

FP09-10 Executive Summary	
General Description	Proposal FP09-10 requests that Federal regulations concerning the slot size limit for early-run Chinook salmon in the Kenai River and daily harvest and possession limits for lake trout in Hidden Lake be aligned with changes made to State regulations by the Alaska Board of Fisheries in February 2008. <i>Submitted by the U.S. Fish and Wildlife Service</i>
Proposed Regulation	See analysis for the proposed regulatory language.
Southcentral Regional Council Recommendation	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal, and the recommendation of the Regional Advisory Council to be supported by substantial evidence, consistent with recognized principles of conservation and appropriately allows for the continuation of subsistence uses.
ADF&G Comments	Support with modification. See comments following the analysis.
Written Public Comments	1 Support

**REGIONAL ADVISORY COUNCIL RECOMMENDATION
FP09-10**

SOUTHCENTRAL ADVISORY COUNCIL

Support Proposal FP09-10. This would provide Federal subsistence users with the opportunity to harvest larger Chinook salmon rather than requiring them to be released. The harvest reduction for lake trout in the Hidden Lake would help conserve the fish population and will have little or no effect on subsistence users.

STAFF ANALYSIS FP09-10

ISSUES

Proposal FP09-10, submitted by the U.S. Fish and Wildlife Service, requests that Federal regulations concerning the slot size limit for early-run Chinook salmon in the Kenai River and daily harvest and possession limits for lake trout in Hidden Lake be aligned with changes made to State regulations by the Alaska Board of Fisheries in February 2008.

DISCUSSION

The proponent states that aligning Federal subsistence with State slot size limits for early-run Chinook salmon in the Kenai River, and reducing daily harvest limits for lake trout in Hidden Lake so that they are double State daily limits would be consistent with the original intent of Federal subsistence fishery regulations adopted in May 2007.

Existing Federal Regulations

§____.27(i)(10) Cook Inlet Area

(E) For Federally managed waters of the Kenai River and its tributaries...

(2) For early-run Chinook salmon less than 44 inches or 55 inches or longer, daily bag and possession limits are 2 per day and 2 in possession.

(3) For late-run Chinook salmon 20 inches and longer, daily bag and possession limits are 2 per day and 2 in possession.

(4) Annual harvest limits for any combination of early- and late-run Chinook salmon are 4 for each permit holder...

(G) For Federally managed waters of the upper Kenai River and its tributaries above Skilak Lake outlet at river mile...

(1) For lake trout 20 inches or longer, daily bag and possession limits are 4 per day and 4 in possession. For fish less than 20 inches, daily bag and possession limits are 15 fish per day and 15 in possession. For Hidden Lake, daily limits are 4 per day and 4 in possession regardless of size.

Proposed Federal Regulation

§____.27(i)(10) Cook Inlet Area.

(E) For Federally managed waters of the Kenai River and its tributaries...

(2) For early-run Chinook salmon less than ~~44~~ 46 inches or 55 inches or longer, daily ~~bag~~ harvest and possession limits are 2 per day and 2 in possession.

(3) For late-run Chinook salmon 20 inches and longer, daily bag and possession limits are 2 per day and 2 in possession.

(4) Annual harvest limits for any combination of early- and late-run Chinook salmon are 4 for each permit holder...

(G) For Federally managed waters of the upper Kenai River and its tributaries above Skilak Lake outlet at river mile 50...

(1) For lake trout 20 inches or longer, daily bag and possession limits are 4 per day and 4 in possession. For fish less than 20 inches, daily bag and possession limits are 15 fish per day and 15 in possession. For Hidden Lake, daily **harvest and possession** limits are **1** per day and **1** in possession regardless of size.

Existing State Regulations

State of Alaska sport fishing regulations for the Kenai Peninsula allow each angler a total annual limit of five Chinook salmon 20" or longer from fresh waters of Cook Inlet north of the latitude of Point Adam, and from Cook Inlet salt waters. Of the total annual limit of five Chinook salmon, no more than two may be taken from the Kenai River, and beginning with the 2008 season, Chinook salmon longer than 20" but less than 28" harvested in the Kenai River from January 1 through June 30 are not included as part of the annual limit.

