extremely difficult and the sonar and depth finders that we use to keep us safe" (Alaska Board of Fisheries 2017: np).

Furthermore, this opponent of the proposal noted that every person who fishes in the Glennallen Subdistrict—whether from shore or by boat—tries to find the "best spot" for dip netting, contextualizing boat fishing practices along a continuum of technology used to efficiently access salmon.

In April 2019, a member of the public referred to the 2017 BOF proposal and discussion in her testimony to the Federal Subsistence Board:

"The technology has improved and their sonar is getting clearer and clearer, so they're starting to capture more and be able to count what's happening. I think there's additional information needed and that was one of the things that came out of our...conference. We need to know what's happening in the spawning beds. [Fishers have been] using fish finders. We put in a proposal [to the Alaska Board of Fisheries] to stop that and that didn't fly because they said they were using it to watch for rocks" (FSB 2019:77).

The same member of the public emphasized that, as a Federally qualified subsistence user, she would like to see regulations reflect the conservation concerns of local users:

"So, for us...we need to manage for the resource and manage correctly and not over-liberalize it to where we're trying to keep up with the State. We should be setting a standard here. That's the way that we're looking at this and put a standard so that the State would have to try to match our standard, your standard on this river" (FSB 2019: 30).

## 2020 Fishery Update

The 2020 Copper River salmon passage was much weaker than expected with a cumulative Miles Lake Sonar estimate of 530,313 fish on July 29<sup>th</sup>, the last day of operation (ADF&G 2020e). The cumulative passage estimate lagged behind the management object of 628,553 fish. Closures of both the commercial gillnet fishery at the mouth of the river and the Chitna Subdistrict personal use salmon dip net fishery were required to provide more fish towards the escapement (ADF&G 2020b, ADF&G 2020c).

## **Cultural Knowledge and Traditional Practices**

Ahtna Athabascan people have harvested Sockeye, Chinook, and Coho Salmon in the Upper Copper River District for at least 1,000 years (Workman 1976). The presence of Upper Tanana Athabaskans fishing in the Upper Copper River was noted in 1885 and long-term kinship and trading ties between the Ahtna and Upper Tanana have been documented (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). 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 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 the ADF&G show that salmon comprise a majority of the annual harvest in most communities along the Copper River drainage (La Vine and Zimpelman 2014). 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 1**). The Upper Copper River District is easily accessible via the Richardson and Glenn Highways, and competition for resources is a main concern for local residents (Holen et al. 2015).

Community	Survey year	Pounds of salmon per capita	Percentage of overall harvest comprised of salmon
Chitina	2012	191.59	78%
Tazlina	2013	102.14	68%
Kenny Lake	2012	93.61	66%
Gulkana	2012	91.69	64%
Copper Center	2010	129.25	61%
Chistochina	2009	94.22	58%
Glennallen	2013	56.97	58%
Gakona	2012	95.94	56%
McCarthy	2012	45.78	53%
Tonsina	2013	101.76	51%
Slana	2010	95.74	47%
Dot Lake	2011	44.16	37%
Mentasta Lake	2010	43.46	29%
Tok	2011	51.32	25%
Cantwell	2012	15.18	15%
Northway	2014	40.81	13%
Dry Creek	2010	17.23	12%

Table 1: Salmon harvest by select communities with C&T for salmon in the Copper River (ADF&G 2020d).

Ahtna fishing technology adapted to local conditions and salmon behavior. The waters of the Upper Copper River are fast and murky; fish cannot be seen as they travel up the river. The bottom of the river is rocky and uneven. 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; 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 the predominant gear used by communities in the Upper Copper River Basin. For example, in 2013, 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 by these communities was quite low, at 3.4% for Glennallen, 2% for Gulkana, and 3% for Tazlina (Holen et al. 2015).

