

ALASKA DEPARTMENT OF FISH AND GAME

**STAFF COMMENTS
PERSONAL USE, SPORT, AND GUIDED SPORT,
FINFISH REGULATORY PROPOSALS
COMMITTEES D, E, F, G**

FOR THE UPPER COOK INLET MANAGEMENT AREA

**ALASKA BOARD OF FISHERIES MEETING
ANCHORAGE, ALASKA**

February 20–March 5, 2011



Regional Information Report No.2A10-04

The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Fisheries (board) meeting, February 20–March 5, 2011 in Anchorage, Alaska. The comments are forwarded to assist the public and board. The comments contained herein should be considered preliminary and subject to change, as new information becomes available. Final department positions will be formulated after review of written and oral public testimony presented to the board.

ABSTRACT

This document contains Alaska Department of Fish and Game staff comments on personal use, sport, and guided sport finfish regulatory proposals for the Upper Cook Inlet Management Areas. These comments were prepared by the department for use at the Alaska Board of Fisheries meeting, February 20 – March 5, in Anchorage, Alaska. The comments are forwarded to assist the public and board. The comments contained herein should be considered preliminary and subject to change, as new information becomes available. Final department positions will be formulated after review of written and oral public testimony presented to the board.

Key words: Alaska Board of Fisheries (board), Alaska Department of Fish and Game (department) staff comments, Upper Cook Inlet (UCI), finfish, management, management plan, regulatory proposals, inriver, subsistence, personal use, sport, guided sport, commercial fisheries, biological escapement goal (BEG), sustainable escapement goal (SEG), optimal escapement goal (OEG).

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Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2011.

Proposal No.	Dept. Position	Issue
172	N	Require users to complete a class and obtain a dipnet education card prior to receiving a dipnet permit.
173	O	Repeal sport fish license requirement to participate in Cook Inlet personal use fisheries.
174	NA	Allow nonresidents to participate in the upper Cook Inlet personal use fishery.
175	N	Establish a July 17 opening date for the Kenai River personal use fishery on runs under 2 million.
176	N	Open Kenai River personal use fishery after 350,000 sockeye pass the sonar.
177	N	Close fishing on the south bank of the Kenai River until minimum in-river goals are met.
178	N	Open dipnet fisheries in Cook Inlet only after over escapement goals are met.
179	N	Open Kenai and Kasilof dipnet fisheries only after lower escapement goals will be achieved.
180	N	Close Kenai River personal use fishery on Tuesdays and Fridays until 450,000 sockeye pass the sonar.
328	N	Revise closure time for the Kenai River personal use fishery.
155	N	Add language that all fisheries will be closed if the OEG will not be achieved.
181	N	Establish a harvest cap of 150,000 for the Kenai River Personal Use Fishery.
182	N	Set allocation of 100,000 - 150,000 sockeye in Kenai River personal use fishery.
183	N	Establish a guideline harvest for Cook Inlet personal use fisheries based upon run size.
184	N	Establish GHF for sport and personal use harvest in the Kenai and Kasilof rivers.
185	N	Set allocation based on harvest and use in Kasilof River personal use fishery.
186	N	Establish a bag limit of 15 per family in the Kenai River personal use fishery and no fishing until escapement goal will be achieved.
187	N	Reduce household limit to 10 fish in Cook Inlet personal use salmon fishery.
188	N	Reduce bag limit or delay opening of the Kenai River dipnet fishery.
189	N	Prohibit retention of king salmon in Cook Inlet dipnet fisheries.
190	N	Allow one king per household for the all Cook Inlet personal use dipnet fisheries.
191	N/O	Reduce allowable mesh size in Cook Inlet dipnet fisheries or prohibit release of fish.
192	O	Prohibit possession of sport and personal use caught salmon on the same day.
193	N	Prohibit dipnetting from boats in Kenai River personal use fishery.
194	NA	Prohibit dipnetting from boats in Kenai River personal use fishery.
195	N/O	Open the Fish Creek dipnet fishery by regulation instead of emergency order.
196	N	Increase season dates and expand area for Beluga River personal use fishery.
197	N/O	Establish a personal use fishery on Eklutna River.
198	N/O	Establish a personal use fishery on Deshka River.
199	N/O	Establish a personal use fishery on Talkeetna River.
21	O	Decrease bag limit to 2 coho salmon in West Cook Inlet.
22	N	Increase bag and possession limit to 3 coho salmon in West Cook Inlet Area.
200	N/O	Increase bag and possession limit to 3 coho in Susitna River Drainage.
201	N	Increase bag and possession limit to 3 coho on the Talkeetna River.
202	N/O	Increase bag and possession limit to 3 coho salmon in the Knik Arm Drainage Area.
203	N/O	Increase bag and possession limit to 3 coho salmon in the Anchorage Bowl Drainages Area.
204	N/O	Increase bag and possession limit to 3 coho salmon in the Kenai River Drainage Area.
23	O	Increase bag and possession limit to 3 coho salmon in the Kenai Peninsula Area.

N = Neutral; S= Support; O = Oppose; NA = No Action

Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2011 (Page 2 of 4)

Proposal No.	Dept. Position	Issue
205	N/O	Increase bag and possession limit to 3 coho salmon on the Kenai and Kasilof rivers.
206	S	Align coho salmon bag limit with adjacent waters in the Russian River sanctuary area and Russian River.
207	N	Repeal the provision that allows a charitable or educational event to fish from guide vessels on the first Sunday in June on Lower Kenai River.
208	N	Prohibit guided sport fishing just above the king salmon sonar station downstream to Cunningham Park.
209	N	Modify existing Kenai River guide hours from 6 a.m.-6 p.m., to 7 a.m.-7 p.m.
210	N	Allow fishing from a registered guide vessel on the Kenai River 24 hours per day during May .
211	N	Allow fishing from a registered guide vessel on the Kenai River on Sundays during May .
212	N	Allow fishing from a registered guide vessel on the Kenai River on Sundays during June .
213	N/O	Allow fishing from a registered guide vessel for coho salmon on Mondays during August – November.
214	N/O	Allow fishing from a registered guide vessel for coho salmon on Mondays during August and September.
215	O	Prohibit barbed hooks when using beads in the Kenai River.
216	O	Increase the allowable size limit of rainbow trout in the lower Kenai River.
217	S	Establish a bag limit for burbot in the Kenai Peninsula Area.
218	S	Establish a steelhead/rainbow trout spawning closure for all tributaries of Tustumena Lake.
219	S	Correct list of Kenai River Drainage Area rainbow trout stocked lakes.
220	S	Add Rainbow Lake to the list of Upper Kenai River drainage stocked lakes.
221	S	Correct list of Kenai River Drainage Area and Kenai Peninsula Area king salmon stocked lakes.
222	S	Correct list of Kenai River Drainage Area and Kenai Peninsula Area king salmon stocked lakes.
223	S	Repeal the special sport fishing gear regulations that apply to Arc Lake, Cisca Lake and Scout Lake.
224	O	Add a new section to increase emergency order authority flexibility to address invasive northern pike.
225	O	Reduce effective dates for fly-fishing-only waters in Killey River sanctuary area from July 31 to July 15.
226	O	Reduce Killey River king salmon sanctuary closure date to June 25 - July 14.
227	O	Reduce Killey River king salmon sanctuary area to allow fishing at 3rd Hole.
228	O	Repeal the seasonal boating restriction at the confluence of the Moose River.
229	N	Increase Slikok Creek king salmon sanctuary area.
230	N	Revise the Kenai River Early-run King Salmon Management Plan.
231	NA/N	Return early run Kenai River king salmon escapement goal to pre-2005 level.
232	O	Allow use of bait on May 1 or June 1 in the Kenai River early-run king salmon fishery.
233	O	Repeal slot limit for Kenai River early-run king salmon.
234	O	Repeal slot limit for Kenai River early-run king salmon.
235	O	Extend king salmon slot limit through the end of July.
236	O	Modify size and annual limits for Kenai River king salmon.
237	O	Increase size and bag limits for jack kings in the late-run on the Kenai River.
238	O	Allow the use of two hooks or treble hooks for Kenai River king salmon fishing.
239	O	Allow anglers to continue fishing after daily bag limits are met on the Kenai River.

N = Neutral; S= Support; O = Oppose; NA = No Action

Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2011 (Page 3 of 4)

Proposal No.	Dept. Position	Issue
240	N	Prohibit anglers that are going to release fish from taking them out of the water.
241	O	Close Kenai River to sport fishing on Tuesdays and Fridays.
242	N/O	Close large sections of the Kenai River to king salmon fishing on a annual rotational cycle.
243	N	Harvested fish must be closely attended in the Russian River area.
244	NA	Establish a tax for pike to sport fishing licenses and a bounty for pike turned in.
245	N	Add an additional drift boat only day (Wednesdays) on the Kenai River.
246	N	Add an additional drift boat only day (Thursdays) on the Kenai River.
247	N	Allow the use of a motor downstream of Cunningham Park to exit the fishery on drift-only Mondays
248	N	Prohibit drift boats from using motors to travel upstream in the lower Kenai River.
249	N	Prohibit drift boats from using motors to travel upstream in the lower Kenai River.
250	N	Establish 3 areas in the lower Kenai River for drift fishing during July.
251	N	Prohibit boats on the Kenai & Russian River confluence back channel.
252	O	Allow fishing for resident species from a motorized vessel on Mondays downstream of Skilak Lake.
253	O	Allow fishing for sockeye salmon from a boat in the Funny River king salmon sanctuary area.
254	N/O	Allow fishing from power boats during the king salmon season on the Kasilof River.
255	N	Prohibit fishing from a boat in the "People's Hole" area adjacent to Crooked Creek .
256	N	Allow boat anglers to land a fish while anchored across from the "People's Hole" area adjacent to Crooked Creek.
257	N	Change boundary marker location for seasonal motor use on lower Kasilof River.
258	S	Rename boundary marker for seasonal motor use on lower Kasilof River.
259	O	Reduce bag limit for king salmon on the Kasilof River.
260	N	Repeal August 1 - 15 fishing closure on Kasilof River above Sterling Hwy bridge.
261	S	Allow the use of bait in the Kasilof River for an additional two weeks in September.
262	N	Allow guides to take more than one group of clients per day on the Kasilof River.
263	N	Limit guided sport fishing hours and days on the Kasilof River.
264	N/O	Increase area open to king salmon fishing on the Kashwitna River.
265	O	Standardize Willow Creek salmon fishing regulations upstream to Deception Creek.
266	N	Prohibit fishing from boats at the mouth of Willow Creek and the Susitna Rivers.
267	N	Restrict passenger limits, anchoring, horsepower, boat length and air boat use on Lake Creek.
268	S	Prohibit fishing for king salmon after retaining a king salmon on the Talachulitna River.
269	O	Extend use of bait for an additional week in Unit 5 of the Susitna River.
270	N/O	Restrict sport, commercial, and subsistence fishing for Alexander Creek king salmon.
271	N	In Lewis and Theodore rivers, prohibit catch and release of kings or require barbless hooks, and determine impact of invasive species.
272	S	Repeal the Little Susitna River Coho Salmon Management Plan.
273	N	Prohibit fishing for coho salmon after retaining bag limit in the Little Susitna River.
274	O	Allow harvest of king salmon in the Little Susitna River above Parks Highway bridge in Houston.
275	N	Limit boat motors to no more than 25 HP on the Little Susitna River.
276	N/S	Create a youth-only fishery on Fish Creek.

N = Neutral; S= Support; O = Oppose; NA = No Action

Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2011 (Page 4 of 4)

Proposal No.	Dept. Position	Issue
277	N	Allow sport fishing for sockeye salmon in Fish Creek during July if escapement will be met.
278	N	Allow sport fishing for sockeye salmon in Fish Creek if escapement will be met.
279	O	Increase area open to king salmon fishing in the Knik River for the Eklutna Tailrace stocked fishery.
280	O	Extend area open to king salmon fishing in the Knik River.
281	O	Allow king salmon fishing in the Matanuska River.
282	S	Repeal duplicate motor restriction regulation in Wasilla Creek drainage, including Rabbit Slough.
283	O	Establish catch and release for trout on Little Willow Creek of Susitna River drainage.
284	S	Repeal size and bag limits, and liberalize methods and means for northern pike in Alexander Lake.
285	S/O	Liberalize bag limits and gear allowed for northern pike fishing in Alexander Lake and eliminate salvage requirements.
286	S/N	Allow 5 lines and bait to fish for northern pike in Big Lake.
287	S/N	Allow 5 lines to fish for northern pike in Nancy Lake.
288	S/N	Liberalize methods and means for pike fishing in Big Lake and Nancy Lake.
289	O	Liberalize methods and means of harvesting northern pike in Threemile/Tukhalla, and Chiutbuna lakes.
290	O	Allow for two fishing rods per single person craft on all stillwaters.
291	O	Stock more rainbows than silvers in lakes.
292	S	Remove Symphony Lake from list of stocked lakes and reduce bag limit for Arctic grayling.
293	O	Prohibit retention of rainbow trout and require only one un-baited, single hook lure year round on Upper and Lower Six Mile Lakes.
294	S	Establish a seasonal spawning closure for rainbow trout in Campbell and Chester creeks.
295	S	Establish a seasonal spawning closure for rainbow trout in Ship Creek.
296	S	Standardize opening date for coho salmon fishing in Campbell Creek.
297	S	Close Bird Creek to all sport fishing between January 1 and July 14.
298	O	Prohibit walking up and down the middle of Ship Creek prior to high and low tides.
N = Neutral; S= Support; O = Oppose; NA = No Action		

COMMITTEE D: – UPPER COOK INLET PERSONAL USE SALMON FISHERY
(TOTAL PROPOSALS:30)

PERSONAL USE PROPOSALS: 172, 173, 174, 175, 176, 177, 178, 179, 180, 328, 155, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199

PROPOSAL 172 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Steve Rasmussen.