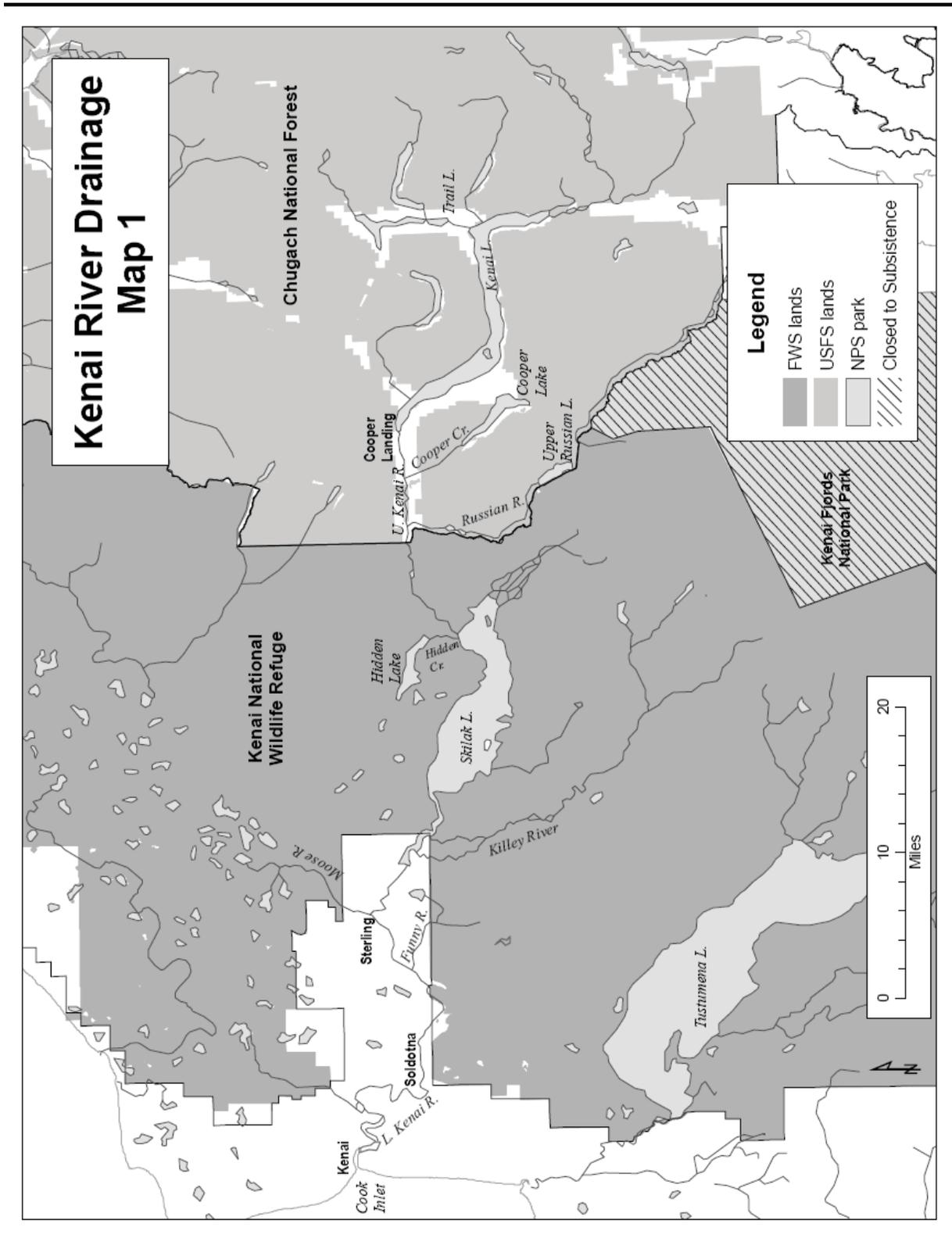
During its February 2008 meeting, the Alaska Board of Fisheries adopted several sport fishery regulation changes that took effect April 15, 2008. Three of these changes are relevant to Federal subsistence fishery proposal FP09-10. First, the slot limit for the Kenai River early-run Chinook salmon was changed, and now all retained early-run Chinook salmon must be either less than 46 inches in length or 55 inches or longer in length. Second, while the annual limit of two Chinook salmon from the Kenai River was not changed, Chinook salmon less than 28 inches in length taken from January 1 through June 30 are not included in this limit. Third, the lake trout daily limit for Hidden Lake was reduced to one per day and one in possession regardless of size.

Extent of Federal Public Waters

For purposes of this discussion, the phrase "Federal public waters" is defined as those waters described under 50 CFR 100.3. For the Kenai River drainage, Federal public waters include waters within and adjacent to the exterior boundaries of the Kenai National Wildlife Refuge and Chugach National Forest (**Map 1**). This includes Kenai Lake and its tributaries and all waters downstream to the confluence of the upper branch of the Killey River, approximately 2 miles of the mainstem Kenai River at approximately RM 25 (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

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



Regulatory History

Pre- and Early Statehood Fisheries

Until 1952 freshwater streams in the Kenai Peninsula were open to subsistence fishing, but poorly regulated commercial fisheries decimated salmon runs. 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 was allowed for “personal use” (Fall et al. 2004).

After 1952, subsistence salmon users in the Cook Inlet Area harvested fish under personal use and sport fish regulations alongside allocation priorities directed toward the recreational fisheries for the Chinook, sockeye, and coho salmon runs and the commercial fisheries for the sockeye, chum and pink salmon runs (Braund 1980:15–18).

State Fisheries

In 1992, the State classified most of the Cook Inlet Area, including the Kenai and Kasilof River drainages, as a non-subsistence 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, Kyuktolik, and Port Graham subdistricts, as well as portions of Seldovia Bay and the Yentna River drainage.