## **Biological Background and Harvest History**

The Copper River supports multiple runs of salmon, but Sockeye Salmon (*Oncorhynchus nerka*) and Chinook Salmon (*Oncorhynchus tshawytscha*) are the two species primarily targeted in the Federal subsistence fisheries. Federally qualified subsistence users are restricted to three areas of the upper Copper River, the Chitina and Glennallen Subdistricts and the Batzulnetas area. Sockeye Salmon is the most abundant species, and is the main fish targeted by all user groups in both the Chitina and Glennallen Subdistrict was 15,873 Sockeye Salmon and 949 Chinook Salmon. The Sockeye Salmon harvest was below the 10-year average of 16,635 fish while the Chinook Salmon harvest was above the 10-year average of 730 fish (**Table 2**). A smaller number of salmon are harvested by Federally qualified subsistence users in the Chitina Subdistrict was 4,451 Sockeye Salmon and 83 Chinook Salmon. Both Sockeye and Chinook Salmon harvests were above the 10-year average of 2,376 Sockeye Salmon and 31 Chinook Salmon (**Table 3**).

Salmon are harvested in the State subsistence fishery in the Glennallen Subdistrict in greater numbers than Federal subsistence harvest. The estimated subsistence salmon harvest by State salmon dip net and fish wheel permit holders in the Glennallen Subdistrict within the last 10-years (2010-2019) averaged 64,320 Sockeye Salmon and 2,569 Chinook Salmon (**Table 4**), Additionally, salmon are harvested from the Chitina Subdistrict personal use dip-net fishery with a 10-year average harvest of 148,458 Sockeye salmon and 1,193 Chinook Salmon (**Table 5**).

The largest harvest of Copper River-bound Sockeye and Chinook Salmon occurs in the Copper River District marine waters near the mouth of the river during the commercial drift net fishery. Over the last 10-years (2010-2019) an average of 1,303,861 Sockeye Salmon and 13,265 Chinook Salmon were harvested in the Copper River District by the commercial fishery (ADF&G 2018, 2019, Vega 2018). In addition to the commercial fishery, a State subsistence drift gillnet fishery also occurs in the Copper River District (ADF&G 2020a, Vega 2018). The estimated subsistence salmon harvest by State subsistence salmon permit holders in the Copper River District averaged 3,231 total salmon for the previous 10-year period (2009-2018) of which 2,800 were Sockeye Salmon and 431 were Chinook Salmon (Somerville 2020).

The ADF&G relies on the passage estimates provided by adaptive resolution imaging sonar (ARIS) units at Miles Lake to manage the commercial fishery and provide for upriver escapement and fishery allocation. Over the 10-year (2010-2019) spawning escapement estimates have been within or have exceeded the current sustainable escapement goal of 360,000–750,000 Sockeye Salmon as estimated by Miles Lake sonar (ADF&G 2020d, Vega 2018). The 2019 Sockeye Salmon escapement estimate for the Copper River was 741,771 fish (Sommerville 2020).

Over the 10-year period (2010-2019), Chinook Salmon escapement estimates have ranged from a low of 12,485 in 2016 to a high of 42,204 fish in 2018 (Sommerville 2020, Vega 2018). In 2010, 2014 and 2016 escapement estimates were below the sustainable escapement goal (SEG) of 24,000 Chinook

Salmon mandated in the State's management plan. In 2017, the SEG was reached through a cooperative effort, pre-season management actions directed at Chinook Salmon conservation. The State restricted its upriver subsistence fishery and closed both the upriver sport and the Chitina personal use fisheries, and the Federal in-season manager issued Chinook Salmon emergency special actions in the Upper Copper River District, delaying the season start date for the Federal subsistence fisheries and reducing the Federal subsistence Chinook Salmon harvest limit for the gear types of dip net and rod and reel (the gear types that would allow selective release of live fish) (ADF&G 2017, FSB2017). These early-season 2017 restrictions were rescinded after abundance assessments indicated adequate escapement to meet the SEG. The 2019 Chinook Salmon escapement estimate for the Copper River was 36,627 fish, which is above the 10-year (2010-2019) average escapement of 27,413 Chinook Salmon (Sommerville 2020, Vega 2018).

**Table 2:** Estimated harvest of Sockeye, Chinook and Coho Salmon by Federallyqualified subsistence users in the Glennallen Subdistrict 2010 - 2019 (Sarafin2020, pers. comm.).