WHAT WOULD THE PROPOSAL DO? This proposal would require users to complete a dip net education course and obtain a dip net education card prior to receiving an Upper Cook Inlet personal use salmon fishery dip net permit.

WHAT ARE THE CURRENT REGULATIONS? Finfish, shellfish, and aquatic plants may be taken for personal use only by a holder of a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing under AS 16.05.400. A person shall, before a permit may be issued, show the person's resident sport fish license, or proof, satisfactory to the department, that the person is exempt from licensing under AS 16.05.400; the person's sport fish license number shall be recorded on the permit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may affect a dipnetter's participation and harvests of salmon in dip net fisheries. It is unknown if compliance with personal use fishing regulations would change. It may result in increased expenditures by the department depending upon how the program would be administered.

BACKGROUND: Alaska residents may participate in Upper Cook Inlet personal use salmon fisheries provided they meet the residency requirements for the State of Alaska. Each fishery has different seasons, fishing times and allowable methods and means; however, bag limits are the same throughout Cook Inlet. Access, land use regulations, and existing infrastructure vary in each fishery. Information regarding the latter items is available to the public through several outlets, including the Southcentral Alaska Sport Fishing Regulation Summary Booklet, department website, local area offices, and various local governmental agencies.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. There is no requirement to complete a course to obtain a sport fishing license, a limited entry commercial fishing permit, or to participate in subsistence fisheries. The board has no "administrative, budgeting, or fiscal powers" that would authorize the board to require the department to administer this program (AS 16.05.241).

COST ANALYSIS: Approval of this proposal is expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 173 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would eliminate the requirement for Alaskan residents to purchase a sport fishing license to participate in any Cook Inlet personal use fishery. The proposal also suggests a fee of \$15 be charged to obtain an Upper Cook Inlet personal use dip net permit.

WHAT ARE THE CURRENT REGULATIONS? Under statewide regulations (5 AAC 77.010 (a)), finfish, shellfish, and aquatic plants may be taken for personal use only by a holder of a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing under AS 16.05.400.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would eliminate the requirement to have a resident sport fishing license for any Cook Inlet personal use fishery, and would make enforcement preventing nonresidents from entering the fishery and verification of residency much more difficult. The sport fishing license requirement subjects the individual to regulations and penalties governing proof of residency. If the license requirement is removed, so does much of the ability of Alaska Wildlife Troopers to enforce the residency requirement and prevent nonresidents from being listed on permits as household members. Without the license requirement, residency could still be enforced, but it would be much more difficult and funds currently provided by license sales would not be available to manage personal use fisheries. This proposal would also create an inconsistency in regulations between Cook Inlet and other areas of the state.

BACKGROUND: Personal use regulations were created in 1982 at the request of the Alaska Board of Fisheries. In this and other findings and actions, the board's intent that personal use fisheries are intended only for Alaska residents is clear; the resident sport fishing license has been adopted as a way to demonstrate and verify eligibility. Since gear for personal use fisheries is often different from that historically associated with sport fishing, the board determined these fisheries should not be classified as sport fisheries in order to avoid confusion among the public. Funds generated from the sale of sport fishing licenses provide the Division of Sport Fish with the only source of revenue available to manage these fisheries. The fee for a resident sport fishing license is \$24.

The sport fishing license requirement is a vital tool for enforcement of personal use fisheries. Alaska Wildlife Troopers are able to issue citations for illegal participation in the Upper Cook Inlet personal use fisheries by comparing the sport fishing license database to the Alaska driver's license and Alaska Permanent Fund application databases. There are other means to verify residency other than a valid resident sport fishing license, but those means are much more difficult for verifications in the field at the fishing site.

DEPARTMENT COMMENTS: Both the Department of Fish and Game and Department of Public Safety **OPPOSE** this proposal. The sport fishing license requirement provides the state with a means of prosecuting offenders and provides funding for management of personal use

fisheries. The department works closely with vendors and Department of Public Safety to ensure personal use salmon permits are distributed only to qualified applicants. The board does not have the regulatory authority to establish a \$15 fee for a personal use permit: license and permit fees require legislative authorization. Cost to participate in the personal use fishery would increase for those who purchase a license for the purpose of sport fishing.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 174 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow nonresidents to participate in Upper Cook Inlet personal use salmon fisheries.

WHAT ARE THE CURRENT REGULATIONS? Under statewide regulations (5 AAC 77.010 (a), finfish, shellfish, and aquatic plants may be taken for personal use only by a holder of a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing under AS 16.05.400.

Under AS 16.05.940 (25), "Personal use fishing" means the taking, fishing for, or possession of finfish, shellfish, or other fishery resources, by Alaska residents for personal use and not for sale or barter, with gill or dip net, seine, fish wheel, long line, or other means defined by the Board of Fisheries.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would significantly increase the number of people participating in Upper Cook Inlet personal use fisheries and increase the number of salmon harvested in those fisheries. This proposal would also create an inconsistency in regulations between Cook Inlet and other areas of the state as well as between personal use salmon fisheries and personal use fisheries for other species within Cook Inlet.

BACKGROUND: The board adopted a regulatory definition of personal use fishing in 1982. At that time, the board lacked explicit statutory authority over personal use fisheries, so the regulatory definition was created under the board's general statutory authority for classifying fisheries, because although noncommercial, nonsubsistence net fishing could technically be classified as sport fishing, the board determined that such a classification would create public confusion. The underlying purpose of the board's creation of the personal use fishing category was to allow efficient harvesting of fish by Alaska residents who were precluded from participating in subsistence fisheries.

The statutory definition of personal use fishing was enacted in 1986 as part of a bill attempting to return Alaska to compliance with subsistence provisions of the Alaska National Interest Lands Conservation Act (ANILCA). The legislative record indicates that the statutory definition and related provisions were intended to authorize the board to adopt regulations that allocated fishery resources for purposes of personal use, as well as to require the board to provide a "fair and reasonable" opportunity for sport, commercial, and personal use fishing. The legislative record indicates that the statutory personal use fishing category, like the regulatory personal use fishing category established by the board, was expected to serve essentially the same purposes as former subsistence fisheries. However, unlike the regulatory personal use category established by the board, the legislative definition limited all personal use fishing to Alaska residents. The fact that the board had already established the category of personal use fishing is acknowledged in the

legislative record; there is nothing in the legislative record that compares the statutory definition to the pre-existing regulatory definition.

The regulatory record indicates that although the proposal for creation of personal use fisheries presented to the board was very restrictive, the board adopted a much less restrictive regulatory scheme. As originally proposed, personal use fisheries could only be conducted where they would not negatively impact an existing resource use, and initial bag limits were proposed at very low levels. The board modified the proposed regulations to allow for the provision of personal use fisheries if they were in the broad public interest, and it also adopted bag limits based on amounts taken under subsistence regulations. The board explicitly rejected some uses permissible under subsistence regulations and reinforced that it was illegal to buy, sell, trade, or barter fish taken in a personal use fishery.

DEPARTMENT COMMENTS: The department recommends **NO ACTION** on this proposal. Only Alaska residents may participate in a personal use fishery under Alaska statute 16.05.940(25).

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 175 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Laney Anderson.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a July 17 opening date for the Kenai River personal use salmon dip net fishery when the total Kenai River late-run sockeye salmon run is projected to be under two million.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in a seven day, or approximately 32%, reduction in the total number of days or hours the Kenai River personal use salmon fishery would be open if the sockeye salmon run was projected to be less than two million. It would reduce the number of salmon, primarily sockeye salmon, harvested in the Kenai River personal use salmon fishery and would likely increase crowding during the 15 remaining days the fishery would be open. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved. During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

Analysis of harvest data from returned personal use permits indicates an average (2004–2009) of 47,053 sockeye salmon (occurs over the first seven days of the fishery, from July 10 through July 16 (Table 175-1). This is about 21% of the annual sockeye salmon harvest in the Kenai River personal use fishery.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 175-1. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

PROPOSAL 176 - 5 AAC 21.360. Kenai River Late-run Sockeye Salmon Management Plan.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would open the Kenai River personal use salmon dip net fishery only after 350,000 sockeye salmon passed the department's sonar project located at river mile 19.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in an undetermined reduction in the total number of days or hours the Kenai River personal use salmon fishery would be open for a season, depending on run timing characteristics of late-run sockeye salmon into the Kenai River. It would likely reduce the number of salmon, primarily sockeye salmon, harvested in the personal use fisheries by an unknown amount, and would likely increase crowding into the remaining days the fishery would be open. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved. During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

Generally, 350,000 sockeye salmon pass the department's sonar project located at river mile 19 by mid to late July (Table 176-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 176-1. Kenai River cumulative passage of sockeye salmon as estimated by sonar by year and date, 2000–2010.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
7/1	1,744	1,209	4,943	5,611	3,164	5,393	1,764	3,740	2,474	2,645	4,290
7/2	3,396	6,680	12,788	8,820	6,591	13,427	4,501	8,207	5,265	5,958	8,847
7/3	6,651	10,885	17,470	13,292	10,151	20,680	7,036	12,067	7,903	9,525	12,088
7/4	9,866	14,797	26,271	19,681	12,509	32,359	9,653	14,738	9,287	14,829	18,180
7/5	11,815	18,495	53,529	24,841	14,334	45,834	12,410	17,654	10,256	19,579	28,389
7/6	14,089	21,192	79,876	28,007	16,379	58,169	15,715	20,976	11,146	24,015	39,621
7/7	18,191	24,819	132,931	31,982	20,127	68,040	19,148	26,137	11,975	30,133	44,634
7/8	22,165	30,125	169,261	36,769	26,140	80,019	22,025	34,021	13,044	34,740	52,731
7/9	29,070	36,120	192,839	43,203	28,975	107,125	25,684	42,654	15,167	40,684	58,709
7/10	37,715	40,644	211,799	53,388	31,663	129,497	29,879	46,572	18,186	45,876	64,253
7/11	42,257	45,630	223,788	77,506	33,887	167,673	32,754	51,189	19,713	53,712	72,801
7/12	46,717	48,641	230,764	137,726	37,128	216,467	34,623	56,114	21,769	73,089	87,235
7/13	71,631	52,213	238,567	178,650	43,144	242,803	37,282	58,906	26,234	85,078	111,647
7/14	162,433	62,476	248,819	207,884	157,250	258,642	39,212	63,434	28,952	105,403	128,551
7/15	241,242	91,356	273,005	229,462	295,462	272,703	43,242	70,330	54,466	155,845	151,203
7/16	286,574	121,858	309,527	318,655	390,382	317,974	56,544	77,241	122,590	212,306	198,219
7/17	309,888	163,409	336,822	427,545	438,760	379,685	72,019	82,669	173,652	264,701	260,535
7/18	340,491	191,794	381,145	520,840	470,854	430,048	80,983	91,550	192,187	301,028	329,088
7/19	364,879	226,341	475,906	592,114	491,511	505,267	86,982	134,199	209,297	327,179	411,892
7/20	377,358	252,875	537,957	623,936	501,700	541,502	94,450	149,979	238,695	372,390	467,775
7/21	389,663	267,041	570,978	655,918	532,184	562,441	110,461	181,575	270,710	400,452	516,615
7/22	401,555	282,398	594,661	723,034	627,654	587,951	142,747	228,372	302,160	409,341	555,372
7/23	420,032	302,953	621,160	788,676	656,900	640,449	176,110	267,450	312,689	420,542	590,495
7/24	446,026	339,758	647,439	843,099	689,087	695,973	219,805	301,579	324,090	436,549	607,468
7/25	469,929	387,914	672,273	873,619	723,806	725,893	269,604	335,714	335,010	444,613	648,557
7/26	491,640	439,484	703,956	905,092	765,397	744,337	352,858	382,201	342,397	455,477	667,588
7/27	509,858	474,483	715,724	929,562	800,513	756,074	408,458	442,461	358,834	491,953	683,904
7/28	525,697	493,151	726,184	969,171	842,523	765,259	466,552	484,839	377,998	532,031	703,227
7/29	542,014	508,476	738,767	997,552	877,735	778,235	531,695	516,454	400,134	564,160	717,455
7/30	550,946	526,167	749,889	1,015,442	902,956	809,614	589,795	536,403	426,350	590,907	731,154
7/31	557,832	541,110	763,767	1,033,715	922,454	845,339	638,656	555,525	445,898	618,277	742,679

-continued-

Table 176-1. Page 2 of 2.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
8/1	565,146	555,313	776,184	1,052,908	935,937	870,043	698,006	574,961	468,513	636,155	756,993
8/2	570,265	570,134	789,954	1,075,605	953,775	885,095	747,366	589,383	485,797	656,584	779,132
8/3	579,041	581,245	805,317	1,095,870	992,784	906,444	789,197	598,124	499,129	678,984	815,449
8/4	588,750	594,159	821,790	1,111,115	1,036,568	924,007	833,128	610,664	513,456	692,688	829,589
8/5	596,778	602,948	839,071	1,121,817	1,065,584	939,501	879,388	629,143	524,865	704,666	840,338
8/6	603,766	612,154	853,372	1,139,644	1,093,109	977,166	909,551	652,588	535,768	711,807	851,898
8/7	609,780	621,868	868,529	1,153,324	1,114,652	1,010,780	931,541	668,269	544,245	716,822	864,366
8/8	614,679	630,954	887,706	1,162,694	1,126,729	1,024,828	945,401	681,403	550,848	720,026	876,676
8/9	619,240	635,503	911,722	1,171,598	1,156,990	1,036,352	958,698	705,832	558,577	724,612	888,737
8/10	624,578	640,621	930,304	1,181,309	1,203,397	1,046,301	969,763	720,111	569,379	731,604	899,308
8/11		642,753	942,711		1,247,872	1,061,451	984,717	741,683	580,330	735,254	905,949
8/12		648,424	948,521		1,293,975	1,113,917	1,009,139	763,985	590,722	739,510	912,100
8/13		650,036	953,858		1,323,366	1,175,190	1,030,297	778,447	598,073	745,170	920,960
8/14			957,924		1,343,481	1,213,012	1,050,379	789,057	606,488		930,548
8/15					1,359,167	1,255,929	1,081,926	799,982	611,936		943,830
8/16					1,369,085	1,295,657	1,117,682	809,952	613,466		956,646
8/17					1,379,539	1,323,218	1,150,017	819,282	614,946		962,488
8/18					1,385,981	1,340,547	1,182,233	827,488			
8/19						1,351,189	1,220,657	838,032			
8/20						1,368,363	1,257,566	848,198			
8/21						1,381,629	1,282,704	854,756			
8/22							1,317,024	861,008			
8/23							1,346,925	867,572			
8/24							1,367,808				
8/25							1,389,715				

Source: P. Shields, Commercial Fisheries biologist, ADF&G, personal communication.