The State has a regulatory management plan for Upper Cook Inlet salmon (5 AAC 21.363) that provides the Alaska Board of Fisheries with guiding principles and mandatory criteria to use when adopting management plans for specific stocks. Commercial and sport fisheries are complex and intensively managed, and there are five management plans specific to Kenai River salmon stocks (5 AAC 21.359, 5 AAC 21.360, 5 AAC 21.363, 5 AAC 21.365, and 5 AAC 56.070). These management plans provide goals for sustained yield, guidance for mixed-species and mixed-stock fisheries, and instructions for allocation between competing fisheries.

The State has a regulatory management plan for Upper Cook Inlet personal use salmon fisheries (5 AAC 77.540). This plan established four personal use fisheries in Upper Cook Inlet: Kasilof River dip net, Kasilof River set gillnet, Kenai River dip net, and Fish Creek dip net. Unlike subsistence fisheries, personal use fisheries do not have a priority over other existing uses. Personal use fisheries are open to all residents of Alaska, require a sport fishing permit and household permit, and occur in marine and intertidal waters outside of Federal public lands. These fisheries target sockeye salmon, the species of greatest abundance and for which the best stock assessment information is available. The current annual harvest limit is 25 salmon and 10 flounder for the head of each household and 10 salmon for each additional household member. Incidentally caught coho, pink, and chum salmon may be retained as part of the annual limit. No retention of Chinook salmon is allowed in the Kasilof River dip net fishery, while Chinook salmon may be retained in the Kasilof River set gillnet fishery as part of the annual limit. The annual household limit is the combined harvest from all personal use fisheries, and cannot include more than one Chinook salmon.

The State administers educational fisheries for 5 groups in the Central (Kenaitze Tribal Group, Ninilchik Traditional Council, Ninilchik Native Descendants, Ninilchik Emergency Services, and Anchorage Point VFW) and 6 groups in the Northern (Knik Tribal Council, Big Lake Cultural Outreach, Intertribal Native Leadership, Eklutna Village, Tyonek Village, and Tim O’Brien) Districts of Upper Cook Inlet under the provisions of 5 AAC 93.200 - 93.235 (Shields 2007). Educational fisheries are based upon applications that address standards set out in regulation. Specific provisions for these fisheries have varied, but permits

have allowed operation of either one or two set gillnets in marine waters in addition to use of traditional methods in freshwaters, including stick fence weirs, grass baskets, and dip nets made from tree roots using materials that naturally occur in the area. For the Kenai River, only the Kenaitze Tribal Group has been issued an educational permit. The permit currently allows this group to harvest 8,000 salmon annually, including up to 300 Chinook and 1,000 coho salmon. In 2007, the Kenaitze Tribal Group total harvest was 4,628 salmon, consisting of 25 Chinook, 3,941 sockeye, 543 pink, and 119 coho salmon.

The State also administers sport fisheries in which both salmon and resident species can be harvested. The sport fisheries for salmon and resident species in the middle and upper Kenai River drainage, within the boundaries of Kenai NWR and Chugach National Forest, are the largest sport fisheries in the state (Pappas and Marsh 2005). There are no participation limits for non-guided anglers, but the number of guides that take anglers fishing is limited in National Refuge and Forest Service waters.

Federal Subsistence Fisheries

Federal regulations for subsistence fisheries were first established in 1999. For salmon, trout, Dolly Varden, and char in Cook Inlet there was no customary and traditional use determination; therefore, all rural residents of Alaska qualified under the Federal program as eligible subsistence users. In 2002, regulations for take in Cook Inlet were established for salmon, trout, Dolly Varden, and char. This subsistence fishery requires a permit, and seasons, harvest and possession limits, and methods and means for take were identical to State of Alaska sport fishing regulations. The Federal Subsistence Board (Board) established this fishery as an interim measure to provide some subsistence opportunity in Cook Inlet for rural residents, pending collection of additional information on community and area-specific harvest patterns to refine customary and traditional use determinations as well as regulations for take. The Board concluded that this information was necessary because of the unique circumstances of the Kenai Peninsula. Rural communities are interspersed among much larger non-rural communities, and no subsistence fisheries have been allowed in the freshwaters of the Kenai Peninsula for over 50 years.

The Board did not consider any further regulatory proposals for Cook Inlet until 2005. With new information available (Fall et al. 2004), the Board took up consideration of customary and traditional use determinations, and continued to defer proposals for take until completion of those deliberations. During this time, no proposals for harvest were under consideration, and regulations for subsistence harvest were identical to State of Alaska sport fishing regulations with one exception. In November 2006, the Board adopted FSA06-01b which provided a temporary 2006-2007 winter subsistence fishery for resident species in Tustumena Lake. The Board considered fishery regulatory proposals for Cook Inlet in both 2007 and 2008, and adopted several proposals establishing subsistence fisheries for salmon and resident fish species in the Kenai and Kasilof River drainages. These include dip net salmon fisheries at designated sites in the Kenai, Russian, and Kasilof Rivers; rod and reel salmon and resident species fisheries in the Kenai and Kasilof River drainages; an under-the-ice gillnet and jig resident species fishery in Tustumena Lake, and a temporary fish wheel salmon fishery in the Kasilof River.