Year	Permits Issued	Percent of Permits Returned	Estimated Sockeye Salmon Harvest	Estimated Chinook Salmon Harvested	Estimated Coho Salmon Harvested
2010	269	88	12,849	342	73
2011	277	88	14,163	799	60
2012	275	92	14,461	403	85
2013	273	89	15,834	372	27
2014	315	91	21,614	439	25
2015	325	92	24,695	416	14
2016	320	83	15,884	446	11
2017	338	85	15,691	468	1
2018	335	91	15,287	2662	0
2019	343	90	15,873	949	0
10-yr avg	307	89	16,635	730	30

Glennallen Subdistrict Federal subsistence fishery

**Table 3:** Estimated harvest of Sockeye, Chinook and Coho Salmon by Federally qualified subsistence users in the Chitina Subdistrict 2010 - 2019 (Sarafin 2020, pers. comm.).

Year	Permits Issued	Percent of Permits Returned	Estimated Sockeye Salmon Harvest	Estimated Chinook Salmon Harvested	Estimated Coho Salmon Harvested
2010	92	86	2399	20	38
2011	85	86	2059	15	9
2012	89	94	1427	6	9
2013	99	91	2199	19	9
2014	113	95	1636	15	72
2015	111	93	2404	14	15
2016	128	81	1925	20	41
2017	132	80	1828	15	9
2018	132	92	3430	100	31
2019	181	90	4451	83	22
10-yr avg	116	89	2376	31	26

Chitina Subdistrict Federal subsistence fishery

**Table 4:** Estimated Harvest of Sockeye, Chinook and Coho Salmon in theGlennallen Subdistrict State subsistence fishery 2010 - 2019 (Somerville2020,Vega 2018).

Year	Permits Issued	Percent of Permits Returned	Estimated Sockeye Salmon Harvest	Estimated Chinook Salmon Harvested	Estimated Coho Salmon Harvested
2010	1321	72	70719	2099	293
2011	1306	74	59622	2319	372
2012	1527	69	76305	2095	335
2013	1339	73	73728	2148	143
2014	1656	66	75501	1365	233
2015	1631	70	81800	2212	77
2016	1769	64	62474	2075	45
2017	1632	64	39859	2935	57
2018	1659	61	40806	5006	151
2019	1713	68	62384	3439	204
10-yr avg	1555	68	64320	2569	191

Glennallen Subdistrict State subsistence fishery

**Table 5:** Estimated harvest of Sockeye, Chinook and Coho Salmon in the Chitina

 Subdistrict State personal use fishery 2010 - 2019 (Somerville 2020, Vega 2018).

Year	Permits Issued	Percent of Permits Returned	Estimated Sockeye Salmon Harvest	Estimated Chinook Salmon Harvested	Estimated Coho Salmon Harvested
2010	9970	61	138487	700	2013
2011	9217	62	128052	1067	1702
2012	10016	58	127143	567	1385
2013	10592	64	180663	744	797
2014	11717	61	157215	719	1129
2015	12635	62	223080	1570	841
2016	11394	55	148982	711	1182
2017	9490	65	132694	1961	715
2018	4982	61	77112	1274	1439
2019	8071	68	171252	2618	1042
10-yr avg	9808	62	148468	1193	1225

Chitina Subdistrict State personal use fishery

## **Effects of the Proposal**

The majority of salmon taken by Federally qualified subsistence users in the Upper Copper River District are taken by fish wheel, rather than from boats. Because boats are not widely used to fish for salmon under Federal subsistence permits on the Upper Copper River District, adopting this proposal would have little effect on use of fish finders in boats. For those fishers who do use boats equipped with fish finders for navigating the river and accessing salmon 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.

If this proposal is adopted, regulations pertaining to fish finders would be more restrictive under Federal regulations than in the State subsistence and personal use fisheries in the Upper Copper River District. Prohibiting use of fish finders under both State and Federal regulations could alleviate conflict between user groups. However, fish finders are used as aids to safely navigate the river, and prohibiting their use could pose a safety issue.

In the absence of State action, adopting this proposal would simply make Federal regulations more restrictive than State regulations, while not eliminating the practice of concern or contributing to conservation of salmon stocks.

## **OSM PRELIMINARY CONCLUSION**

**Oppose** Proposal FP21-14.

### Justification

Adopting this proposal would not lead to the proponent's desired conservation outcome, because fishing under Federal subsistence permits in the Upper Copper River District is dominated by fish wheels; fishing from boats is far less common. Furthermore, Federally qualified subsistence users could continue to use fish finders on boats under State regulations in both the Glennallen subsistence and Chitina personal use fisheries. If adopted, Federal subsistence regulations pertaining to use of this technology would be more restrictive than State subsistence or personal use regulations for the Upper Copper River District.