PROPOSAL 177 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Brian Tibbs.

WHAT WOULD THE PROPOSAL DO? This proposal would close personal use salmon dip net fishing on the south bank of the Kenai River, both from shore and from boats, until minimum inriver sockeye salmon goals were met.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

Salmon may be taken by dip net from a boat in an approximate 3.5 river mile area of the Kenai River, from a department regulatory marker located near the Kenai city dock upstream to the downstream side of the Warren Ames Bridge; however, salmon may not be taken from a boat powered by a two stroke motor other than a motor manufactured as a direct fuel injection motor (Figure 177-1). Salmon may also be taken from shore from department regulatory markers located on Cook Inlet beaches outside the terminus of the river upstream to the downstream side of the Warren Ames Bridge, except dipnetting is closed on the north shore from a department regulatory marker located below the end of Main Street upstream to a department regulatory marker located near the Kenai city dock (Figure 177-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the area open to dipnetting by approximately 50% until inriver run goals are met. It would significantly increase crowding in the remaining area open to dipnetting on the north shore and would likely reduce the salmon harvest in the Kenai River personal use fishery. The proposal is unclear how dipnetting from a boat would be closed on the south shore as boat fishermen do not operate from the shore; they operate in the mainstream of the river. From the wording of the proposal, it is not clear how dipnetting from a boat “on the south shore” would be enforced. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. .

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved.

During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. The total Kenai River late-run sockeye salmon run strength triggers management actions for Kenai River recreational and personal use fisheries. A three-tiered system, described in the *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360), establishes increasing inriver run goals as larger run sockeye salmon run strengths are projected, in order to provide an allocation of sockeye salmon to the inriver sport fishery. In this three-tiered system, the run is managed as follows: at runs less than two million sockeye salmon, the inriver goal range is 650,000–850,000; at run strengths of two to four million sockeye salmon, the inriver goal range is 750,000–950,000; at run strengths greater than four million sockeye salmon, the inriver goal range is 850,000–1,100,000. In this plan, the corresponding minimum allocation of sockeye salmon provided for the inriver sockeye salmon sport fishery are 150,000, 250,000, and 350,000 fish. When the department can determine that the Kenai River late-run sockeye salmon will exceed two million fish, the daily hours of the Kenai River personal use dip net fishery can be liberalized to 24 hours per day until the season closes on July 31; the sockeye salmon bag and possession limit in the sport fishery may be increased through the remainder of the year.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

The date that inriver sockeye salmon run goals are achieved varies with run timing and strength of the run. Generally, the inriver run goals are met later in the season, often during August (Table 177-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

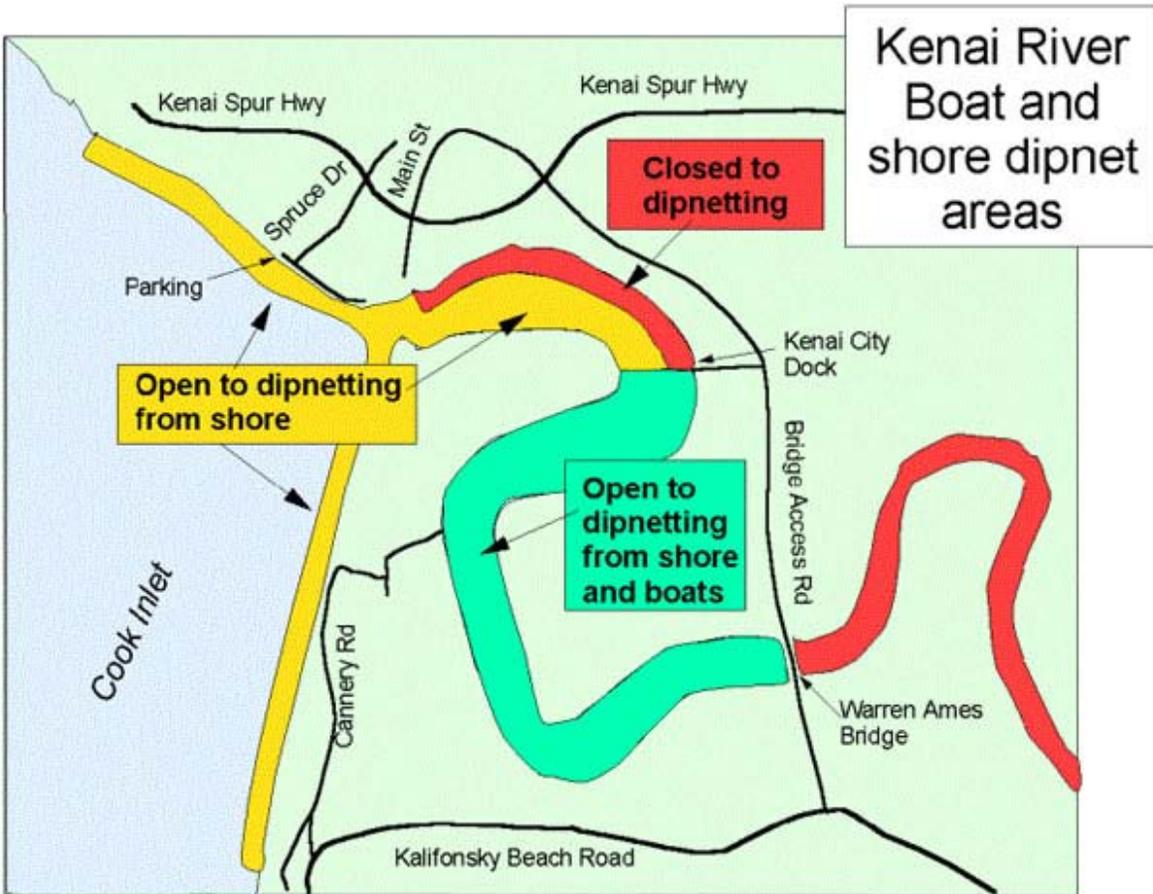


Figure 177-1. Kenai River area open to dipnetting from boat and shore.

Table 177-1. Kenai River cumulative passage of sockeye salmon as estimated by sonar by year and date, 2000–2010.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
7/1	1,744	1,209	4,943	5,611	3,164	5,393	1,764	3,740	2,474	2,645	4,290
7/2	3,396	6,680	12,788	8,820	6,591	13,427	4,501	8,207	5,265	5,958	8,847
7/3	6,651	10,885	17,470	13,292	10,151	20,680	7,036	12,067	7,903	9,525	12,088
7/4	9,866	14,797	26,271	19,681	12,509	32,359	9,653	14,738	9,287	14,829	18,180
7/5	11,815	18,495	53,529	24,841	14,334	45,834	12,410	17,654	10,256	19,579	28,389
7/6	14,089	21,192	79,876	28,007	16,379	58,169	15,715	20,976	11,146	24,015	39,621
7/7	18,191	24,819	132,931	31,982	20,127	68,040	19,148	26,137	11,975	30,133	44,634
7/8	22,165	30,125	169,261	36,769	26,140	80,019	22,025	34,021	13,044	34,740	52,731
7/9	29,070	36,120	192,839	43,203	28,975	107,125	25,684	42,654	15,167	40,684	58,709
7/10	37,715	40,644	211,799	53,388	31,663	129,497	29,879	46,572	18,186	45,876	64,253
7/11	42,257	45,630	223,788	77,506	33,887	167,673	32,754	51,189	19,713	53,712	72,801
7/12	46,717	48,641	230,764	137,726	37,128	216,467	34,623	56,114	21,769	73,089	87,235
7/13	71,631	52,213	238,567	178,650	43,144	242,803	37,282	58,906	26,234	85,078	111,647
7/14	162,433	62,476	248,819	207,884	157,250	258,642	39,212	63,434	28,952	105,403	128,551
7/15	241,242	91,356	273,005	229,462	295,462	272,703	43,242	70,330	54,466	155,845	151,203
7/16	286,574	121,858	309,527	318,655	390,382	317,974	56,544	77,241	122,590	212,306	198,219
7/17	309,888	163,409	336,822	427,545	438,760	379,685	72,019	82,669	173,652	264,701	260,535
7/18	340,491	191,794	381,145	520,840	470,854	430,048	80,983	91,550	192,187	301,028	329,088
7/19	364,879	226,341	475,906	592,114	491,511	505,267	86,982	134,199	209,297	327,179	411,892
7/20	377,358	252,875	537,957	623,936	501,700	541,502	94,450	149,979	238,695	372,390	467,775
7/21	389,663	267,041	570,978	655,918	532,184	562,441	110,461	181,575	270,710	400,452	516,615
7/22	401,555	282,398	594,661	723,034	627,654	587,951	142,747	228,372	302,160	409,341	555,372
7/23	420,032	302,953	621,160	788,676	656,900	640,449	176,110	267,450	312,689	420,542	590,495
7/24	446,026	339,758	647,439	843,099	689,087	695,973	219,805	301,579	324,090	436,549	607,468
7/25	469,929	387,914	672,273	873,619	723,806	725,893	269,604	335,714	335,010	444,613	648,557
7/26	491,640	439,484	703,956	905,092	765,397	744,337	352,858	382,201	342,397	455,477	667,588
7/27	509,858	474,483	715,724	929,562	800,513	756,074	408,458	442,461	358,834	491,953	683,904
7/28	525,697	493,151	726,184	969,171	842,523	765,259	466,552	484,839	377,998	532,031	703,227
7/29	542,014	508,476	738,767	997,552	877,735	778,235	531,695	516,454	400,134	564,160	717,455
7/30	550,946	526,167	749,889	1,015,442	902,956	809,614	589,795	536,403	426,350	590,907	731,154
7/31	557,832	541,110	763,767	1,033,715	922,454	845,339	638,656	555,525	445,898	618,277	742,679

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Table 177-1. Page 2 of 2.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
8/1	565,146	555,313	776,184	1,052,908	935,937	870,043	698,006	574,961	468,513	636,155	756,993
8/2	570,265	570,134	789,954	1,075,605	953,775	885,095	747,366	589,383	485,797	656,584	779,132
8/3	579,041	581,245	805,317	1,095,870	992,784	906,444	789,197	598,124	499,129	678,984	815,449
8/4	588,750	594,159	821,790	1,111,115	1,036,568	924,007	833,128	610,664	513,456	692,688	829,589
8/5	596,778	602,948	839,071	1,121,817	1,065,584	939,501	879,388	629,143	524,865	704,666	840,338
8/6	603,766	612,154	853,372	1,139,644	1,093,109	977,166	909,551	652,588	535,768	711,807	851,898
8/7	609,780	621,868	868,529	1,153,324	1,114,652	1,010,780	931,541	668,269	544,245	716,822	864,366
8/8	614,679	630,954	887,706	1,162,694	1,126,729	1,024,828	945,401	681,403	550,848	720,026	876,676
8/9	619,240	635,503	911,722	1,171,598	1,156,990	1,036,352	958,698	705,832	558,577	724,612	888,737
8/10	624,578	640,621	930,304	1,181,309	1,203,397	1,046,301	969,763	720,111	569,379	731,604	899,308
8/11		642,753	942,711		1,247,872	1,061,451	984,717	741,683	580,330	735,254	905,949
8/12		648,424	948,521		1,293,975	1,113,917	1,009,139	763,985	590,722	739,510	912,100
8/13		650,036	953,858		1,323,366	1,175,190	1,030,297	778,447	598,073	745,170	920,960
8/14			957,924		1,343,481	1,213,012	1,050,379	789,057	606,488		930,548
8/15					1,359,167	1,255,929	1,081,926	799,982	611,936		943,830
8/16					1,369,085	1,295,657	1,117,682	809,952	613,466		956,646
8/17					1,379,539	1,323,218	1,150,017	819,282	614,946		962,488
8/18					1,385,981	1,340,547	1,182,233	827,488			
8/19						1,351,189	1,220,657	838,032			
8/20						1,368,363	1,257,566	848,198			
8/21						1,381,629	1,282,704	854,756			
8/22							1,317,024	861,008			
8/23							1,346,925	867,572			
8/24							1,367,808				
8/25							1,389,715				

Source: P. Shields, Commercial Fisheries biologist, ADF&G, personal communication.