Biological Background and Harvest History

Early-Run Chinook Salmon

Most early-run Chinook salmon spawn in Kenai River tributaries, and the State's Kenai River and Kasilof River Early-Run King Salmon Conservation Management Plan (5 AAC 56.070) establishes escapement objectives and guidelines for the management of all existing fisheries harvesting this run. This plan also tries to ensure that the age and size composition of the harvest closely approximates that of the run. The primary harvest of this run occurs within the sport fishery. Most of the sport harvest is taken in the Kenai

River, although the marine sport fishery takes an undetermined, but likely small number, of Kenai River early-run Chinook salmon based on tag recoveries (King and Breakfield 2002). The State manages other fisheries to minimize the harvest of this run. The commercial and personal use fisheries open after most early-run Chinook salmon have entered the Kenai River, and the personal use fishery has a seasonal limit of one Chinook salmon per household. The Kenaitze Tribe's educational fishery has an annual limit of 300 Chinook salmon, all of which may be taken prior to July 1. The optimal escapement goal range set by this plan is 5,300 to 9,000 early-run Chinook salmon, which is estimated with sonar equipment installed in the lower Kenai River. To achieve the escapement goal, daily sonar estimates of Chinook salmon passing the sonar site and estimates of the sport harvest from creel surveys are used in a run timing model to project total inriver return, total harvest, and final spawning escapement. If escapement is projected to fall below the lower end of the goal's range, the sport fishery is restricted by steps to catch-and-release only and ultimately to closure. Bait cannot be used until escapement is projected to reach the upper end of the goal's range. To help ensure that the age and size composition of the harvest is similar to that of the run, there is a slot limit that specifies the size of Chinook salmon that may be retained. The slot limit is in effect from January 1 to June 30 from the Kenai River mouth upstream to the outlet of Skilak Lake, and from July 1 to 14 from the Soldotna Bridge upstream to the outlet of Skilak Lake.

All sport fishing for early-run Chinook salmon in the Kenai River occurs below Skilak Lake. The bag and possession limit for Chinook salmon 20 inches or longer is 1 per day and 1 in possession. Additionally, there is an annual limit of 2 Chinook salmon 20 inches or longer from the Kenai River. In March 2003, the Alaska Board of Fisheries adopted a slot limit regulation that only allowed retention of early-run Chinook salmon less than 44 inches or greater than 55 inches in length until July 1 downstream of the Soldotna Bridge and until July 15 upstream of the bridge. In 2008, the slot limit was changed to allow retention of early-run Chinook salmon less than 46 inches or greater than 55 inches in length. The purpose of the slot limit is to reverse a declining abundance trend in older, larger Chinook salmon, primarily age-7 (5-ocean) Chinook salmon, while still allowing anglers the opportunity to keep relatively rare trophy-sized individuals greater than 55 inches long. In 2008, the Alaska Board of Fisheries also adopted a regulation allowing sport anglers the opportunity to increase their harvest of small early-run Chinook salmon by not counting harvested fish less than 28 inches long as part of their Chinook salmon annual harvest limit.

The annual sport fishery harvest of early-run Kenai River Chinook salmon during 1996–2005 has ranged from 899 to 8,129, with an average of 3,763 (**Table 1**). These harvests do not include the estimated hook-and-release mortality of about 7.6% of the total catch (Bendock and Alexandersdottir 1992). The Kenaitze Tribe's educational fishery harvest has ranged from 46 to 198 early-run Chinook salmon during the time period 1997–2006, with an average of 108. No estimates of the number of early-run Kenai River Chinook salmon harvested in commercial or personal use fisheries are available, but due to the timing of these fisheries these harvests are assumed to be negligible.

The assessment program for early-run Kenai River Chinook salmon is very good. Escapement into the Kenai River system is estimated using sonar equipment installed at river mile 8.5. Early-run Chinook salmon enter the Kenai River from about late-May through late-June. Most early-run Chinook salmon spawn in Kenai River tributaries below the outlet of Skilak Lake, and most of these spawners are bound for the Killey and Funny rivers. On average, only about 7% of all early-run Chinook salmon spawn in tributaries within and above Skilak Lake (Bendock and Alexandersdottir 1992, Burger et al. 1983) (**Table 2**). All escapements during the time period 1996–2003 have been within or above the optimal escapement goal range of 5,300 to 9,000 Chinook salmon (**Table 1**). Spawning escapements during this period have ranged from 6,185 to 17,276 early-run Chinook salmon, with an average of 11,330. A

Table 1. Kenai River system early-run Chinook salmon harvest and spawning escapement information, 1996-2006. The number of Kenai River early-run Chinook salmon within commercial and personal use harvests has not been estimated, but is assumed to be negligible since these fisheries begin after most of this run has entered the Kenai River. Sport harvests do not include either the marine harvest, which is unknown, or estimated hook-and-release mortality, which is about 7.6% (Bendock and Alexandersdottir 1992). N/A = data not available.

