

FP21-09 Executive Summary

General Description	Proposal FP21-09 requests that the Federal Subsistence Board (Board) revise the Federal subsistence fishing regulations for Kenai River Chinook Salmon in the Cook Inlet Area (§____.27(e)(10)) to replace the designations of early-run and late-run with specific dates. <i>Submitted by the Kenai Fish and Wildlife Conservation Office, U.S. Fish and Wildlife Service (USFWS).</i>
Proposed Regulation	<i>Reference page 6 for proposed regulation.</i>
OSM Preliminary Conclusion	Support
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
FP21-09**

ISSUES

Proposal FP21-09, submitted by the Kenai Fish and Wildlife Conservation Office, U.S. Fish and Wildlife Service (USFWS), requests that the Federal Subsistence Board (Board) revise the Federal subsistence fishing regulations for Kenai River Chinook Salmon in the Cook Inlet Area (§ ____.27(e)(10)) to replace the designations of early-run and late-run with specific dates.

DISCUSSION

The proponent states that this administrative change will remove confusing and outdated regulatory language about early- and late-run Chinook Salmon. There is considerable geographic and temporal overlap for both stocks within waters under Federal subsistence fisheries jurisdiction even though Federal regulations define separate seasons and harvest limits, leading to confusion. They suggest that this change will limit confusion and achieve conservation for this species throughout their residence in fresh waters, and will make it easier for Federally qualified subsistence users to understand when, where, and how they are able to harvest Chinook Salmon in the Kenai River.

Existing Federal Regulation

§ ____.27(e)(10) Cook Inlet Area

* * * *

(iii) Seasons, harvest limits, and methods and means for Kenai River fisheries. Household annual limits for salmon in Kenai River fisheries are as follows:

<i>Species</i>	<i>Number of fish allowed for each permit holder</i>	<i>Additional fish for each household member</i>	<i>Additional provisions</i>
* * * *	* * * *	* * * *	* * * *
<i>Chinook salmon—Early run (July 1</i>	<i>2</i>	<i>1</i>	<i>For the Kenai River community gillnet fishery described under</i>

*through July
15)*

*paragraph (e)(10)(iii)(B)
of this section*

*Chinook
salmon—Late
run (July 16
through August
31)*

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(A) Kenai River dip net or rod and reel; salmon.

(1) You may take only sockeye salmon through a dip net or rod and reel fishery at one specified site on the Russian River.

(i) For the Russian River fishing site, incidentally caught fish may be retained for subsistence uses, except for early- and late-run Chinook salmon, coho salmon, rainbow trout, and Dolly Varden, which must be released.

** * * **

(2) You may take sockeye, late-run Chinook, coho, and pink salmon through a dip net or rod and reel fishery at two specified sites on the Kenai River below Skilak Lake and as provided in this section.

(i) For both Kenai River fishing sites below Skilak Lake, incidentally caught fish may be retained for subsistence uses, except for early-run Chinook salmon (unless otherwise provided for in this section), rainbow trout 18 inches or longer, and Dolly Varden 18 inches or longer, which must be released.

** * * **

(3) Fishing seasons are as follows:

<i>Species</i>	<i>Season</i>	<i>Location</i>
****	****	****
<i>Late-run Chinook salmon</i>	<i>July 16-September 30</i>	<i>Kenai River sites only</i>
****	****	****

(B) Kenai River gillnet; salmon.

(2) Fishing will be allowed July 1 through August 15 and September 10-30 on the Kenai River unless closed or otherwise restricted by Federal special action. The following conditions apply to harvest in the Kenai River community gillnet fishery:

(iii) Additional harvest restrictions for this fishery are as follows:

<i>Species</i>	<i>Period</i>	<i>Harvest</i>	<i>Fishery limits</i>
****	****	****	****
<i>Early-run Chinook salmon less than 46 inches in length or greater than 55 inches in length</i>	<i>July 1-15</i>	<i>Fish may be retained if the most current preseason forecast from the Alaska Department of Fish and Game projects the in-river run to be within or above the optimal escapement goal range for early-run Chinook salmon; otherwise, live fish must be released</i>	<i>Fishery will close until July 16 once 50 early-run Chinook salmon have been retained or released.</i>

*Late-run Chinook
salmon*

July 16-August 15

*Fishery will close
prior to August 15 if
200 late-run
Chinook salmon
have been retained
or released prior to
that date. Fishery
will reopen
September 10-30 for
species available at
that time*

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(C) Kenai River rod and reel only; salmon.