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### Ahtna Intertribal Resource Commission

dba/Copper River-Ahtna Inter-Tribal Resource Conservation District PO Box 613 Glennallen, Alaska 99588 907-822-4466 connect@ahtnatribal.org

July 2, 2020

Federal Subsistence Board Attn: Theo Matuskowitz Office of Subsistence Management 1011 E. Tudor Rd. M/S 121 Anchorage, AK 99503-6199

Dear Federal Subsistence Board Members,

In 2011, after many years of preparation, a group of Ahtna leaders formed the Ahtna Intertribal Resource Commission (AITRC) to address the compelling need for tribal stewardship of our traditional fish, wildlife and plant resources that have been degraded by nearly three centuries of impact and competition. Because of AITRC's focus on developing fish and wildlife management programs for Ahtna traditional lands, our efforts are contributing to enhanced food security and food sovereignty for residents of the Copper Basin. The subsistence fisheries on the upper Copper River play an important role in the food security of most Ahtna tribal members, as well as in that of other federally-qualified subsistence users.

Toward its goal of supporting the continued availability of salmon for customary and traditional uses, AITRC would like to offer comments on the following proposals:

#### FP 21-11

AITRC supports FP 21-11. Based on our ongoing research and participation in the fisheries regulatory and management processes, we feel strongly that there is a need for more timely harvest data in the upriver subsistence and personal-use fisheries. Moreover, this is a topic about which we have found broad consensus among both tribal and non-tribal federally-qualified subsistence fishers within the region.

As part of its ongoing social science research through a Partners for Fisheries Management Program (PFMP) grant from the US Fish and Wildlife Service, AITRC has used participatory, ethnographic methods to document management, regulatory and conservation concerns in Copper River fisheries. Concern about the health of salmon stocks has been a common theme emerging from both subsistence fishers and some biologists who have participated in this research, as has anxieties about their future availability for customary and traditional uses. These concerns are accentuated by recent events such as historically low sockeye abundance in 2018 and 2020, and clear trends of decline in Chinook abundance.

Although biologists do not know the reasons for these declines, many enrollees in AITRC's member tribes have expressed strong concern about steadily increasing harvest levels in upriver subsistence and personal-use fisheries. Many of these concerns have been specifically directed toward the state fisheries, but gaining an accurate picture of in-season harvest levels would be best accomplished if in-season reporting were applied universally across all state and federal

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subsistence and personal-use fisheries. Companion proposals submitted to the State Board of Fisheries address the state-managed fisheries.

While this proposal would require more frequent reporting, it would not require federallyqualified subsistence users to report any more data on their harvests than is required currently. Federal subsistence users must already track their daily harvest levels, by species, and report these totals at the end of each season. If this reporting were done using an online app, it would not require any more effort than is required under the current system.

Timely reporting would probably produce better-quality data than does end-of-season reporting. A common problem with the current system is that subsistence fishers often fail to keep their permits up-to-date, waiting to fill them out till the end of the year when they are due, and guessing about their daily catch totals. During years of low abundance, these data could provide more granular data on the fishery, enabling more adaptive management decision-making. They also might help to build trust and consensus between fisheries management and an interested local public.

#### FP 21-12

AITRC is in support of proposal FP 21-12, which would ban monofilament-type dipnets between June 1<sup>st</sup> and August 15<sup>th</sup>. While Chinook salmon run sizes have fluctuated, they have shown a clear trend of decline during the past 20 years (Savereide et al. 2018). Biologists are investigating the reasons for these declines; multiple factors are likely implicated in these changes, including changing ocean conditions. Even so, simple in-river conservation measures would help to maximize the survival rates of Chinook salmon during spawning migration, while still maintaining in-river harvest opportunities.

Both dipnets constructed with inelastic seine-style mesh, and the traditional Ahtna style made with inelastic mesh, are effective at catching salmon. Inelastic, seine-style nets are widely available and are no more expensive than monofilament-type nets. This proposal would not reduce opportunity, and would have no effect on the number of Chinook salmon federallyqualified dip net fishers would be allowed to retain each year.