Year	Harvest ^{a,b,c}				Escapement ^{a,d,e}
	Commercial	Sport	Personal Use	Educational	
1996	N/A	6,623	N/A	104	16,595
1997	N/A	6,437	N/A	122	8,176
1998	N/A	1,170	N/A	131	7,760
1999	N/A	8,129	N/A	114	17,276
2000	N/A	1,818	N/A	124	10,476
2001	N/A	2,397	N/A	198	14,074
2002	N/A	899	N/A	48	6,185
2003	N/A	2,839	N/A	126	10,097
2004	N/A	2,283	N/A	72	15,274 ^f
2005	N/A	5,035	N/A	76	20,450 ^f
2006	N/A	4,931	N/A	65	23,326 ^f
2007	N/A	N/A	N/A	N/A	15,904 ^f

^aPapas and Marsh (2005)

^bADF&G (2008b)

^cShields (2006 and 2007)

^dADF&G (2008c)

^eThe total Kenai River system optimal escapement goal is 5,300 to 9,000 Chinook salmon.

^fThis is an inriver estimate that does not account for sport fish harvests above the counting site.

sustainable harvest level for the early run is about 8,000 Chinook salmon, and the sport fishery does not always harvest the entire harvestable surplus.

No Chinook salmon were reported to have been harvested from the Kenai River drainage by Federally qualified subsistence users during 2007 or 2008 (Palmer 2008 pers. comm.).

Lake Trout

All information from lake trout studies by ADF&G and USFWS relate to fisheries within Federal public waters. There are no lake trout abundance estimates available for the Kenai River drainage. Size and age information has occasionally been collected from Hidden Lake from 1960 to 1994, and will also be collected during 2008. Prior to 1992, ADF&G collected lake trout for population age structure data using gillnets. For three years beginning in 1992, USFWS conducted a creel survey that included size and age information. Little information exists about lake trout in other parts of the drainage. References to lake trout harvests in other Federal public waters are limited to Skilak and Kenai lakes, where effort is viewed as generally small and harvests are limited to a few hundred fish annually.

Lake trout are long lived, slow growing, and have a well-documented history of over-exploitation in the Copper and Tanana river drainages. Sustainable exploitation for those populations is no greater than

Table 2. Spawning destinations of radio tagged early-run Chinook salmon in the Kenai River.

Destination	Bendock and Alexandersdottir (1992)		Burger et al. (1983)	Total for All Studies	
	1990	1991	1980-1981	Number	Percent
<u><i>Above the Outlet of Skilak Lake</i></u>					
Skilak Lake	2	0		2	0.9%
Juneau Creek	1	1	1	3	1.4%
Russian River	0	0		0	0.0%
Quartz Creek	1	2	1	4	1.9%
Grant Creek	1	0		1	0.5%
Interlake	5	0	0	5	2.4%
Total	10	3	2	15	7.1%
Percent	10.6%	3.9%	5.0%	7.1%	
<u><i>Outlet of Skilak Lake to Soldotna Bridge</i></u>					
Upper Kenai River	3	1	0	4	1.9%
Killey River (including Benjamin Creek)	43	49	30	122	57.8%
Funny River	19	16	6	41	19.4%
Middle Kenai River	10	5	0	15	7.1%
Total	75	71	36	182	86.3%
Percent	79.8%	92.2%	90.0%	86.3%	
<u><i>Below Soldotna Bridge</i></u>					
Slikok Creek	1	2	1	4	1.9%
Lower Kenai River	8	1	1	10	4.7%
Total	9	3	2	14	6.6%
Percent	9.6%	3.9%	5.0%	6.6%	
<u><i>All Destinations</i></u>					
Totals	94	77	40	211	

10% (Burr 1992, Scanlon 2004, Szarzi and Bernard 1997). Age and size sampling in both Tustumena and Skilak Lake demonstrate similarly structured populations to those in the Copper and Tanana River drainages (Sonnevil 2006, pers. comm.) and are indicative of low reproductive potential.

Lake trout fishing in the Kenai River drainage is generally limited to fall and spring at the outlet of Kenai and Skilak Lake, and an open-water and ice fishery on Hidden Lake. Historically, the fishery was managed for high-yield with a bag limit of 10 through 1996, but beginning in 1997, the bag limit was reduced to 2 of any size in Hidden Lake and two over 20 inches in the remainder of the drainage. These restrictions were a result of well documented over-exploitation leading to fishery restrictions and closures in the Copper and Tanana river drainages (Burr 1992), as well as a declining fishery at Hidden Lake (**Figure 1**).

The lake trout harvest in Kenai River and Hidden Lake fisheries has decreased over the last two decades, while the fisheries in Skilak and Kenai Lake have remained reasonably stable (Table 3). Mean harvest in Hidden Lake declined by about 73% after 1996 from a 1977-1996 mean of 1,353 to a 1997-2006 mean