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(2) Seasons, areas, harvest and possession limits, and methods and means for take are the same as for the taking of these salmon species under State of Alaska fishing regulations (5 AAC 56, 5 AAC 57 and 5 AAC 77.540), except for the following harvest and possession limits:

<i>Species</i>	<i>Size</i>	<i>Limits</i>
<i>Chinook salmon—Early-run (January 1 through July 15)</i>	<i>Less than 46 inches or 55 inches and longer</i>	<i>2 per day and 2 in possession</i>
<i>Chinook salmon—Late-run (July 16 through August 31)</i>	<i>20 inches and longer</i>	<i>2 per day and 2 in possession</i>

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(ii) Annual harvest limits for any combination of early- and late-run Chinook salmon are four for each permit holder.

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Proposed Federal Regulation

§ __.27(e)(10) Cook Inlet Area

* * * *

(iii) Seasons, harvest limits, and methods and means for Kenai River fisheries. Household annual limits for salmon in Kenai River fisheries are as follows:

<i>Species</i>	<i>Number of fish allowed for each permit holder</i>	<i>Additional fish for each household member</i>	<i>Additional provisions</i>
* * * *	* * * *	* * * *	* * * *
<i>Chinook salmon—Early run (July 1 through July 15)</i>	<i>2</i>	<i>1</i>	<i>For the Kenai River community gillnet fishery described under paragraph (e)(10)(iii)(B) of this section</i>
<i>Chinook salmon—Late run (July 16 through August 31)</i>	<i>10</i>	<i>2</i>	
* * * *	* * * *	* * * *	* * * *

(A) Kenai River dip net or rod and reel; salmon.

(1) You may take only sockeye salmon through a dip net or rod and reel fishery at one specified site on the Russian River.

(i) For the Russian River fishing site, incidentally caught fish may be retained for subsistence uses, except for ~~early and late run~~ Chinook salmon, coho salmon, rainbow trout, and Dolly Varden, which must be released.

* * * *

(2) You may take sockeye, ~~late run~~ Chinook, coho, and pink salmon through a dip net or rod and reel fishery at two specified sites on the Kenai River below Skilak Lake and as provided in this section.

(i) For both Kenai River fishing sites below Skilak Lake, incidentally caught fish may be retained for subsistence uses, except for ~~early run~~ Chinook salmon **prior to July 16** (unless otherwise provided for in this section), rainbow trout 18 inches or longer, and Dolly Varden 18 inches or longer, which must be released.

* * * *

(3) Fishing seasons are as follows:

<i>Species</i>	<i>Season</i>	<i>Location</i>
* * * *	* * * *	* * * *
Late run Chinook salmon	July 16-September 30	Kenai River sites only
* * * *	* * * *	* * * *

(B) Kenai River gillnet; salmon.

* * * *

(2) Fishing will be allowed July 1 through August 15 and September 10-30 on the Kenai River unless closed or otherwise restricted by Federal special action. The following conditions apply to harvest in the Kenai River community gillnet fishery:

* * * *

(iii) *Additional harvest restrictions for this fishery are as follows:*

<i>Species</i>	<i>Period</i>	<i>Harvest</i>	<i>Fishery limits</i>
* * * *	* * * *	* * * *	* * * *
<i>Early-run Chinook salmon less than 46 inches in length or greater than 55 inches in length</i>	<i>July 1-15</i>	<i>Fish may be retained if the most current preseason forecast from the Alaska Department of Fish and Game projects the in-river run to be within or above the optimal escapement goal range for early-run Chinook salmon; otherwise, live fish must be released</i>	<i>Fishery will close until July 16 once 50 early-run Chinook salmon have been retained or released.</i>
<i>Late-run Chinook salmon</i>	<i>July 16-August 15</i>		<i>Fishery will close prior to August 15 if 200 late-run Chinook salmon have been retained or released between July 16 and prior to that date. Fishery will reopen September 10-30 for species available at that time</i>
* * * *	* * * *	* * * *	* * * *

(C) *Kenai River rod and reel only; salmon.*

* * * *

(2) Seasons, areas, harvest and possession limits, and methods and means for take are the same as for the taking of these salmon species under State of Alaska fishing regulations (5 AAC 56, 5 AAC 57 and 5 AAC 77.540), except for the following harvest and possession limits:

<i>Species</i>	<i>Size</i>	<i>Limits</i>
<i>Chinook salmon—Early run</i> <i>(January 1 through July 15)</i>	<i>Less than 46 inches or 55 inches and longer</i>	<i>2 per day and 2 in possession</i>
<i>Chinook salmon—Late run</i> <i>(July 16 through August 31)</i>	<i>20 inches and longer</i>	<i>2 per day and 2 in possession</i>
<i>* * * *</i>	<i>* * * *</i>	<i>* * * *</i>

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(ii) Annual harvest limits for any combination of ~~early and late run~~ Chinook salmon are four for each permit holder.