PROPOSAL 178 - 5 AAC 21.360. Kenai River Late-run Sockeye Salmon Management Plan.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would open personal use salmon dip net fisheries in Cook Inlet only after optimal escapement goals were met.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the optimal escapement goal of 500,000 to 1,000,000 late-run sockeye salmon, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

In the Kasilof River personal use gillnet fishery, salmon may be taken from June 15 through June 24, seven days per week, and fishing is allowed between 6:00 a.m. and 11:00 p.m. The Kasilof River personal use dip net fishery is open from June 25 through August 7, and fishing is allowed 24 hours per day, seven days per week.

The commissioner will open, by emergency order, the personal use dip net fishery in Fish Creek from July 10 through July 31, if the department projects that the escapement of sockeye salmon into Fish Creek will be above the upper end of the escapement goal of 70,000 fish.

In the Beluga River, salmon, other than king salmon, may be taken by dip net only by Alaska residents 60 years of age or older from July 20 through August 31. The fishery is open 24 hours per day from the Beluga River Bridge downstream to a department regulatory marker located approximately one mile below the bridge. The commissioner will close, by emergency order, the fishery when 500 salmon, other than king salmon, have been harvested. A permit holder for this fishery shall report weekly to the department as specified in the permit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the number of days that Kenai and Kasilof River personal use salmon fisheries would be open or prevent personal use salmon fisheries in the Kenai and Kasilof rivers from opening if escapement goals were not met or the goal was not expected to be exceeded by the time the fisheries were scheduled to close by regulation. It would reduce the number of salmon, primarily sockeye salmon, harvested in Kenai and Kasilof River personal use fisheries and would increase crowding into the remaining days the fisheries were open. Personal use harvest of sockeye salmon would likely shift to the later segment of the run rather than be taken from throughout the run. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

This proposal would have no effect on harvests in the Fish Creek and Beluga River personal use dip net fisheries. The Fish Creek fishery cannot open before the escapement goal is projected to be exceeded and the Beluga River does not have an escapement goal for sockeye salmon.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved. During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

Generally, 500,000 sockeye salmon pass the department's Kenai River sonar project at river mile 19 by late July (Table 178-1).

The Fish Creek personal use salmon fishery was opened by regulation beginning June 10 through June 30 from 1996–2001. In 2002, the board adopted changes to the opening of the fishery in response to low sockeye salmon returns. The fishery could only be opened by emergency order when the department projected the escapement of sockeye salmon into Fish Creek would be

above the upper end of the escapement goal of 70,000 fish. This strategy has helped to avoid overharvesting sockeye salmon during years of low or average sockeye salmon runs, but has also prevented earlier openings during years of large returns.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 178-1. Kenai River cumulative passage of sockeye salmon as estimated by sonar by year and date, 2000–2010.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
7/1	1,744	1,209	4,943	5,611	3,164	5,393	1,764	3,740	2,474	2,645	4,290
7/2	3,396	6,680	12,788	8,820	6,591	13,427	4,501	8,207	5,265	5,958	8,847
7/3	6,651	10,885	17,470	13,292	10,151	20,680	7,036	12,067	7,903	9,525	12,088
7/4	9,866	14,797	26,271	19,681	12,509	32,359	9,653	14,738	9,287	14,829	18,180
7/5	11,815	18,495	53,529	24,841	14,334	45,834	12,410	17,654	10,256	19,579	28,389
7/6	14,089	21,192	79,876	28,007	16,379	58,169	15,715	20,976	11,146	24,015	39,621
7/7	18,191	24,819	132,931	31,982	20,127	68,040	19,148	26,137	11,975	30,133	44,634
7/8	22,165	30,125	169,261	36,769	26,140	80,019	22,025	34,021	13,044	34,740	52,731
7/9	29,070	36,120	192,839	43,203	28,975	107,125	25,684	42,654	15,167	40,684	58,709
7/10	37,715	40,644	211,799	53,388	31,663	129,497	29,879	46,572	18,186	45,876	64,253
7/11	42,257	45,630	223,788	77,506	33,887	167,673	32,754	51,189	19,713	53,712	72,801
7/12	46,717	48,641	230,764	137,726	37,128	216,467	34,623	56,114	21,769	73,089	87,235
7/13	71,631	52,213	238,567	178,650	43,144	242,803	37,282	58,906	26,234	85,078	111,647
7/14	162,433	62,476	248,819	207,884	157,250	258,642	39,212	63,434	28,952	105,403	128,551
7/15	241,242	91,356	273,005	229,462	295,462	272,703	43,242	70,330	54,466	155,845	151,203
7/16	286,574	121,858	309,527	318,655	390,382	317,974	56,544	77,241	122,590	212,306	198,219
7/17	309,888	163,409	336,822	427,545	438,760	379,685	72,019	82,669	173,652	264,701	260,535
7/18	340,491	191,794	381,145	520,840	470,854	430,048	80,983	91,550	192,187	301,028	329,088
7/19	364,879	226,341	475,906	592,114	491,511	505,267	86,982	134,199	209,297	327,179	411,892
7/20	377,358	252,875	537,957	623,936	501,700	541,502	94,450	149,979	238,695	372,390	467,775
7/21	389,663	267,041	570,978	655,918	532,184	562,441	110,461	181,575	270,710	400,452	516,615
7/22	401,555	282,398	594,661	723,034	627,654	587,951	142,747	228,372	302,160	409,341	555,372
7/23	420,032	302,953	621,160	788,676	656,900	640,449	176,110	267,450	312,689	420,542	590,495
7/24	446,026	339,758	647,439	843,099	689,087	695,973	219,805	301,579	324,090	436,549	607,468
7/25	469,929	387,914	672,273	873,619	723,806	725,893	269,604	335,714	335,010	444,613	648,557
7/26	491,640	439,484	703,956	905,092	765,397	744,337	352,858	382,201	342,397	455,477	667,588
7/27	509,858	474,483	715,724	929,562	800,513	756,074	408,458	442,461	358,834	491,953	683,904
7/28	525,697	493,151	726,184	969,171	842,523	765,259	466,552	484,839	377,998	532,031	703,227
7/29	542,014	508,476	738,767	997,552	877,735	778,235	531,695	516,454	400,134	564,160	717,455
7/30	550,946	526,167	749,889	1,015,442	902,956	809,614	589,795	536,403	426,350	590,907	731,154
7/31	557,832	541,110	763,767	1,033,715	922,454	845,339	638,656	555,525	445,898	618,277	742,679

-continued-

Table 178-1. Page 2 of 2.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
8/1	565,146	555,313	776,184	1,052,908	935,937	870,043	698,006	574,961	468,513	636,155	756,993
8/2	570,265	570,134	789,954	1,075,605	953,775	885,095	747,366	589,383	485,797	656,584	779,132
8/3	579,041	581,245	805,317	1,095,870	992,784	906,444	789,197	598,124	499,129	678,984	815,449
8/4	588,750	594,159	821,790	1,111,115	1,036,568	924,007	833,128	610,664	513,456	692,688	829,589
8/5	596,778	602,948	839,071	1,121,817	1,065,584	939,501	879,388	629,143	524,865	704,666	840,338
8/6	603,766	612,154	853,372	1,139,644	1,093,109	977,166	909,551	652,588	535,768	711,807	851,898
8/7	609,780	621,868	868,529	1,153,324	1,114,652	1,010,780	931,541	668,269	544,245	716,822	864,366
8/8	614,679	630,954	887,706	1,162,694	1,126,729	1,024,828	945,401	681,403	550,848	720,026	876,676
8/9	619,240	635,503	911,722	1,171,598	1,156,990	1,036,352	958,698	705,832	558,577	724,612	888,737
8/10	624,578	640,621	930,304	1,181,309	1,203,397	1,046,301	969,763	720,111	569,379	731,604	899,308
8/11		642,753	942,711		1,247,872	1,061,451	984,717	741,683	580,330	735,254	905,949
8/12		648,424	948,521		1,293,975	1,113,917	1,009,139	763,985	590,722	739,510	912,100
8/13		650,036	953,858		1,323,366	1,175,190	1,030,297	778,447	598,073	745,170	920,960
8/14			957,924		1,343,481	1,213,012	1,050,379	789,057	606,488		930,548
8/15					1,359,167	1,255,929	1,081,926	799,982	611,936		943,830
8/16					1,369,085	1,295,657	1,117,682	809,952	613,466		956,646
8/17					1,379,539	1,323,218	1,150,017	819,282	614,946		962,488
8/18					1,385,981	1,340,547	1,182,233	827,488			
8/19						1,351,189	1,220,657	838,032			
8/20						1,368,363	1,257,566	848,198			
8/21						1,381,629	1,282,704	854,756			
8/22							1,317,024	861,008			
8/23							1,346,925	867,572			
8/24							1,367,808				
8/25							1,389,715				

Source: P. Shields, Commercial Fisheries biologist, ADF&G, personal communication.

PROPOSAL 179 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would open Kenai and Kasilof personal use salmon dip net fisheries only after the lower limit of an escapement goal will be achieved.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the sockeye salmon optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

In the Kasilof River personal use gillnet fishery, salmon may be taken from June 15 through June 24, seven days per week, fishing is allowed between 6:00 a.m. and 11:00 p.m. The Kasilof River personal use dip net fishery is open from June 25 through August 7, fishing is allowed 24 hours per day, seven days per week.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the number of days these two fisheries would be open, or preclude these fisheries from opening if escapement goals were not met by the time the fishery was scheduled to close by regulation. It would reduce the number of salmon, primarily sockeye salmon, harvested in these personal use fisheries and increase crowding in the remaining days these fisheries would be open. Personal use harvest of sockeye salmon would likely shift to the later segment of the run rather than be taken from throughout the run. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved. During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the

abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

The department may use general emergency order authority, as necessary, to liberalize or restrict the Kasilof River personal use salmon dip net fishery based upon inseason assessment of sockeye salmon run strength as estimated by a sonar project. The Kasilof River personal use gillnet fishery was modified inseason one time in 2005 in response to sockeye salmon run strength. Conversely, the Kasilof River personal use salmon dip net fishery has been liberalized inseason on several occasions by expanding the area where salmon may be taken by dip net from shore and from a boat. The area open to dipnetting from shore has been increased from river mile 1 upstream to the Sterling Highway Bridge crossing at river mile 8, and area open to dipnetting from a boat has been increased from river mile 1 upstream to approximately river mile 3. These liberalizations for the dip net fishery occurred from 2004-2009 because the escapement rate of sockeye salmon into the Kasilof River was proceeding at a rate greater than that needed to ensure the biological escapement goal would be met. In each of these years, the biological escapement goal (150,000–250,000) and optimum escapement goal (150,000–300,000) of sockeye salmon was exceeded (Table 179-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 179-1. Kasilof River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Commercial Fisheries			Personal Use Fisheries			Sport Harvest	Percent of Total Run	Sonar Estimate
	Total Run	Number Harvested	Percent of Total Run	Gillnet Harvest	Dip Net Harvest	Percent of Total Run			
1981	601,996	334,739	55.6%	ND	10,300	1.7%	443	0.1%	256,625
1982	720,406	530,334	73.6%	7,543	1,800	1.3%	653	0.1%	180,239
1983	1,068,858	837,220	78.3%	8,846	11,124	1.9%	1,863	0.2%	210,271
1984	686,047	426,256	62.1%	12,926	12,771	3.7%	3,212	0.5%	231,685
1985	1,807,384	1,273,878	70.5%	10,746	16,284	1.5%	1,903	0.1%	505,049
1986	1,717,840	1,391,966	81.0%	9,609	38,674	2.8%	2,171	0.1%	275,963
1987	1,237,175	951,942	76.9%	9,375	18,454	2.2%	10,872	0.9%	249,250
1988	949,475	782,495	82.4%	9,803	3,547	1.4%	2,365	0.2%	151,856
1989 ^a	633,829	462,221	72.9%	9,928	ND	1.6%	4,632	0.7%	158,206
1990 ^a	511,484	359,497	70.3%	7,123	ND	1.4%	971	0.2%	144,136
1991 ^a	704,374	445,511	63.2%	8,380	ND	1.2%	5,216	0.7%	238,269
1992 ^{ab}	1,078,190	879,498	81.6%	ND	ND		3,501	0.3%	184,178
1993 ^a	709,951	550,339	77.5%	7,942	ND	1.1%	2,306	0.3%	149,939
1994 ^b	681,268	457,432	67.1%	ND	3,679	0.5%	2,489	0.4%	205,117
1995 ^b	714,590	487,387	68.2%	ND	4,160	0.6%	3,535	0.5%	204,935
1996	968,395	695,871	71.9%	9,506	11,197	2.1%	2,502	0.3%	249,944
1997	948,610	651,755	68.7%	17,997	9,737	2.9%	4,128	0.4%	266,025
1998	596,876	259,940	43.6%	15,975	45,161	10.2%	3,449	0.6%	273,213
1999	931,633	565,547	60.7%	12,832	37,176	5.4%	4,654	0.5%	312,587
2000	563,421	264,518	46.9%	14,774	23,877	6.9%	5,599	1.0%	256,053
2001	803,921	437,034	54.4%	17,201	37,612	6.8%	6,005	0.7%	307,570
2002	739,119	439,401	59.4%	17,980	46,769	8.8%	4,506	0.6%	226,682
2003	959,620	534,438	55.7%	15,706	43,870	6.2%	5,971	0.6%	359,633
2004	1,664,402	1,005,732	60.4%	25,417	48,315	4.4%	7,430	0.4%	577,581
2005	1,351,010	927,150	68.6%	26,609	43,151	5.2%	5,982	0.4%	348,012
2006	1,644,575	1,182,705	71.9%	28,867	56,144	5.2%	7,723	0.5%	368,092
2007	1,015,914	616,158	60.7%	14,943	43,293	5.7%	3,843	0.4%	336,866
2008	1,051,814	663,463	63.1%	23,432	54,051	7.4%	7,470	0.7%	305,199
2009	845,419	443,366	52.4%	26,646	73,035	11.8%	6,673	0.8%	297,125
2010 ^c	845,000	477,000	56.4%						267,013
Mean									
1996-2009	1,006,050	620,510	61.7%	19,130	40,960	6.0%	5,420	0.5%	316,770
Mean									
All Years	958,420	644,490	67.2%	12,760	23,940	3.8%	4,210	0.4%	269,910

Source : Statewide Harvest Surveys: Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish Biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries Biologist, ADF&G, Soldotna, personal communication.