This proposal would promote greater survival rates among Chinook salmon caught in nets and then released back into the river. These releases occur frequently with Chinook salmon, both when dip net fishers have exceeded their seasonal limits, and when fishers voluntarily release Chinooks due to conservation concerns. Salmon are far more likely to become severely entangled in monofilament/multifilament nets than in nets with inelastic bags. As the same kind of mesh material used in gillnets, monofilament nets are designed to catch fish on the jaws, gillplates, fins and other protruding areas of the fish, as well as to stretch and become tightly girdled around their abdomens. These entanglements can cause direct injuries to the salmon (e.g. split tail-fins, broken gill-plates, abrasion), and at the very least, it can make untangling salmon from these nets a far longer and more difficult process, especially for inexperienced fishers. Longer time out of the water leads to increased stress and greater likelihood of mortality. Inelastic-type dipnets, on the other hand, are far more likely to merely enclose the salmon without causing excessive entanglement or injury.

One slight modification to this resolution should be considered: as it is currently worded, this resolution could be interpreted as prohibiting the rigid dipnets that are customary traditional to

Ahtna fishers (commonly made of chicken-wire nowadays). Because of their rigidity, these traditional-type nets do not cause entanglement. Accordingly, the resolution should contain language specifically allowing these, such as by removing the word "braided" from the proposed regulation:

"You may not use a dipnet that is rigged with monofilament or multifilament mesh before August 15th (when the majority of the Chinook run has passed into the upper Copper River). Before this time, your dipnet must be rigged with <del>braided,</del> inelastic mesh."

### FP 21-13

AITRC strongly supports proposal FP 21-13, which would ban dipnetting from boats. We feel that the dramatic increase in this method's popularity (Botz and Somerville 2017) poses significant conservation concerns.

Salmon often delay their upriver migration during high water events, resting in deep parts of the river and/or areas such as eddies where the current is less intense. During these times, catch per unit effort for fish wheels and onshore dipnetters tends to be quite low. However, dipnetters in boats are able to move throughout the river and target these resting areas. On the middle Copper River (i.e. Chitina – Gulkana), subsistence fishers have observed that when the water begins to recede, large pulses of fish have often followed bringing very good fishing during the following days. During the past several years, local/traditional knowledge observations suggest that these pulses of fish have not been occurring in the same way. Although research into this topic is warranted, a very likely explanation for this change is that boat-based dip netters are catching much of the fish that are resting in these deep pockets.

AITRC's PFMP research and activities have shown that there is significant opposition to the practice among Copper Basin locals. For one longtime subsistence fisher and Ahtna elder, made the following observations during our 2019 interview with him:

[...] Not only do they get 'em from the shore and now they're getting 'em in the middle of the river. And they're using boats to do it. And the boats are just like, you're moving. You're not like you're standing still waiting for the fish to come to you—you're going down the river getting 'em as they're coming up. And all you're doing is hanging the net out the w—out the way, but. Not really a work—just to sit there and float and hang onto a net. And then and—and then, they're right down the middle of the river so right-right outside the fishwheel.

As this elder points out, the mobility of boat dipnetters gives them a competitive advantage over both fishwheel users and dipnetters who fish from shore. Both fishwheel fishers and onshore dipnetters have reported disruptive encroachment by parties that are dipnetting from boats. Because fishwheels are large and stationary, they have no way of avoiding dipnetters from boats who are inconsiderate and come too close. This can also be an issue for dipnetters who are fishing from shore, as onshore fishing sites are limited in some parts of the river.

Dip netting salmon from boats is not a customary or traditional use of the resource. In traditional times, Ahtna fishers dipnetted from shore or from platforms that extended into the river (Simeone and Valentine 2007), but did not dipnet from boats floating in the river. Even among non-native settlers, dip netting from boats does not have a long enough history to be considered a

customary or traditional use of the resource. Rather, this is a practice that has only become widespread during the past one or two decades. Although this is not, specifically, a difference in the equipment used to harvest salmon, it represents a dramatic change in the way in which the fishery is prosecuted. Boats can confer a competitive advantage over fishers who fish from shore, as noted above, but they are expensive to own and operate, and are thus not available to many federally-qualified subsistence fishers.