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Existing State Regulation

5 AAC 57.120. General provisions for seasons, bag, possession, annual, and size limits, and methods and means for the Kenai River Drainage Area

(a) Unless otherwise specified in 5 AAC 57.121 - 5 AAC 57.123 or by an emergency order issued under AS 16.05.060, the following are the general seasons, bag, possession, annual, and size limits, and methods and means that apply to sport fishing for finfish in the Kenai River Drainage Area:

(2) king salmon 20 inches or greater in length, as follows:

(A) may be taken only from January 1 - July 31, in the Kenai River from its mouth upstream to an ADF&G regulatory marker located at the outlet of Skilak Lake, with a bag and possession limit of one fish, as follows:

(i) from January 1 - June 30, from its mouth upstream to an ADF&G regulatory marker located at the outlet of Skilak Lake, and from July 1 - July 31, from an ADF&G regulatory marker located approximately 300 yards downstream from the mouth of the Slikok Creek upstream to an ADF&G regulatory marker located at the outlet of Skilak Lake, only king salmon that are less than 34 inches in length as measured from tip of snout to tip of tail may be retained;

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 under consideration include all waters of the Kenai River within and adjacent to the exterior boundaries of the Kenai National Wildlife Refuge and Chugach National Forest. This includes Kenai Lake and its tributaries and all water downstream to the confluence of the upper branch of the Killey River (approximately RM 45.5), the mainstem Kenai River between RM 26.5 and RM 29 (known locally as Moose Range Meadows), and most of the upper reaches of tributaries below Skilak Lake including the Moose, Killey and Funny Rivers.

Customary and Traditional Use Determinations

Residents of the communities of Cooper Landing, Hope, and Ninilchik have a customary and traditional use determination for all fish in the Kenai Peninsula District, waters north of and including the Kenai River drainage within the Kenai Nation Wildlife Refuge and the Chugach National Forest.

Regulatory History

Prior to 1952, freshwater streams in the Kenai Peninsula were open to subsistence fishing. In 1952, as part of efforts to rebuild salmon runs, all streams and lakes of the Kenai Peninsula were closed to subsistence fishing under Territory of Alaska regulations. Only rod and reel fishing was allowed for “personal use” (Fall et al. 2004). In 1992, the State classified most of the Cook Inlet Area, including the Kenai and Kasilof River drainages, as a nonsubsistence area (5AAC 99.015(3)). The only State subsistence fisheries in Cook Inlet occur in areas that are not accessible from the road system, including the Tyonek, Windy Bay, Port Chatham, and Port Graham subdistricts, as well as portions of Seldovia Bay and the Yentna River drainage. The State’s subsistence priority does not apply on the Kenai Peninsula, and the Alaska Board of Fisheries may not authorize subsistence fisheries in this area. Under State regulations, personal use fisheries and educational fishery permits provide opportunities for harvesting fish with gear other than rod and reel in nonsubsistence areas.

Sport and personal use fisheries in the Kenai River are intensively managed by the Alaska Department of Fish and Game (ADF&G) through a series of management plans. These plans provide goals for sustained yield, guidance for mixed-species and mixed-stock fisheries, and instructions for allocation between competing fisheries.

There are two plans that direct the management of Chinook Salmon in the Kenai River: the Kenai River and Kasilof River Early-Run King Salmon Conservation Management Plan (5 AAC 56.070), and

the Kenai River Late-Run King Salmon Management Plan (5 AAC 21.359). Although these plans, which are a means to ensure adequate escapement and provide management guidelines for the department, speak to the stocks as early- and late-runs, the general regulations for the Chinook Salmon sport fishery (5 AAC 57.120) instead use dates and river sections to specify when and where fishing can occur.

Most of the initial Federal subsistence fishing regulations for the Kenai River were put in place during the period of 2006 – 2008, and were based on plans that mirrored State regulations, conservation efforts, and management. The fisheries in this drainage were most recently updated to include a community gillnet fishery for the residents of Ninilchik through adoption of Proposals FP15-10 and FP17-10 and through Board approval and publication of the Cook Inlet Final Rule (FSB 2015, 2017, 2019, 84 FR 39188).