^a No personal use dip net fishery occurred.

^b No personal use gillnet fishery occurred.

^c Preliminary estimates.

PROPOSAL 180 - 5 AAC 21.360. Kenai River Late-run Sockeye Salmon Management Plan.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would close the Kenai River personal use salmon dip net fishery on Tuesdays and Fridays until 450,000 sockeye salmon have been estimated to pass the sonar project located at river mile 19.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the number of days the Kenai River personal use salmon dip net fishery would be open from seven to five days per week until 450,000 sockeye salmon have been estimated to pass the sonar project. It would reduce the number of salmon, primarily sockeye salmon, harvested in the personal use fishery and increase crowding in the remaining days the fishery would be open. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved. During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but

the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years.

Generally, 450,000 sockeye salmon pass the department’s sonar project at river mile 19 by mid to late July (Table 180-1). Since the 2001 season, the Kenai River late-run sockeye salmon escapement goal has been met or exceeded eight out of ten years (Table 180-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 180-1. Kenai River cumulative passage of sockeye salmon as estimated by sonar by year and date, 2000–2010.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
7/1	1,744	1,209	4,943	5,611	3,164	5,393	1,764	3,740	2,474	2,645	4,290
7/2	3,396	6,680	12,788	8,820	6,591	13,427	4,501	8,207	5,265	5,958	8,847
7/3	6,651	10,885	17,470	13,292	10,151	20,680	7,036	12,067	7,903	9,525	12,088
7/4	9,866	14,797	26,271	19,681	12,509	32,359	9,653	14,738	9,287	14,829	18,180
7/5	11,815	18,495	53,529	24,841	14,334	45,834	12,410	17,654	10,256	19,579	28,389
7/6	14,089	21,192	79,876	28,007	16,379	58,169	15,715	20,976	11,146	24,015	39,621
7/7	18,191	24,819	132,931	31,982	20,127	68,040	19,148	26,137	11,975	30,133	44,634
7/8	22,165	30,125	169,261	36,769	26,140	80,019	22,025	34,021	13,044	34,740	52,731
7/9	29,070	36,120	192,839	43,203	28,975	107,125	25,684	42,654	15,167	40,684	58,709
7/10	37,715	40,644	211,799	53,388	31,663	129,497	29,879	46,572	18,186	45,876	64,253
7/11	42,257	45,630	223,788	77,506	33,887	167,673	32,754	51,189	19,713	53,712	72,801
7/12	46,717	48,641	230,764	137,726	37,128	216,467	34,623	56,114	21,769	73,089	87,235
7/13	71,631	52,213	238,567	178,650	43,144	242,803	37,282	58,906	26,234	85,078	111,647
7/14	162,433	62,476	248,819	207,884	157,250	258,642	39,212	63,434	28,952	105,403	128,551
7/15	241,242	91,356	273,005	229,462	295,462	272,703	43,242	70,330	54,466	155,845	151,203
7/16	286,574	121,858	309,527	318,655	390,382	317,974	56,544	77,241	122,590	212,306	198,219
7/17	309,888	163,409	336,822	427,545	438,760	379,685	72,019	82,669	173,652	264,701	260,535
7/18	340,491	191,794	381,145	520,840	470,854	430,048	80,983	91,550	192,187	301,028	329,088
7/19	364,879	226,341	475,906	592,114	491,511	505,267	86,982	134,199	209,297	327,179	411,892
7/20	377,358	252,875	537,957	623,936	501,700	541,502	94,450	149,979	238,695	372,390	467,775
7/21	389,663	267,041	570,978	655,918	532,184	562,441	110,461	181,575	270,710	400,452	516,615
7/22	401,555	282,398	594,661	723,034	627,654	587,951	142,747	228,372	302,160	409,341	555,372
7/23	420,032	302,953	621,160	788,676	656,900	640,449	176,110	267,450	312,689	420,542	590,495
7/24	446,026	339,758	647,439	843,099	689,087	695,973	219,805	301,579	324,090	436,549	607,468
7/25	469,929	387,914	672,273	873,619	723,806	725,893	269,604	335,714	335,010	444,613	648,557
7/26	491,640	439,484	703,956	905,092	765,397	744,337	352,858	382,201	342,397	455,477	667,588
7/27	509,858	474,483	715,724	929,562	800,513	756,074	408,458	442,461	358,834	491,953	683,904
7/28	525,697	493,151	726,184	969,171	842,523	765,259	466,552	484,839	377,998	532,031	703,227
7/29	542,014	508,476	738,767	997,552	877,735	778,235	531,695	516,454	400,134	564,160	717,455
7/30	550,946	526,167	749,889	1,015,442	902,956	809,614	589,795	536,403	426,350	590,907	731,154
7/31	557,832	541,110	763,767	1,033,715	922,454	845,339	638,656	555,525	445,898	618,277	742,679

-continued-

Table 180-1. Page 2 of 2.

Date	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
8/1	565,146	555,313	776,184	1,052,908	935,937	870,043	698,006	574,961	468,513	636,155	756,993
8/2	570,265	570,134	789,954	1,075,605	953,775	885,095	747,366	589,383	485,797	656,584	779,132
8/3	579,041	581,245	805,317	1,095,870	992,784	906,444	789,197	598,124	499,129	678,984	815,449
8/4	588,750	594,159	821,790	1,111,115	1,036,568	924,007	833,128	610,664	513,456	692,688	829,589
8/5	596,778	602,948	839,071	1,121,817	1,065,584	939,501	879,388	629,143	524,865	704,666	840,338
8/6	603,766	612,154	853,372	1,139,644	1,093,109	977,166	909,551	652,588	535,768	711,807	851,898
8/7	609,780	621,868	868,529	1,153,324	1,114,652	1,010,780	931,541	668,269	544,245	716,822	864,366
8/8	614,679	630,954	887,706	1,162,694	1,126,729	1,024,828	945,401	681,403	550,848	720,026	876,676
8/9	619,240	635,503	911,722	1,171,598	1,156,990	1,036,352	958,698	705,832	558,577	724,612	888,737
8/10	624,578	640,621	930,304	1,181,309	1,203,397	1,046,301	969,763	720,111	569,379	731,604	899,308
8/11		642,753	942,711		1,247,872	1,061,451	984,717	741,683	580,330	735,254	905,949
8/12		648,424	948,521		1,293,975	1,113,917	1,009,139	763,985	590,722	739,510	912,100
8/13		650,036	953,858		1,323,366	1,175,190	1,030,297	778,447	598,073	745,170	920,960
8/14			957,924		1,343,481	1,213,012	1,050,379	789,057	606,488		930,548
8/15					1,359,167	1,255,929	1,081,926	799,982	611,936		943,830
8/16					1,369,085	1,295,657	1,117,682	809,952	613,466		956,646
8/17					1,379,539	1,323,218	1,150,017	819,282	614,946		962,488
8/18					1,385,981	1,340,547	1,182,233	827,488			
8/19						1,351,189	1,220,657	838,032			
8/20						1,368,363	1,257,566	848,198			
8/21						1,381,629	1,282,704	854,756			
8/22							1,317,024	861,008			
8/23							1,346,925	867,572			
8/24							1,367,808				
8/25							1,389,715				

Source: P. Shields, Commercial Fisheries biologist, ADF&G, personal communication.

Table 180-2. Estimated Kenai River late-run sockeye salmon abundance and harvest in the Kenai River personal use dip net estimate and spawning escapement, 1996–2010. fishery, sonar passage

Year	Kenai Sockeye Run	Kenai Personal Use Harvest	Kenai Sockeye Sonar Estimate	Kenai Sockeye Escapement Estimate
1996	3,173,542	102,821	797,847	631,698
1997	3,876,451	114,619	1,064,818	917,831
1998	1,470,877	103,847	767,558	611,653
1999	2,502,572	149,504	803,379	615,654
2000	1,441,611	98,262	624,578	420,777
2001	1,841,801	150,766	650,036	481,932
2002	2,972,502	180,028	957,924	744,884
2003	3,788,166	223,580	1,181,309	927,623
2004	4,992,136	262,831	1,385,981	1,131,210
2005	5,550,441	295,496	1,376,452	1,121,634
2006	2,509,615	127,630	1,499,692	1,327,054
2007	3,416,650	291,270	867,572	602,186
2008	2,304,587	234,109	614,946	415,292
2009	2,470,906	339,993	745,170	503,659
2010	3,259,000		970,662	

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

PROPOSAL 328 - 5 AAC 21.360. Kenai River Late-Run Sockeye Salmon Management Plan.

(This proposal was erroneously cited as 5 AAC 21.360, Kenai River Late-Run King Salmon Management Plan)

PROPOSED BY: Kenai Peninsula Fishermen's Association.

WHAT WOULD THE PROPOSAL DO? This proposal would close the Kenai River personal use salmon dip net fishery if the department announced the lower end of the optimal escapement goal (OEG) would not be met. The personal use fishery would close 24 hours after the announcement and reopen when the department projected the lower end of the OEG would be achieved.

WHAT ARE THE CURRENT REGULATIONS? Subject to the requirement of achieving the lower end of the OEG, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce harvest in the personal use salmon fishery by an unknown amount, depending upon abundance and the number of days the fishery was closed. This proposal would likely affect users traveling to participate in the fishery due to the very short advance notice period of 24 hours, and have an impact on the City of Kenai as well, which provides direct services to the fishery (trash collection, portable restroom maintenance, and more).

BACKGROUND: Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon and in 2006 due to late run timing (Table 328-1). In 2008, commercial salmon fishing with drift gillnets and set gillnets was closed (except in the Kasilof River Special Harvest Area) during regular fishing periods beginning Monday, July 28. During this time period, the Kenai River personal use fishery remained open until the regular close of the season on July 31. On August 1, 2008, the department issued a news release stating the Kenai River late-run sockeye salmon run was below two million fish and commercial fishing in locations that harvest Kenai River sockeye salmon would remain closed until the minimum escapement goal in the

Kenai River was assured. The sockeye salmon sport fishery downstream of the Kenai River sockeye salmon sonar project at river mile 19 was also closed on August 1. Upstream of the sonar project, the sport bag limit was reduced to one sockeye salmon, effective August 6. The 2008 final escapement of sockeye salmon into the Kenai River was estimated to be 407,138 fish.

During the 2009 season, on July 24, the department used inseason assessment data to project that the 2009 Kenai River sockeye salmon run was less than two million fish. Based on this projection, the inriver goal according to the management plan is 650,000 to 850,000 fish. At that time approximately 500,000 sockeye salmon had passed the sonar, about one million Kenai River sockeye salmon had been harvested by all users, and the department's best estimate was that 4500,000 (plus or minus 400,000) more Kenai River sockeye salmon would arrive. Of the 400,000 fish, 150,000 fish were needed to assure OEG would be attained. The department estimated the personal use dip net fishery would harvest 15,000 to 20,000 fish, which left approximately 230,000 Kenai River fish available for commercial harvest. Even though the regular commercial period was closed on Monday July 27, commercial fishing continued in the Kasilof section within ½ mile of shore which harvested approximately 5,000 Kenai River bound fish. If Kasilof River escapements remained high, the department anticipated commercial fishing would continue in that area with similar catches of Kenai River bound fish. Commercial fishing was not closed for the season and the personal use fishery remained open until the close of the personal use fishing season on July 31. The department allowed these small commercial and recreational harvests of Kenai bound fish to continue in anticipation that there would be more commercial fishing during the run. The 12-hour regularly scheduled fishing period that was closed on Thursday, July 30, was fished on Saturday, August 1. The week of August 2–8 was prosecuted by fishing regular periods only with the August 6 period extended 3 hours to facilitate set gillnet gear removal. During the final management week of the year for Upper Subdistrict set gillnetting and Central District inlet-wide drift gillnetting, the regularly scheduled 12-hour fishing period on Monday, August 10, was extended 4 hours to take advantage of the full tide cycle, with drift gillnetting confined to the Kenai and Kasilof Sections during this extension. The minimum inriver escapement goal of 650,000 fish in the Kenai River was achieved on August 2, and by August 5 the cumulative passage estimate had exceeded 700,000 sockeye salmon. The final sockeye salmon passage estimate in the Kenai River was 745,000 fish (Table 328-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 328-1. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