#### FP 21-14

AITRC supports FP 21-14, which would ban fish finders from boats that are fishing on the Copper River. Obviously, if FP 21-13 is approved, this proposal will not be necessary. However, if FP 21-13 is voted down, the board should at least the use of devices that enable boat-based fishers to target schools of fish. This targeting contributes to the likely overfishing of salmon during high-water events, as mentioned above.

Fish finders are a technology that is in no way customary or traditional to any of the fisheries on the upper Copper River. This proposed regulatory change would be unlikely to have negative impacts on many federally-qualified subsistence users, as most experienced locals already know where to find schools of fish, anyway. Restricting fish-finders would merely encourage inexperienced fishers to develop the knowledge and experience that are requisite for fishing on a swift, dangerous river such as the Copper.

Along these lines, we have previously heard the objection to banning fish fineders; that they are needed to watch for rocks and sandbars on the Copper River. We are somewhat skeptical of this explanation, as the Copper is a swiftly-flowing river, and most fish finders are not reliable for spotting rocks or other objects in time to avoid them. Learning to read river conditions (i.e. through direct observation) is by far the safest and most reliable way of avoiding these hazards. Again, fishers who depend on fish-finders to avoid running aground may lack the necessary experience to safely fish on a dangerous river like the Copper. Rather than increasing safety for these inexperienced fishers, overreliance on these devices diverts their attention away from actually observing the river.

Thank you for the opportunity to comment on these proposals.

Tsin'aen,

Karen Linnell

Executive Director

#### **References:**

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### Fw: [EXTERNAL] comments on copper river proposals

From: michael mahoney <mjmahoney22@hotmail.com> Sent: Thursday, July 2, 2020 12:33 PM To: AK Subsistence, FW7 <subsistence@fws.gov> Subject: [EXTERNAL] comments on copper river proposals

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Thank you for the opportunity to comment.

#### FP 21-10

Given the concerns that biologists, managers and stakeholders have with the king and sockeye salmon abundance on the copper river, I don't think that it would be a good idea to open up a new fishery on the lower copper river in order to target these fish (especially Kings). Therefore, I am opposed to it. Cordova residents have ample opportunity to harvest salmon resources in the area. One excellent king salmon harvest opportunity, which is utilized by many residents is the remote release site at fleming spit.

#### FP 21-11

I cannot think of any downside to this proposal. I support it. With modern communication options, there is no reason why this timely reporting would be too burdensome to the user. Good in-season management requires current data, and this is the only way for that to happen. It is time to give our managers the tools they need to protect this fishery.

#### FP 21-12, 13, 14

I think that all of these changes would be helpful in protecting our King salmon and I support them. All of these practices are not customary and traditional, and have resulted in a much higher efficiency levels of harvest. With the use of boats, and sonar equipment in particular, there is a corresponding profit motive from the guide services who profit from this.

Sincerely, Mike Mahoney PO Box 2416 Cordova, AK 99574

### Fw: [EXTERNAL] Prince William Sound proposals

From: Thea Thomas <thea@ctcak.net> Sent: Thursday, July 2, 2020 7:19 AM To: AK Subsistence, FW7 <subsistence@fws.gov> Subject: [EXTERNAL] Prince William Sound proposals

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Dear Mr. Matuskowitz,

I am a 40 year resident of Cordova, Alaska and a commercial fisherman. Over the years, i have served on several boards and presentedly am on the board of the Copper River/Prince William Sound Marketing Association and the Prince William Sound Science Center.

I am strongly opposed to proposal FP21-10. Subsistence users have more than adequate opportunity through the State of Alaska subsistence openers which occur 3 days a week, and the federal subsistence opportunity on the Eyak River.

I strongly support proposal FP21-11, FP21-12, FP21-13 and FP21-14. These proposals are important to limit over harvest in the Chitina dipnet fishery and to acquire timely data on the harvest.

Thank you

Thea Thomas PO BOX 1566 Cordova, AK 99574 907 424 5266 June 29, 2020

Federal Subsistence Board Office of Subsistence Management (Attn: Theo Matuskowitz) 1011 E. Tudor Road, MS-121 Anchorage, Alaska 99503-6199

Mr. Matuskowitz:

Enclosed are Ahtna Tene Nene' comments on 2021-2023 Federal Fisheries proposals. Please record them as public comments for Southcentral Subsistence Regional Advisory Council's and Eastern Subsistence Regional Advisory's recommendation, and to the Federal Subsistence Board for final decision making and action.