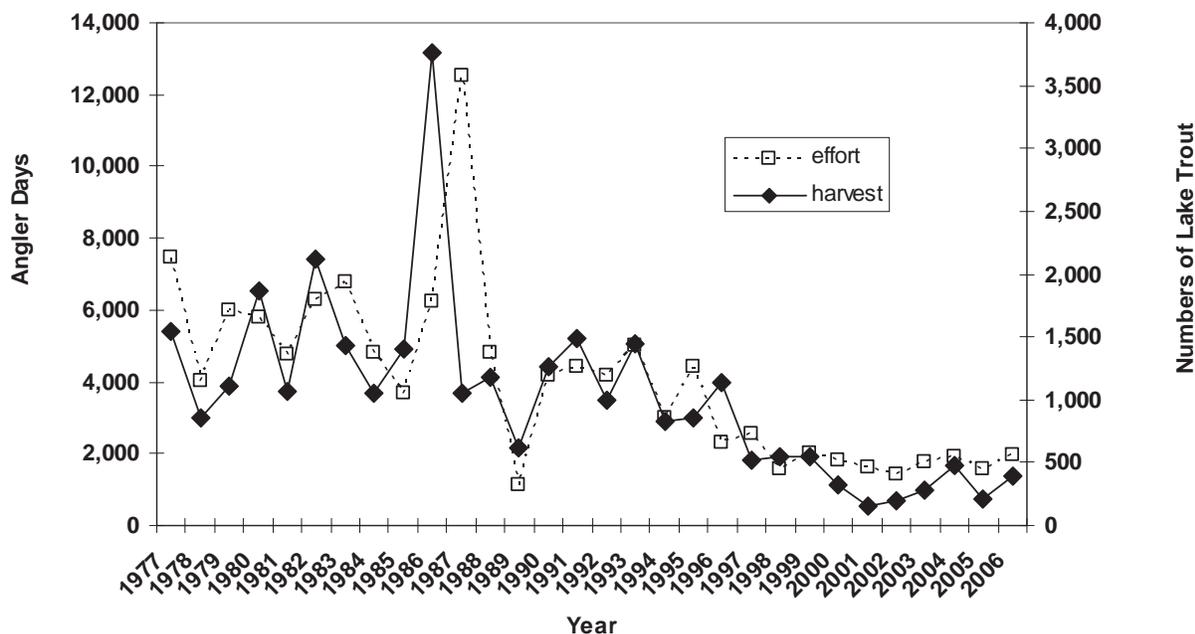


Figure 1. Angler effort and harvest for lake trout, Hidden Lake, 1977-2006.

of 367, and sport fishing effort has shown a similar decline (Figure 1 and Table 3). Lake trout yield potential for Hidden Lake, based on a lake surface area model used in combination with estimated mean lake trout weight (Scanlon 2004), is probably about 400 lake trout per year (ADF&G 2008a: pages 198-199). This suggests that the lake trout population in Hidden Lake was heavily overexploited in past years and probably has not yet recovered.

No lake trout were reported to have been harvested from Hidden Lake or any other portion of the Kenai River drainage by Federally qualified subsistence users during 2007 or 2008 (Palmer 2008 pers. comm.).

Effects of the Proposal

The proposed change to the Kenai River early-run Chinook salmon slot limit would be consistent with State regulations that have been adopted to rebuild this run. The slot limit provides protection to larger, older Chinook salmon, the component of the early run that has been declining. By realigning Federal to State regulations for this run, Federally qualified subsistence fishers would be allowed to harvest slightly larger early-run Chinook salmon within the lower range of the slot limit. The actual effect of adopting the proposed regulations on future Federal subsistence harvests is difficult to predict. Prior to 2007, Federal and State daily and annual harvest limits for Chinook salmon in rod and reel fisheries were the same. Beginning in 2007, Federal subsistence rod and reel daily and annual harvest limits were set at double those for the State sport fishery, but no Chinook salmon harvests were reported by Federally qualified subsistence fishers in 2007 or 2008.

The proposed change to the Hidden Lake daily harvest limit for lake trout would also be consistent with State regulations adopted to rebuild this population. While recent annual State sport fishing harvests

Table 3. Kenai River lake trout harvest as determined by Statewide Harvest Survey 1977-2006.

Year	Kenai River	Hidden Lake	Skilak Lake	Kenai Lake	Total
1977	252	1,542			1,794
1978	524	850			1,374
1979	409	1,109			1,518
1980	112	1,860			1,972
1981	723	1,069			1,792
1982	628	2,117			2,745
1983	650	1,437			2,087
1984	535	1,047			1,582
1985	954	1,405			2,359
1986	972	3,761			4,733
1987	315	1,050		706	2,071
1988	893	1,183	546		2,622
1989	296	619	86	105	1,106
1990	256	1,260	260	167	1,943
1991	497	1,494	363	485	2,839
1992	450	995	455	185	2,085
1993	335	1,449	233	816	1,786
1995	178	852	626	552	2,208
1996	1,199	1,131	325	385	3,040
1997	130	524	504	299	1,457
1998	117	550	355	181	1,203
1999	293	545	621	623	2,082
2000	115	318	543	202	1,178
2001	156	160	72	980	1,368
2002	173	200	147	886	1,406
2003	243	285	230	226	984
2004		482	529		1,011
2005		216	54	631	901
2006		386	23		409
Mean:					
1977-2006	437	1,024	338	451	1,883
1997-2006	175	367	308	504	1,200

have been within sustainable limits, this population has probably not yet fully recovered from excessive fishing pressure that continued through the late 1990s. Reducing existing Federal subsistence fishing daily harvest limit for lake trout in Hidden Lake by half would contribute to population rebuilding efforts and still provide Federally qualified subsistence fishers with the opportunity to harvest twice as many lake trout per day as sport anglers. The actual effect of adopting the proposed regulations on future Federal subsistence harvests is difficult to predict. Prior to 2007, Federal and State daily limits for lake trout in rod and reel fisheries were the same. Beginning in 2007, Federal subsistence rod and reel daily limits were at double those for the State sport fishery, but no lake trout harvests were reported by Federally qualified subsistence fishers in 2007 or 2008.