Table 328-2. Kenai River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Total Run	Commercial Fisheries		Personal Use Dip Net		Inriver Sport		Sonar Estimate
		Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	
1981	913,763	511,131	55.9%	ND		19,721	2.2%	407,639
1982	2,539,635	1,913,193	75.3%	Unknown		50,103	2.0%	619,831
1983	3,636,921	2,985,442	82.1%	7,562	0.2%	71,267	2.0%	630,340
1984	1,049,519	702,335	66.9%	ND		15,702	1.5%	344,571
1985	2,148,239	1,635,779	76.1%	ND		57,337	2.7%	502,820
1986	2,691,045	2,188,409	81.3%	ND		72,398	2.7%	501,157
1987	8,572,845	6,938,572	80.9%	24,086	0.3%	240,819	2.8%	1,596,871
1988	5,752,895	4,730,749	82.2%	16,880	0.3%	152,751	2.7%	1,021,469
1989	5,862,323	4,145,014	70.7%	48,976	0.8%	277,906	4.7%	1,599,959
1990	2,685,214	2,075,919	77.3%	ND		120,788	4.5%	659,520
1991	1,682,597	1,093,851	65.0%	ND		161,678	9.6%	647,597
1992	7,716,559	6,660,256	86.3%	12,189	0.2%	242,491	3.1%	994,798
1993	3,904,145	3,035,627	77.8%	33,467	0.9%	137,179	3.5%	813,617
1994	3,382,316	2,335,429	69.0%	ND		93,616	2.8%	1,003,446
1995	2,270,352	1,587,520	69.9%	14,352	0.6%	125,428	5.5%	630,447
1996	3,173,542	2,297,324	72.4%	102,821	3.2%	186,291	5.9%	797,847
1997	3,876,451	2,704,036	69.8%	114,619	3.0%	177,133	4.6%	1,064,818
1998	1,470,877	636,171	43.3%	103,847	7.1%	164,536	11.2%	767,558
1999	2,502,572	1,551,907	62.0%	149,504	6.0%	200,574	8.0%	803,379
2000	1,441,611	705,699	49.0%	98,262	6.8%	230,983	16.0%	624,578
2001	1,841,801	1,028,205	55.8%	150,766	8.2%	200,762	10.9%	650,036
2002	2,972,502	1,827,466	61.5%	180,028	6.1%	225,917	7.6%	957,924
2003	3,788,166	2,321,047	61.3%	223,580	5.9%	286,089	7.6%	1,181,309
2004	4,992,136	3,289,237	65.9%	262,831	5.3%	294,793	5.9%	1,385,981
2005	5,550,441	3,818,737	68.8%	295,496	5.3%	294,287	5.3%	1,376,452
2006	2,509,615	862,338	34.4%	127,630	5.1%	173,425	6.9%	1,499,692
2007	3,416,650	2,202,073	64.5%	291,270	8.5%	308,850	9.0%	867,572
2008	2,304,587	1,407,952	61.1%	234,109	10.2%	230,030	10.0%	614,946
2009	2,470,906	1,360,934	55.1%	339,993	13.8%	252,319	10.2%	745,170
2010 ^a	3,259,000	1,887,000	57.9%					970,662
Mean								
1996–2009	3,022,280	1,858,080	61.5%	191,050	6.3%	230,430	7.6%	952,660
Mean								
All Years	3,345,970	2,347,980	70.2%	97,660	2.9%	174,660	5.2%	876,070

Source : Statewide Harvest Surveys; Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

^a Preliminary estimates.

PROPOSAL 155 - 5 AAC 21.360(b)(4). Kenai River Late-Run Sockeye Salmon Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would add new language to close commercial and non-commercial fisheries if the optimum escapement goal is not expected to be achieved.

WHAT ARE THE CURRENT REGULATIONS? The Kenai River late-run sockeye salmon commercial, sport, and personal use fisheries shall be managed to 1) meet an optimum escapement goal (OEG) range of 500,000–1,000,000 late-run sockeye salmon; 2) achieve inriver goals as established by the board and measured at the Kenai River sonar counter located at river mile 19; and 3) distribute the escapement of sockeye salmon evenly with the OEG range, in proportion to the size of the run.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24-hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than 2,000,000 fish.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall manage the sport fishery on the Kenai River, except that portion of the Kenai River from its confluence with the Russian River to an ADF&G regulatory marker located 1,800 yards downstream as follows; fishing will occur seven days per week, 24 hours per day; and the bag and possession limit for the sport fishery is three sockeye salmon unless the department determines that the abundance of late-run sockeye exceeds 2,000,000 salmon, at which time the commissioner may, by emergency order, increase the bag and possession limit as the commissioner determines to be appropriate; and if the projected inriver run of sockeye salmon above the Kenai River sonar counter located at river mile 19 is less than 650,000 fish and the inriver sport fishery harvest is projected to result in an escapement below the lower end of the optimal escapement goal, the commissioner may, by emergency order, decrease the bag and possession limit, as the commissioner determines to be appropriate, for sockeye salmon in the sport fishery above the Kenai River sonar counter located at river mile 19.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely have no effect on management since meeting the OEG is already a requirement in management of these fisheries.

BACKGROUND: The current escapement goal range of 500,000–800,000 spawners for the Kenai River late-run sockeye salmon stock was adopted by the department in 1999. Stock-recruit data has been extensively modeled in historic reports and again in the escapement goal report presented at this board meeting in an effort to identify an appropriate escapement goal. At the 2005 board meeting, the board adopted an optimal escapement goal of 500,000–1,000,000

sockeye salmon. This goal is achieved by managing for one of three abundance based goals. The department already has emergency authority and has closed and restricted both commercial and non-commercial fisheries to attain the OEG.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon and in 2006 due to late run timing (Table 155-1). In 2008, commercial salmon fishing with drift gillnets and set gillnets was closed (except in the Kasilof River Special Harvest Area) during regular fishing periods beginning Monday, July 28. During this time period, the Kenai River personal use fishery remained open until the regular close of the season on July 31. On August 1, 2008, the department issued a news release stating the Kenai River late-run sockeye salmon run was below two million fish and commercial fishing in locations that harvest Kenai River sockeye salmon would remain closed until the minimum escapement goal in the Kenai River was assured. The sockeye salmon sport fishery downstream of the Kenai River sockeye salmon sonar project at river mile 19 was also closed on August 1. Upstream of the sonar project, the sport bag limit was reduced to one sockeye salmon, effective August 6. The 2008 final escapement of sockeye salmon into the Kenai River was estimated to be 407,138 fish.

During the 2009 season, on July 24, the department used inseason assessment data to project that the 2009 Kenai River sockeye salmon run was less than two million fish. Based on this projection, the inriver goal according to the management plan is 650,000 to 850,000 fish. At that time approximately 500,000 sockeye salmon had passed the sonar, about one million Kenai River sockeye salmon had been harvested by all users, and the department's best estimate was that 450,000 (plus or minus 40,000) more Kenai River sockeye salmon would arrive. Of the 400,000 fish, 150,000 fish were needed to assure OEG would be attained. The department estimated the personal use dip net fishery would harvest 15,000 to 20,000 fish, which left approximately 230,000 Kenai River fish available for commercial harvest. Even though the regular commercial period was closed on Monday July 27, commercial fishing continued in the Kasilof section within ½ mile of shore which harvested approximately 5,000 Kenai River bound fish. If Kasilof River escapements remained high, the department anticipated commercial fishing would continue in that area with similar catches of Kenai River bound fish. Commercial fishing was not closed for the season and the personal use fishery remained open until the close of the personal use fishing season on July 31. The department allowed these small commercial and recreational harvests of Kenai bound fish to continue in anticipation that there would be more commercial fishing during the run. The 12-hour regularly scheduled fishing period that was closed on Thursday, July 30, was fished on Saturday, August 1. The week of August 2–8 was

prosecuted by fishing regular periods only with the August 6 period extended 3 hours to facilitate set gillnet gear removal. During the final management week of the year for Upper Subdistrict set gillnetting and Central District inlet-wide drift gillnetting, the regularly scheduled 12-hour fishing period on Monday, August 10, was extended 4 hours to take advantage of the full tide cycle, with drift gillnetting confined to the Kenai and Kasilof Sections during this extension. The minimum inriver escapement goal of 650,000 fish in the Kenai River was achieved on August 2, and by August 5 the cumulative passage estimate had exceeded 700,000 sockeye salmon. The final sockeye salmon passage estimate in the Kenai River was 745,000 fish (Table 155-2).

In the last 10 years (2001–2010), the Kenai River inriver run goal has been exceeded six of 10 years, within the goal three times, and below the goal once. In the last nine years (2001–2009), the sockeye salmon escapement in the Kenai River was below the optimum escapement goal two times, within four times, and was exceeded three times. During that same time period, the SEG has been below two times, within three times, and was exceeded four times.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. However, the department already has emergency authority to close fisheries if goals are not being met.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 155-1. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

Table 155-2. Kenai River sockeye salmon total run abundance, commercial, personal use, sport harvests, and sonar estimate by year, 1981–2010.

Year	Total Run	Commercial Fisheries		Personal Use Dip Net		Inriver Sport		Sonar Estimate
		Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	
1981	913,763	511,131	55.9%	ND		19,721	2.2%	407,639
1982	2,539,635	1,913,193	75.3%	Unknown		50,103	2.0%	619,831
1983	3,636,921	2,985,442	82.1%	7,562	0.2%	71,267	2.0%	630,340
1984	1,049,519	702,335	66.9%	ND		15,702	1.5%	344,571
1985	2,148,239	1,635,779	76.1%	ND		57,337	2.7%	502,820
1986	2,691,045	2,188,409	81.3%	ND		72,398	2.7%	501,157
1987	8,572,845	6,938,572	80.9%	24,086	0.3%	240,819	2.8%	1,596,871
1988	5,752,895	4,730,749	82.2%	16,880	0.3%	152,751	2.7%	1,021,469
1989	5,862,323	4,145,014	70.7%	48,976	0.8%	277,906	4.7%	1,599,959
1990	2,685,214	2,075,919	77.3%	ND		120,788	4.5%	659,520
1991	1,682,597	1,093,851	65.0%	ND		161,678	9.6%	647,597
1992	7,716,559	6,660,256	86.3%	12,189	0.2%	242,491	3.1%	994,798
1993	3,904,145	3,035,627	77.8%	33,467	0.9%	137,179	3.5%	813,617
1994	3,382,316	2,335,429	69.0%	ND		93,616	2.8%	1,003,446
1995	2,270,352	1,587,520	69.9%	14,352	0.6%	125,428	5.5%	630,447
1996	3,173,542	2,297,324	72.4%	102,821	3.2%	186,291	5.9%	797,847
1997	3,876,451	2,704,036	69.8%	114,619	3.0%	177,133	4.6%	1,064,818
1998	1,470,877	636,171	43.3%	103,847	7.1%	164,536	11.2%	767,558
1999	2,502,572	1,551,907	62.0%	149,504	6.0%	200,574	8.0%	803,379
2000	1,441,611	705,699	49.0%	98,262	6.8%	230,983	16.0%	624,578
2001	1,841,801	1,028,205	55.8%	150,766	8.2%	200,762	10.9%	650,036
2002	2,972,502	1,827,466	61.5%	180,028	6.1%	225,917	7.6%	957,924
2003	3,788,166	2,321,047	61.3%	223,580	5.9%	286,089	7.6%	1,181,309
2004	4,992,136	3,289,237	65.9%	262,831	5.3%	294,793	5.9%	1,385,981
2005	5,550,441	3,818,737	68.8%	295,496	5.3%	294,287	5.3%	1,376,452
2006	2,509,615	862,338	34.4%	127,630	5.1%	173,425	6.9%	1,499,692
2007	3,416,650	2,202,073	64.5%	291,270	8.5%	308,850	9.0%	867,572
2008	2,304,587	1,407,952	61.1%	234,109	10.2%	230,030	10.0%	614,946
2009	2,470,906	1,360,934	55.1%	339,993	13.8%	252,319	10.2%	745,170
2010 ^a	3,259,000	1,887,000	57.9%					970,662
Mean								
1996–2009	3,022,280	1,858,080	61.5%	191,050	6.3%	230,430	7.6%	952,660
Mean								
All Years	3,345,970	2,347,980	70.2%	97,660	2.9%	174,660	5.2%	876,070

Source : Statewide Harvest Surveys; Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

^a Preliminary estimates.

PROPOSALS 181 and 182 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan and 5 AAC 21.360 Kenai River Late-Run Sockeye Salmon Management Plan.

PROPOSED BY: Laney Anderson (Proposal 181),
Pat Hodgson (Proposal 182).

WHAT WOULD THESE PROPOSALS DO? These proposals would establish a harvest cap of 100,000-150,000 sockeye salmon for the Kenai River personal use salmon dip net fishery.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? Based upon the last five year average harvest, these proposals would result in a 42% reduction in the number of sockeye salmon harvested in the Kenai River personal use dip net fishery and would require a reduction in the time, area, and/or number of individuals participating in the Kenai River personal use salmon dip net fishery. These proposals may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. Depending on the method used to restrict harvest, a 24-hour reporting requirement or inseason harvest monitoring project may need to be implemented in order to effectively manage for a harvest cap or guideline harvest level. Development of a program to monitor Kenai River personal use harvests inseason would require a significant restructuring of the department's current budget allocations.

BACKGROUND: The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) provides for a personal use salmon gillnet fishery at the mouth of Kasilof River, and salmon dip net fisheries in the Kenai and Kasilof rivers and Fish Creek in Northern Cook Inlet. This plan was in effect for the 1981 season and later adopted into regulation by the board in 1982. The plan has undergone several amendments since that time. The underlying purpose of the board's creation of the personal use fishing category was to allow efficient harvesting of fish by individuals who were precluded from participating in subsistence fisheries.