Biological Background

Chinook Salmon runs in the Kenai River drainage are categorized into early and late runs. Chinook Salmon entering the Kenai River prior to July are considered early-run fish and primarily spawn in tributaries, while Chinook Salmon entering the Kenai River during July and August are considered late-run fish and almost exclusively spawn in the main-stem Kenai River (Begich et al. 2013). Each run is managed independently due to differences in run size, run timing, and spatial distribution of spawning fish.

While Kenai River Chinook Salmon are managed as early and late runs, the two runs are perhaps more appropriately delineated as mainstem and tributary spawning groups. The early returning fish are predominantly tributary bound, and are genetically distinct from the later returning mostly mainstem spawners (Adams et al. 1994, Barclay and Habicht 2015, Reimer and Fleischman 2017). Recent analyses, which used a more comprehensive sample collection from throughout the drainage, found additional genetic structure within Kenai River Chinook Salmon beyond mainstem and tributary (Rogers Olive et al. 2013). The study confirmed the broad scale genetic structure between the temporal runs (early and late), but also found three mid-scale structure groups (upper tributaries, lower tributaries, and mainstem) and six fine-scale structure groups. The fine-scale groups were 1) Upper mainstem/Juneau Creek, 2) Lower mainstem, 3) Quartz/Dave's/Crescent creeks, 4) Grant Creek/Russian River, 5) Benjamin Creek/Killey River, and 6) Funny River/Slikok Creek). Although temporal designations are likely the most appropriate for management purposes, it is important to note that the two broad scale genetic groups overlap in run timing to some extent. As such, some early returning mainstem spawners (late-run fish) are in the river below Skilak Lake during the early-run time period (before July 1), and some late returning tributary spawners (early-run fish) are in the river below Skilak Lake during the late-run time period (after June 30).

Chinook Salmon abundance in the Kenai River and throughout Alaska has been mostly decreasing since around 2007 (ADF&G Chinook Salmon Research Team 2013, Lipka et al. 2020). A portion of these stocks are also exhibiting declining trends in size and age, including Kenai River Chinook Salmon that spawn on the Kenai National Wildlife Refuge, either in tributary streams (Boersma and

Gates 2016) or the main-stem Kenai River (Lewis et al. 2015). Several potential, yet unproven, causal factors for this downward trend in abundance include size-selective harvest, competitive interactions, and changing environmental conditions (Lewis et al. 2015).

Cultural Knowledge and Traditional Practices

The Kenai River watershed is within the traditional territory of the *Dena'ina* Athabaskans, which dates to around 1000 A.D. The area extends from Kachemak Bay on the south end of the Kenai Peninsula, west across Cook Inlet to Lake Clark and the Stony River and northeast to the Susitna Basin. Borders are shared with the traditional territory of the *Sugpiaq* (Alutiiq) which includes the southern portion of the Kenai Peninsula, bridging the *Sugpiaq* territories of Prince William Sound with Kodiak Island and the Alaska Peninsula (de Laguna 1934, Krauss 1982, Stanek 1980).

Non-Native settlement of the Kenai Peninsula began in the 18th century with the Russians and the fur trade, and later mining efforts in Kachemak Bay. At the end of the 19th century, commercial fishing brought about new settlements, such as the Herring saltery at Seldovia in 1896. The next major non-Native settlement period began during the Gold Rush era at the end of the 19th century. Hope and Cooper Landing settlements were established during this period. Homesteading in the Homer region occurred from 1915 through 1940. With the construction of roads and local oil development in the 1950s, the population of the Kenai Peninsula increased substantially through immigration of people born outside Alaska.

Harvest History

Harvest of Pacific salmon returning to the Kenai River drainage occur in Federal subsistence fisheries, as well as State commercial, sport, personal use, and educational fisheries. Federal subsistence regulations have provided for the harvest of fish in the Kenai River drainage for the rural residents of Cooper Landing, Hope, and Ninilchik since 2007. Management of the Federal subsistence fishery occurs through general and Cook Inlet Area specific subsistence regulations, as well as in-season management actions. A Federal subsistence fishing permit is required for the harvest of salmon, trout, and char, and all harvest must be reported to the Federal in-season manager. While the Federal subsistence regulations allow for the harvest of Chinook Salmon from both runs, the actual harvest over the years has been very low (**Table 1**). There were closures in place for the retention of Chinook Salmon for the years 2013, 2014, and 2015, which may have impacted this to some degree.