OSM CONCLUSION

Support Proposal FP09-10.

Justification

The regulatory changes requested by the proponent would maintain the intent of current Federal regulations when the Board adopted them in May 2007. The proposed changes would realign early-run Chinook salmon slot size limits with recently adopted changes to State regulations for the Kenai River, and would set daily harvest limits for lake trout in Hidden Lake at a level twice that now allowed for sport anglers. Based on available information, the proposed changes should provide for sustainable fisheries by conserving age-7, early-run Chinook salmon in the Kenai River, a major component of a run that is being rebuilt; allowing additional harvest opportunities for smaller early-run Chinook salmon; and reducing exploitation on the lake trout population in Hidden Lake, a population that has been overexploited and has probably not yet recovered. While no Chinook salmon were reported to have been harvested in the Kenai River during the Federal subsistence rod and reel salmon fishery in 2007 or 2008, adopting the proposed changes to the early-run Chinook salmon slot limit would provide Federally qualified subsistence users the opportunity to harvest slightly larger Chinook salmon within the lower range of the slot limit rather than being required to release them. Adopting the proposed reduction to the daily harvest limit for lake trout in Hidden Lake is expected to have little or no effect on Federally qualified subsistence users, since there was no reported harvest of this species in Hidden Lake in 2007 or in 2008.

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**INTERAGENCY STAFF COMMITTEE COMMENTS
FP09-10**

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal, and the recommendation of the Regional Advisory Council to be supported by substantial evidence, consistent with recognized principles of conservation and appropriately allows for the continuation of subsistence uses.

ADF&G Comments FP09-10
December 2, 2008, Page 1 of 3

Alaska Department of Fish and Game
Comments to the Federal Subsistence Board

FP09-10 Modify Kenai River Chinook and Hidden Lake Lake Trout Harvest Limits

Introduction: Proposal FP09-10 is intended to reflect and correspond to the Alaska Board of Fisheries regulatory changes made in February 2008. It proposes the following specific changes:

1. Reduce the slot limit for Kenai River early-run Chinook salmon from 44"-55" in length to 46"-55" in length. This will allow retention of any fish that are less than 46" in length or greater than 55" in length, thus increasing opportunity of retaining Chinook salmon.
2. Reduce the federal subsistence daily harvest and possession limit for Hidden Lake lake trout from 4 fish per day of any size down to two fish per day of any size. (Note: The new State limit is one fish per day, which is half the proposed federal limit).

Impact on Subsistence Users: The Kenai River slot limit reduction will provide additional opportunity to harvest early-run Chinook salmon. Decreasing the Hidden Lake lake trout daily harvest limit from four fish per day to two fish per day will reduce the amount of fish a federal subsistence user can harvest on a daily basis.

Opportunity Provided by State: The Kenai and Kasilof Rivers are located in the Anchorage-MatSu-Kenai Nonsubsistence area designation under state law. The State provides a broad array of personal use, sport, and educational fisheries in these areas to meet needs for personal and family consumption as well as cultural purposes. Adequate opportunities for harvest of lake trout and Arctic char/Dolly Varden presently occur under State sport fishing regulations.

Conservation Issues:

1. The early-run Kenai River Chinook salmon stock is currently considered healthy and is managed for sustainability through a myriad of conservative regulations developed by the State over decades of managing the stock. The extensive list of restrictions placed upon the sport fishery is credited for the current sustainable stock level. The sport fishery is presently managed by using a combination of: (1) a "slot limit" that prohibits harvest of early-run Chinook salmon between 46 inches and 55 inches in length to protect seven-year-old spawners and help preserve genetic characteristics and diversity of the Kenai River Chinook salmon stocks; (2) a daily harvest limit of one such fish; and (3) a two-fish annual limit (excluding fish less than 28 inches in length before June 30). The Alaska Department of Fish and Game (Department) supports the federal staff recommendation to mirror the Alaska Board of Fisheries February 2008 decision to reduce the early-run Kenai River Chinook salmon slot limit from 44"-55" to 46"-55" in length. The Alaska Board of Fisheries reviewed all available data and the Department analysis of this issue and determined slightly liberalizing the sport fishery by adjusting the slot limit was appropriate. This slight liberalization of the sport fishery was intended to provide additional opportunity to harvest available fish which have been determined to be in surplus of established escapement goals.

ADF&G Comments FP09-10
December 2, 2008, Page 2 of 3

Although the Department supports the intent of the proposed modification of the early-run Kenai River Chinook salmon slot limit in the federal subsistence rod and reel fishery, the Department does not support maintaining the liberal federal subsistence fishery early-run Chinook salmon daily/annual harvest limit of two fish per person, which will be easier to achieve with the reduced slot limit and which could create conservation concerns if widely utilized. The Department strongly requests the Federal Subsistence Board (Federal Board) to consider all the information previously submitted to the Federal Board and take a conservative approach that mirrors the Alaska Board of Fisheries by adopting the one fish daily harvest limit. This action would be consistent with the proponent's stated intent to adopt changes corresponding to those in the State regulation.