Prior to 1996, gillnet and dip net fisheries at both the Kenai and Kasilof rivers did not occur each year. The dip net fisheries were set to open when a specified sonar estimate was achieved.

During years when the sonar estimate was not achieved, the dip net fishery scheduled for either the Kenai or Kasilof rivers did not occur.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. Harvest of sockeye salmon was 103,847 fish in 1998 and 127,630 fish in 2006 (Table 181-1, Figure 181-1). During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The personal use harvest of sockeye salmon during these years averaged 194,527 fish. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years. The average sockeye salmon harvest in the Kenai River during years the fishery was liberalized was 250,641 fish.

From 1996 through 2010, the sockeye salmon harvest in the Kenai River personal use dip net fishery averaged 191,054 fish. During 2004–2009, the date 150,000 sockeye salmon have been harvested has, on average, occurred by July 23 (Table 181-2). Daily harvest rates in the Kenai River personal use fishery can vary widely, ranging from 570 to 47,000 sockeye salmon (Table 181-2). Factors affecting daily harvest rates include effort, abundance, tides, weather, and weekends versus weekdays.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these allocative proposals. Successfully managing for a harvest cap or guideline harvest level in the personal use fishery would be difficult to accomplish without a 24-hour reporting requirement or inseason harvest monitoring project.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 181-1. Kenai River personal use dip net fishery total salmon harvest by year, 1996–2009.

Year	Sockeye	Chinook	Coho	Pink	Chum	Total
1996	102,821	295	1,932	2,404	175	107,627
1997	114,619	364	559	619	58	116,219
1998	103,847	254	1,011	1,032	85	106,229
1999	149,504	488	1,009	1,666	102	152,769
2000	98,262	410	1,449	1,457	193	101,771
2001	150,766	638	1,555	1,326	155	154,440
2002	180,028	606	1,721	5,662	551	188,568
2003	223,580	1,016	1,332	1,647	249	227,824
2004	262,831	792	2,661	2,103	387	268,774
2005	295,496	997	2,512	1,806	321	301,132
2006	127,630	1,034	2,235	11,127	551	142,577
2007	291,270	1,509	2,111	1,939	472	297,301
2008	234,109	1,362	2,609	10,631	504	249,215
2009	339,993	1,189	2,401	5,482	285	349,350
Min.	98,262	254	559	619	58	101,771
Mean	191,054	782	1,793	3,493	292	197,414
Max.	339,993	1,509	2,661	11,127	551	349,350

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

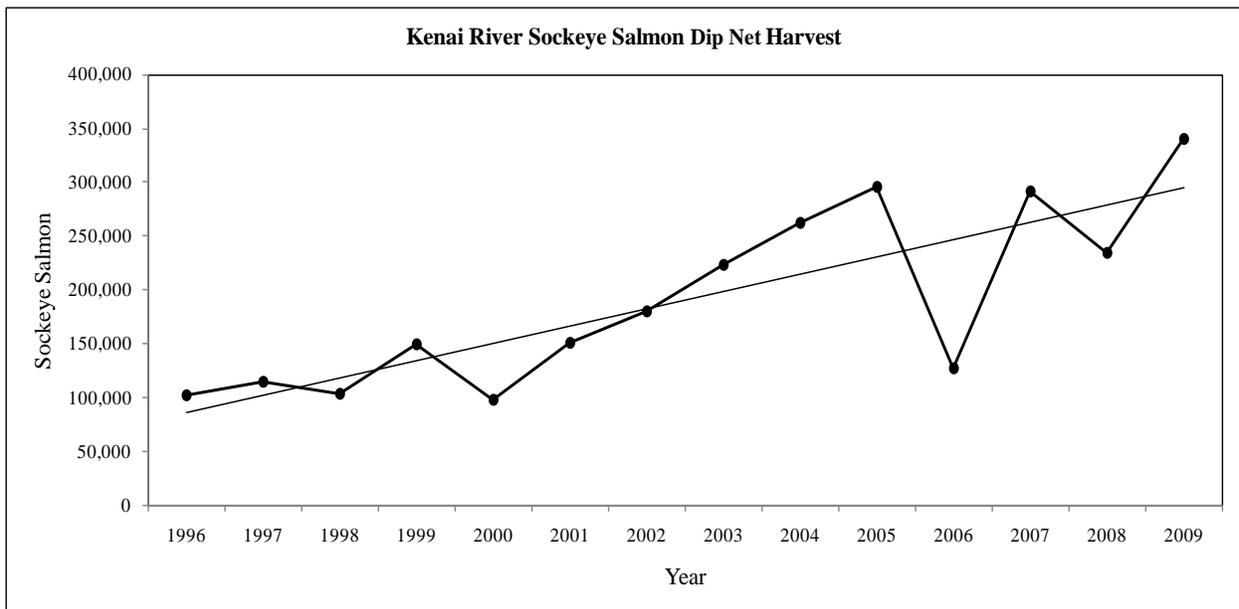


Figure 181-1. Personal use dip net sockeye salmon harvest from the Kenai River, 1996–2009.

Table 181-2. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

PROPOSAL 183 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: South K-Beach Independent Fishermen.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a guideline harvest for Cook Inlet personal use salmon fisheries based upon run size as follows:

Harvest would be managed on a three-tiered guideline harvest strategy similar to the *Kenai River Late Run Sockeye Salmon Management Plan*. The department would manage using methods and means; time and area would be regulated to achieve a harvest of no more than 100,000 sockeye salmon when the forecast is less than two million sockeye salmon; 225,000 sockeye salmon when the forecast is two to four million; and no restriction for time and a liberalization for runs over four million sockeye salmon.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24-hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Based upon the last five year average harvest, this proposal would result in a 61% reduction in harvest in the number of sockeye salmon harvested in the Kenai River personal use dip net fishery in years when Kenai River sockeye salmon abundance was less than two million. Based upon the last several years, it is likely that harvest would also be reduced on runs of two to four million. This proposal would likely result in near average harvests for years when Kenai River sockeye salmon abundance is greater than four million. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. Depending on the method used to restrict harvest, a 24-hour reporting requirement or inseason harvest monitoring project may need to be implemented in order to effectively manage for a harvest cap or guideline harvest level. Development of a program to monitor personal use harvests inseason would require a significant restructuring of the department's current budget allocations.

BACKGROUND: Since 1996, the total estimated number of sockeye salmon passing the Kenai River sonar has ranged from 614,000 to nearly 1.5 million fish, while the estimated harvest of sockeye salmon in the personal dip net fishery has ranged from 98,262 to 339,993 fish (Table 183-1). During this same time, on average, approximately 6.3% of the total run of Kenai River

late-run sockeye salmon has been harvested in the Kenai River personal use fishery. The commercial fisheries harvest about 61.5% and inriver sport fisheries harvest 7.6% of the total Kenai River sockeye salmon late run (Table 183-1). During 2004–2009, daily harvest of sockeye salmon in the Kenai River personal use fishery varied widely, ranging from 571 to 47,331 sockeye salmon (183-2). Factors affecting daily harvest rates include effort, abundance, tides, weather, and weekends versus weekdays.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Successfully managing for a harvest cap or guideline harvest level in the personal use fishery would be difficult to accomplish without a 24-hour reporting requirement or inseason harvest monitoring project.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 183-1. Kenai River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Total Run	Commercial Fisheries		Personal Use Dip Net		Inriver Sport		Sonar Estimate
		Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	
1981	913,763	511,131	55.9%	ND		19,721	2.2%	407,639
1982	2,539,635	1,913,193	75.3%	Unknown		50,103	2.0%	619,831
1983	3,636,921	2,985,442	82.1%	7,562	0.2%	71,267	2.0%	630,340
1984	1,049,519	702,335	66.9%	ND		15,702	1.5%	344,571
1985	2,148,239	1,635,779	76.1%	ND		57,337	2.7%	502,820
1986	2,691,045	2,188,409	81.3%	ND		72,398	2.7%	501,157
1987	8,572,845	6,938,572	80.9%	24,086	0.3%	240,819	2.8%	1,596,871
1988	5,752,895	4,730,749	82.2%	16,880	0.3%	152,751	2.7%	1,021,469
1989	5,862,323	4,145,014	70.7%	48,976	0.8%	277,906	4.7%	1,599,959
1990	2,685,214	2,075,919	77.3%	ND		120,788	4.5%	659,520
1991	1,682,597	1,093,851	65.0%	ND		161,678	9.6%	647,597
1992	7,716,559	6,660,256	86.3%	12,189	0.2%	242,491	3.1%	994,798
1993	3,904,145	3,035,627	77.8%	33,467	0.9%	137,179	3.5%	813,617
1994	3,382,316	2,335,429	69.0%	ND		93,616	2.8%	1,003,446
1995	2,270,352	1,587,520	69.9%	14,352	0.6%	125,428	5.5%	630,447
1996	3,173,542	2,297,324	72.4%	102,821	3.2%	186,291	5.9%	797,847
1997	3,876,451	2,704,036	69.8%	114,619	3.0%	177,133	4.6%	1,064,818
1998	1,470,877	636,171	43.3%	103,847	7.1%	164,536	11.2%	767,558
1999	2,502,572	1,551,907	62.0%	149,504	6.0%	200,574	8.0%	803,379
2000	1,441,611	705,699	49.0%	98,262	6.8%	230,983	16.0%	624,578
2001	1,841,801	1,028,205	55.8%	150,766	8.2%	200,762	10.9%	650,036
2002	2,972,502	1,827,466	61.5%	180,028	6.1%	225,917	7.6%	957,924
2003	3,788,166	2,321,047	61.3%	223,580	5.9%	286,089	7.6%	1,181,309
2004	4,992,136	3,289,237	65.9%	262,831	5.3%	294,793	5.9%	1,385,981
2005	5,550,441	3,818,737	68.8%	295,496	5.3%	294,287	5.3%	1,376,452
2006	2,509,615	862,338	34.4%	127,630	5.1%	173,425	6.9%	1,499,692
2007	3,416,650	2,202,073	64.5%	291,270	8.5%	308,850	9.0%	867,572
2008	2,304,587	1,407,952	61.1%	234,109	10.2%	230,030	10.0%	614,946
2009	2,470,906	1,360,934	55.1%	339,993	13.8%	252,319	10.2%	745,170
2010 ^a	3,259,000	1,887,000	57.9%					970,662
Mean								
1996–2009	3,022,280	1,858,080	61.5%	191,050	6.3%	230,430	7.6%	952,660
Mean								
All Years	3,345,970	2,347,980	70.2%	97,660	2.9%	174,660	5.2%	876,070

Source : Statewide Harvest Surveys; Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

^a Preliminary estimates.

Table 183-2. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

PROPOSAL 184 - 5 AAC 21.360. Kenai River Late-Run Sockeye Salmon Management Plan; and 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a combined sport and personal use guideline harvest level of 10% of Kenai River and Kasilof River sockeye salmon, based on the sonar estimate generated from the sonar project on each of these rivers.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24-hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

The Kasilof River personal use set gillnet is open from June 15-24, seven days per week, from 6:00 a.m. to 11:00 p.m. The Kasilof River personal use dip net fishery is open seven days per week, 24-hours per day.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in a large reduction in the harvest of sockeye salmon in the Kasilof and Kenai personal use fisheries, as well as the Kenai River sockeye salmon sport fishery. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. It is likely that a 24-hour reporting requirement or inseason harvest monitoring project would need to be implemented in order to effectively manage for a harvest cap or guideline harvest level. Development of a program to monitor personal use harvest inseason would require a significant restructuring of the department's current budget allocations.