Sincerely,

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Mr. John Dye, Vice Chair

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FP21-14

1. Kirk Wilson Hco1 box1960 Glennallen, AK 99558 907.320.1016 kirkakfish@yahoo.com

2. What regulations you wish to change. Include management unit number and species. Quote the current regulation if known. If you are proposing a new regulation, please state, "new regulation."

50 CFR 100.27(11)(xi) - New regulation

3. How should the regulation read? Write the regulation the way you would like to see it written in the regulations.

While you are fishing from a boat or other watercraft, you may not have onboard any device that indicates bathymetry and/or fish locations (i.e. fish finders).

4. Why should this regulation change be made?

The use of electronic devices that indicate bathymetry and/or fish locations (i.e. fish finders) is contributing to unsustainable harvest practices on the upper Copper River. These devices enable fishers to locate and target specific holding areas in the river. Wild stocks are very vulnerable in these areas. These stocks are very time-sensitive and probably travel in small groups and use these areas to hold before continuing upriver. If we do not address this issue, we will continue to see our wild stocks and Gulkana brood stocks not meet their objectives. The Gulkana Hatchery has not met their brood-stock goals for the past five years, and this is surely also the case for some wild stocks.

5. You should provide any additional information that you believe will help the Federal Subsistence Board in evaluating the proposed change.

#### **Comments:**

We support FP21-14 to dis-allow fish finders or any such device that indicate bathymetry while fishing from a boat or other watercraft.

Fish finders may work to indicate or show where Sockeyes and Chinooks are in the Copper River. Fishing with a fish finder may or may not enable fishermen to harvest an abundance of fish in the Copper River. Allowing use of fish finders may encourage fishermen to find ideal spots in the Copper River to over harvest salmon in the Copper River or near its tributaries.

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This past summer there was a low Sockeye and King Salmon run, timing and strength, fish finders should not be allowed to harvest salmon in the Copper River District. Everyone should be concerned about this fisheries and do what we all can do to protect fisheries in the Copper River.

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Bonnie Yazzie PO Box 67 Chitina, AK 99566

July 2, 2020

Federal Subsistence Board Attn: Theo Matuskowitz Office of Subsistence Management 1011 E. Tudor Rd. M/S 121 Anchorage, AK 99503-6199

To the board:

I am from an Ahtna family who has depended on Copper River salmon since time immemorial. Although I lived away from the region for a long time until fairly recently, we still received salmon every year from our relatives. I work for Native Village of Chitina as an Office/Accounting Assistant, and serve as Secretary/Treasurer on the Ahtna Intertribal Resource Commission Board of Directors.

FP 21-11: support. I think that we need to know exactly what's being taken in order to accurately manage the fishery. This would help keep people more honest and in-check. In some of the Kenai Peninsula clam fisheries, they have checkpoints to check people's permits and see how many clams people have dug. It helps keep people honest. But when dipnetters come here to Chitina there's no check-point. We have more than 10,000 people come through here each year and nobody is monitoring. The very least we can do is require in-season reporting.

I also support FP 21-12, to ban monofilament dipnets during king season.

FP 21-13: support. Dipnetting from a boat is not a customary or traditional way of getting salmon. They didn't do it back in the early 1900s. Back then, we actually made our own dipnets out of alder. We didn't get on boats and dipnet for salmon. The people nowadays who are dip netting from boats are getting all their salmon easy. They come down by the thousands and all dipnet at the same time, and the people who live up the river are not getting their salmon. Last year was a good example. Managers opened the dipnetting in June and hardly anybody got salmon in their fishwheels after that. To me it's taking unfair advantage of the resource. They're not dipnetting; they're trawling. They're just holding their dipnets in the water and drifting down the stream and throwing the fish in their boats. I've heard of dipnetters in boats limiting out this year, while many of us with fishwheels are struggling.

FP 21-14: support. In the past, boaters with fish-finders have used the excuse that they need the fishfinders to navigate the river channel. These fishers need to learn the river channel. Using fish-finders to find salmon is taking unfair advantage, once again.

Thank you for your consideration.

Sincerely,

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Bonnie Yazzie