2. Because of over-exploitation concerns, the Alaska Board of Fisheries recently reduced the State harvest limit for lake trout in Hidden Lake to one (from two) fish of any size. The Department recommends that the Federal Board adopt a corresponding reduction to two (from four) lake trout as the harvest limit and place a maximum size restriction of 20" in length for one of the two lake trout. Little is known about lake trout population sizes and appropriate harvest levels in Hidden Lake. The Department is very concerned that, without good stock assessment information and reporting, excessive harvest may not be detected in time. Lake trout, which are known to be a long-lived, slow-growing species susceptible to over-exploitation, require many years to rebuild populations after depletion, if they are able to do so at all.

Jurisdiction Issues: The Department requests detailed land status maps that distinctly illustrate land ownership, easements, and exact boundaries within which it is claimed federal regulations would apply and justification for claiming those boundaries. Portions of both the upper and lower Kenai and Kasilof rivers are bordered by state or private lands including areas where federal claims of jurisdiction exist. Fishers need to be provided copies of these detailed maps because the State will enforce its regulations on fishers standing on nonfederal land while fishing.

Recommendation: Support with modification as explained above, consistent with the proponent's intent to complement the Alaska Board of Fisheries changes and with ANILCA's conservation purposes, as follows:

1. Support the slot limit liberalization for Kenai early-run Chinook salmon but request modification of the daily harvest limits from two to one.
2. Support reducing lake trout harvest limits in Hidden Lake from four to two fish daily and request modification to allow harvest of 2 lake trout per day of which only one can be over 20" in length.

The Department's recommended modified regulation language:

§____.27(i)(10) *Cook Inlet Area.*

(E) For Federally managed waters of the Kenai River and its tributaries, in addition to the dip net and rod and reel fisheries on the Kenai and Russian rivers described under

ADF&G Comments FP09-10
December 2, 2008, Page 3 of 3

paragraph (i)(10)(iv)(D) of this section, residents of Hope, Cooper Landing, and Ninilchik may take sockeye, Chinook, coho, pink, and chum salmon through a separate rod and reel fishery in the Kenai River drainage. Before leaving the fishing site, all retained fish must be recorded on the permit and marked by removing the dorsal fin. Permits must be returned to the Federal fisheries manager at the end of the fishing season. Incidentally caught fish, other than salmon, are subject to regulations found in paragraphs (i)(10)(iv)(F) and (G) of this section. Seasons, areas (including seasonal riverbank closures), 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), except for the following ~~bag~~ **harvest** and possession limits:...

(2) For early-run Chinook salmon less than ~~44~~ **46** inches or 55 inches or longer, daily ~~bag~~ **harvest** and possession limits are ~~21~~ per day and ~~21~~ in possession.

(3) For late-run Chinook salmon 20 inches and longer, daily ~~bag~~ **harvest** and possession limits are 2 per day and 2 in possession.

(4) For all Chinook salmon less than 20 inches in length, daily harvest and possession limits are 10 per day and 10 in possession.

~~(45)~~ Annual harvest limits for any combination of early- and late-run Chinook salmon are 4 for each permit holder. **Annual harvest limits do not include Chinook salmon less than 28 inches long harvested May 1 through June 30 and Chinook salmon less than 20 inches long harvested July 1 through July 31.**

~~(5)(6)~~ For other salmon 16 inches and longer, the combined daily ~~bag~~ **harvest** and possession limits are 6 per day and 6 in possession, of which no more than 4 per day and 4 in possession may be coho salmon, except for the Sanctuary Area and Russian River, for which no more than 2 per day and 2 in possession may be coho salmon.

(G) For Federally managed waters of the upper Kenai River and its tributaries above Skilak Lake outlet at river mile 50...

(1) For lake trout 20 inches or longer, daily ~~bag~~ **harvest** and possession limits are 4 per day and 4 in possession. For fish less than 20 inches, daily ~~bag~~ **harvest** and possession limits are 15 fish per day and 15 in possession. For Hidden Lake, daily **harvest and possession** limits are ~~42~~ per day and ~~42~~ in possession **of which only one can be 20" or longer regardless of size.**

WRITTEN PUBLIC COMMENTS

Support. The Alaska Board of Fisheries recently (February 2008) passed regulatory changes affecting the management of Chinook salmon and Lake Trout in upper Cook Inlet waters. This proposal would help bring into alignment the Federal and State regulations.

Lake trout harvest limits are proposed to be reduced by this proposed action. This is necessary to address conservation concerns for this stock. It is our understanding that a study is being conducted by the Kenai Fish and Wildlife Field Office during the 2008 field season, the results of which will be helpful in assessing the population status of lake trout in Hidden Lake.

We support the changes to king salmon and lake trout regulations proposed.

Kenai River Sportfishing Association