Table 1. Kenai River Federal subsistence salmon harvests by residents of Hope, Cooper Landing, and Ninilchik between the years 2007 and 2019 (USFWS 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2020).

Dip Net Harvests										
Year	Russian River Falls			Kenai River (RM 45.5-48)			Moose Range Meadows			Total
	Sockeye	Coho	Chinook	Sockeye	Coho	Chinook	Sockeye	Coho	Chinook	
2007	527	n/a	n/a	0	0	0	12	0	0	539
2008	1,281	n/a	n/a	0	0	0	0	0	0	1,281
2009	809	n/a	n/a	30	0	0	0	0	0	839
2010	804	n/a	n/a	0	0	0	0	0	0	804
2011	953	n/a	n/a	0	0	0	0	0	0	953
2012	1,285	n/a	n/a	0	0	0	0	0	0	1,285
2013	1,267	n/a	n/a	0	0	0	0	0	0	1,267
2014	1,672	n/a	n/a	0	0	0	0	0	0	1,672
2015	1,604	n/a	n/a	0	0	0	0	0	0	1,604
2016	1,641	n/a	n/a	0	0	0	0	0	0	1,641
2017	1,773	n/a	n/a	25	0	0	0	0	0	1,798
2018	1,951	n/a	n/a	0	0	0	0	0	0	1,951
2019	1,848	n/a	n/a	0	0	0	0	0	0	1,848
TOTAL	17,415	n/a	n/a	55	0	0	12	0	0	17,482
Average	1340	n/a	n/a	4	0	0	0.923077	0	0	1,345
Rod and Reel Harvests										
Year	Upper Kenai/Russian River			Kenai River (RM 45.5-50)			Moose Range Meadows			Total
	Sockeye	Coho	Chinook	Sockeye	Coho	Chinook	Sockeye	Coho	Chinook	
2007	169	5	n/a	0	0	0	0	0	0	174
2008	125	7	n/a	0	0	0	202	5	0	339
2009	165	9	n/a	0	0	0	93	0	0	267
2010	57	0	n/a	0	0	0	42	0	0	99
2011	46	0	n/a	0	0	0	90	0	0	136
2012	43	0	n/a	0	0	0	86	0	0	129
2013	68	4	n/a	0	0	0	73	0	0	145
2014	100	2	n/a	0	0	0	124	0	0	226
2015	89	0	n/a	0	0	0	75	0	0	164
2016	9	0	n/a	0	0	1	6	0	0	16
2017	88	0	n/a	0	0	1	42	0	0	131
2018	103	3	n/a	0	0	0	33	0	0	139
2019	127	5	n/a	0	0	0	55	0	0	187
TOTAL	1189	35	n/a	0	0	2	921	5	0	2,152
Average	91	3	n/a	0	0	0.2	71	0.4	0	166
Community Gillnet Harvest										
Year						Moose Range Meadows				Total
	Sockeye	Coho	Chinook	Pink		Sockeye	Coho	Chinook	Pink	
2016	-	-	-	-	-	723	12	1	6	742
2017	-	-	-	-	-	2,169	12	1	11	2,193
2018	-	-	-	-	-	1,488	32	-	6	1,526
2019	-	-	-	-	-	2,832	6	-	1	2,839
TOTAL	-	-	-	-	-	7,212	62	2	24	7,300
Average	-	-	-	-	-	1,803	16	1	6	1,825

Effects of the Proposal

This proposal is administrative in nature. It would remove references to early- and late-run from the portions of the Cook Inlet Area Federal subsistence fishing regulations for the Kenai River. Many of the regulations currently in place use both these terms, as well as date ranges. In the locations where the early- or late-run terms are used without date ranges, those dates would be added for clarity. If supported by the Board, this proposal would not shorten or lengthen any seasons and would not increase or decrease opportunity for Federally qualified subsistence users. These changes would reflect a more accurate portrayal of the overlapping nature of these two runs in this system and may make the complex regulations in this area easier for users to understand.

OSM PRELIMINARY CONCLUSION

Support FP21-09.

Justification

This proposed change does not alter existing harvest dates or opportunities for Federally qualified subsistence users. Using dates alone to indicate when Chinook Salmon can be harvested, rather than dates and early- or late-run designations, would provide a more concise description of when Chinook Salmon could be harvested from the Kenai River. This administrative change would continue the recent efforts to make the regulations for the Cook Inlet Area more user friendly.

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