BACKGROUND: Since 1996, the total estimated number of sockeye salmon passing the Kenai River sonar has ranged from 614,000 to nearly 1.5 million fish, while the estimated harvest of sockeye salmon in the personal dip net fishery has ranged from 98,262 to 339,993 fish (Table 184-1). During this same time, on average, approximately 6.3% of the total run of Kenai River late-run sockeye salmon has been harvested in the Kenai River personal use fishery. The commercial fisheries harvest about 61.5% and inriver sport fisheries harvest 7.6% of the total Kenai River sockeye salmon late run (Table 184-1). During 2004–2009, daily harvest of sockeye salmon in the Kenai River personal use fishery varied widely, ranging from 571 to 47,331 sockeye salmon (184-2). Since 2002, the Kasilof River personal use dip net fishery harvest of sockeye

salmon has averaged 51,080 and the personal use gillnet fishery has averaged 22,450 (Table 184-3). Factors affecting daily harvest rates include effort, abundance, tides, weather, and weekends versus weekdays.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. A GHF based upon annual sonar estimates would be impractical from a management perspective because the sonar projects are located upstream of most of the fisheries, and the department continues to estimate the number of sockeye salmon passing the sonar projects after the personal use season is closed.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 184-1. Kenai River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Total Run	Commercial Fisheries		Personal Use Dip Net		Inriver Sport		Sonar Estimate
		Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	
1981	913,763	511,131	55.9%	ND		19,721	2.2%	407,639
1982	2,539,635	1,913,193	75.3%	Unknown		50,103	2.0%	619,831
1983	3,636,921	2,985,442	82.1%	7,562	0.2%	71,267	2.0%	630,340
1984	1,049,519	702,335	66.9%	ND		15,702	1.5%	344,571
1985	2,148,239	1,635,779	76.1%	ND		57,337	2.7%	502,820
1986	2,691,045	2,188,409	81.3%	ND		72,398	2.7%	501,157
1987	8,572,845	6,938,572	80.9%	24,086	0.3%	240,819	2.8%	1,596,871
1988	5,752,895	4,730,749	82.2%	16,880	0.3%	152,751	2.7%	1,021,469
1989	5,862,323	4,145,014	70.7%	48,976	0.8%	277,906	4.7%	1,599,959
1990	2,685,214	2,075,919	77.3%	ND		120,788	4.5%	659,520
1991	1,682,597	1,093,851	65.0%	ND		161,678	9.6%	647,597
1992	7,716,559	6,660,256	86.3%	12,189	0.2%	242,491	3.1%	994,798
1993	3,904,145	3,035,627	77.8%	33,467	0.9%	137,179	3.5%	813,617
1994	3,382,316	2,335,429	69.0%	ND		93,616	2.8%	1,003,446
1995	2,270,352	1,587,520	69.9%	14,352	0.6%	125,428	5.5%	630,447
1996	3,173,542	2,297,324	72.4%	102,821	3.2%	186,291	5.9%	797,847
1997	3,876,451	2,704,036	69.8%	114,619	3.0%	177,133	4.6%	1,064,818
1998	1,470,877	636,171	43.3%	103,847	7.1%	164,536	11.2%	767,558
1999	2,502,572	1,551,907	62.0%	149,504	6.0%	200,574	8.0%	803,379
2000	1,441,611	705,699	49.0%	98,262	6.8%	230,983	16.0%	624,578
2001	1,841,801	1,028,205	55.8%	150,766	8.2%	200,762	10.9%	650,036
2002	2,972,502	1,827,466	61.5%	180,028	6.1%	225,917	7.6%	957,924
2003	3,788,166	2,321,047	61.3%	223,580	5.9%	286,089	7.6%	1,181,309
2004	4,992,136	3,289,237	65.9%	262,831	5.3%	294,793	5.9%	1,385,981
2005	5,550,441	3,818,737	68.8%	295,496	5.3%	294,287	5.3%	1,376,452
2006	2,509,615	862,338	34.4%	127,630	5.1%	173,425	6.9%	1,499,692
2007	3,416,650	2,202,073	64.5%	291,270	8.5%	308,850	9.0%	867,572
2008	2,304,587	1,407,952	61.1%	234,109	10.2%	230,030	10.0%	614,946
2009	2,470,906	1,360,934	55.1%	339,993	13.8%	252,319	10.2%	745,170
2010 ^a	3,259,000	1,887,000	57.9%					970,662
Mean								
1996–2009	3,022,280	1,858,080	61.5%	191,050	6.3%	230,430	7.6%	952,660
Mean								
All Years	3,345,970	2,347,980	70.2%	97,660	2.9%	174,660	5.2%	876,070

Source : Statewide Harvest Surveys; Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

^a Preliminary estimates.

Table 184-2. Sockeye salmon harvest by date during the Kenai River personal use dip net fishery, 2004–2009.

Date	2004	2005	2006 ^a	2007	2008	2009	Cumulative		Percent of Total
							Average	Average	
10-Jul	1,416	3,966	1,066	1,146	571	2,658	1,804	1,804	0.81%
11-Jul	950	3,754	848	757	721	5,542	2,095	3,899	1.75%
12-Jul	1,339	5,905	946	647	1,450	4,093	2,397	6,296	2.83%
13-Jul	10,005	5,363	820	1,698	1,143	5,228	4,043	10,339	4.65%
14-Jul	20,934	4,265	2,783	3,907	3,843	17,856	8,931	19,270	8.66%
15-Jul	18,854	16,085	8,930	4,119	11,292	21,973	13,542	32,812	14.74%
16-Jul	19,397	24,157	10,365	2,125	15,152	14,248	14,241	47,053	21.14%
17-Jul	15,715	14,353	5,390	3,990	11,848	24,914	12,702	59,755	26.85%
18-Jul	7,135	16,033	4,798	19,883	19,053	32,852	16,626	76,380	34.32%
19-Jul	4,352	8,668	6,469	6,649	23,022	27,235	12,733	89,113	40.04%
20-Jul	13,008	10,908	13,512	25,622	15,074	21,801	16,654	105,767	47.52%
21-Jul	31,776	8,153	30,607	47,331	16,294	9,502	23,944	129,711	58.28%
22-Jul	6,321	19,858	^a	19,446	8,668	10,156	12,890	142,600	64.07%
23-Jul	10,803	20,324	^a	7,651	9,401	7,795	11,195	153,795	69.10%
24-Jul	13,525	9,077	^a	11,749	4,937	6,990	9,256	163,051	73.26%
25-Jul	9,174	5,096	^a	25,865	9,738	12,861	12,547	175,598	78.90%
26-Jul	4,664	3,427	^a	19,531	13,126	12,695	10,689	186,286	83.70%
27-Jul	5,569	2,086	^a	16,388	7,534	13,187	8,953	195,239	87.72%
28-Jul	6,141	3,143	^a	16,061	5,769	12,270	8,677	203,916	91.62%
29-Jul	4,677	7,160	^a	6,482	6,165	8,533	6,603	210,519	94.59%
30-Jul	4,151	9,694	^a	6,432	7,009	9,033	7,264	217,783	97.85%
31-Jul	4,271	2,740	6,030	4,855	5,331	5,451	4,780	222,563	100.00%
1-Aug									
2-Aug									
3-Aug			102				102	102	
4-Aug			1,144				1,144	1,246	
5-Aug			3,844				3,844	5,090	
6-Aug			2,145				2,145	7,235	
7-Aug			1,707				1,707	8,942	
8-Aug			1,168				1,168	10,110	
9-Aug			1,316				1,316	11,426	
10-Aug			2,280				2,280	13,706	
Total ^b	214,177	204,215	106,270	252,334	197,141	286,873	236,269	213,897	

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

^a Emergency Order closed dipnetting on July 21; subsequent emergency orders re-opened dipnetting on July 31 and for August 3–10.

^b Daily and total estimates are from returned permit data only and are not expanded to include harvest by non-respondents.

Table 184-3. Kasilof River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Commercial Fisheries			Personal Use Fisheries			Sport Harvest	Percent of Total Run	Sonar Estimate
	Total Run	Number Harvested	Percent of Total Run	Gillnet Harvest	Dip Net Harvest	Percent of Total Run			
1981	601,996	334,739	55.6%	ND	10,300	1.7%	443	0.1%	256,625
1982	720,406	530,334	73.6%	7,543	1,800	1.3%	653	0.1%	180,239
1983	1,068,858	837,220	78.3%	8,846	11,124	1.9%	1,863	0.2%	210,271
1984	686,047	426,256	62.1%	12,926	12,771	3.7%	3,212	0.5%	231,685
1985	1,807,384	1,273,878	70.5%	10,746	16,284	1.5%	1,903	0.1%	505,049
1986	1,717,840	1,391,966	81.0%	9,609	38,674	2.8%	2,171	0.1%	275,963
1987	1,237,175	951,942	76.9%	9,375	18,454	2.2%	10,872	0.9%	249,250
1988	949,475	782,495	82.4%	9,803	3,547	1.4%	2,365	0.2%	151,856
1989 ^a	633,829	462,221	72.9%	9,928	ND	1.6%	4,632	0.7%	158,206
1990 ^a	511,484	359,497	70.3%	7,123	ND	1.4%	971	0.2%	144,136
1991 ^a	704,374	445,511	63.2%	8,380	ND	1.2%	5,216	0.7%	238,269
1992 ^{ab}	1,078,190	879,498	81.6%	ND	ND		3,501	0.3%	184,178
1993 ^a	709,951	550,339	77.5%	7,942	ND	1.1%	2,306	0.3%	149,939
1994 ^b	681,268	457,432	67.1%	ND	3,679	0.5%	2,489	0.4%	205,117
1995 ^b	714,590	487,387	68.2%	ND	4,160	0.6%	3,535	0.5%	204,935
1996	968,395	695,871	71.9%	9,506	11,197	2.1%	2,502	0.3%	249,944
1997	948,610	651,755	68.7%	17,997	9,737	2.9%	4,128	0.4%	266,025
1998	596,876	259,940	43.6%	15,975	45,161	10.2%	3,449	0.6%	273,213
1999	931,633	565,547	60.7%	12,832	37,176	5.4%	4,654	0.5%	312,587
2000	563,421	264,518	46.9%	14,774	23,877	6.9%	5,599	1.0%	256,053
2001	803,921	437,034	54.4%	17,201	37,612	6.8%	6,005	0.7%	307,570
2002	739,119	439,401	59.4%	17,980	46,769	8.8%	4,506	0.6%	226,682
2003	959,620	534,438	55.7%	15,706	43,870	6.2%	5,971	0.6%	359,633
2004	1,664,402	1,005,732	60.4%	25,417	48,315	4.4%	7,430	0.4%	577,581
2005	1,351,010	927,150	68.6%	26,609	43,151	5.2%	5,982	0.4%	348,012
2006	1,644,575	1,182,705	71.9%	28,867	56,144	5.2%	7,723	0.5%	368,092
2007	1,015,914	616,158	60.7%	14,943	43,293	5.7%	3,843	0.4%	336,866
2008	1,051,814	663,463	63.1%	23,432	54,051	7.4%	7,470	0.7%	305,199
2009	845,419	443,366	52.4%	26,646	73,035	11.8%	6,673	0.8%	297,125
2010 ^c	845,000	477,000	56.4%						267,013
Mean									
1996-2009	1,006,050	620,510	61.7%	19,130	40,960	6.0%	5,420	0.5%	316,770
Mean									
All Years	958,420	644,490	67.2%	12,760	23,940	3.8%	4,210	0.4%	269,910

Source : Statewide Harvest Surveys: Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish Biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries Biologist, ADF&G, Soldotna, personal communication.

^a No personal use dip net fishery occurred.

^b No personal use gillnet fishery occurred.

^c Preliminary estimates.

PROPOSAL 185 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Pat Hodgson.

WHAT WOULD THE PROPOSAL DO? This proposal would set an allocation for salmon taken in the Kasilof River personal use fishery, based on harvest and use in that fishery.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. Only one Upper Cook Inlet personal use salmon permit may be issued to each household per year. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each additional household member.

The Kasilof River personal use set gillnet fishery is open from June 15–24, seven days per week, from 6:00 a.m. to 11:00 p.m. The Kasilof River personal use dip net fishery is open seven days per week, 24-hours per day from June 25 through August 7.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the harvest of salmon in the Kasilof River personal use fisheries. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: In 1995, the Alaska Supreme Court overturned an October 1993 Superior Court decision (in *Kenaitze vs. Alaska*) that found unconstitutional the provision in a 1992 state subsistence law that directed the board to designate nonsubsistence use areas. This new ruling re-established the Anchorage/Mat-Su/Kenai nonsubsistence use area. The board convened an emergency meeting by teleconference on May 24, 2005 to close subsistence fisheries in the now nonsubsistence use area. The board delegated the commissioner to readopt the *Upper Cook Inlet Subsistence Salmon Management Plan* as a personal use fishery, having the same regulations as the 1994 subsistence fishery, which included a household annual limit of 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

In 1984, the board created a personal use salmon fishery in the Copper River drainage under the *Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.590). The limits in this fishery are 15 salmon for a single person and 30 salmon for a household of two or more, only one of which may be a king salmon. Prior to 1997, maximum allowable harvest for the Chitina Subdistrict of the Copper River dip net fishery was 60,000 salmon, with 25% of fish in excess of the inriver goal allocated to the personal use fishery. From 1997–1999, maximum allowable harvest was increased to 100,000 salmon, excluding fish in excess of the inriver goal as well as any salmon harvested after August 31. In 2000, following the 1999 board reclassification of the Chitina Subdistrict as a subsistence fishery, the amount reasonably necessary to meet subsistence needs was determined to be 100,000–150,000 salmon. In 2003, the board reversed its 1999 decision and reclassified the Chitina Subdistrict as a personal use fishery, but maintained the harvest level and bag limits.

In the Kasilof River, from 1996 through 2001, the personal use gillnet fishery opened on June 16 and closed by emergency order when approximately 10,000–20,000 fish had been harvested. The fishery was generally about nine days in duration. Beginning in 2002, the personal use gillnet season changed to June 15–24, and the 27-day dip net fishing season (July 10 through August 5) was changed to a 44-day season (June 25 through August 7). The Kasilof River personal use gillnet fishery season was extended one day by emergency order in 2005 in response to sockeye salmon run strength. The Kasilof River personal use dip net fishery has been liberalized inseason on several occasions by expanding the area open to dipnetting from shore and from a boat. These liberalizations for the dip net fishery occurred from 2004 to 2009 because the escapement rate of sockeye salmon into the Kasilof River was proceeding at a rate greater than that needed to ensure the biological escapement goal would be met. In each of these years the biological escapement goal (150,000–250,000) and optimum escapement goal (150,000–300,000) of sockeye salmon were exceeded. From 1996 to 2009, the combined gillnet and dip net Kasilof River personal use harvest has ranged from 20,703 to 99,681 sockeye salmon (Figure 185-1). Since 2002, the Kasilof River personal use dip net fishery harvest of sockeye salmon has averaged 51,080 and the personal use gillnet fishery has averaged 22,450 (Table 185-1).

The Alaska Department of Natural Resources, Division of Mining, Land and Water has initiated a public process to create a Kasilof River Special Use Area. This process will create regulations on State of Alaska public domain lands managed by DNR where the Kasilof River personal use fisheries occur. A focus of this effort is to create land-use regulations to minimize habitat degradation around the mouth of the Kasilof River.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

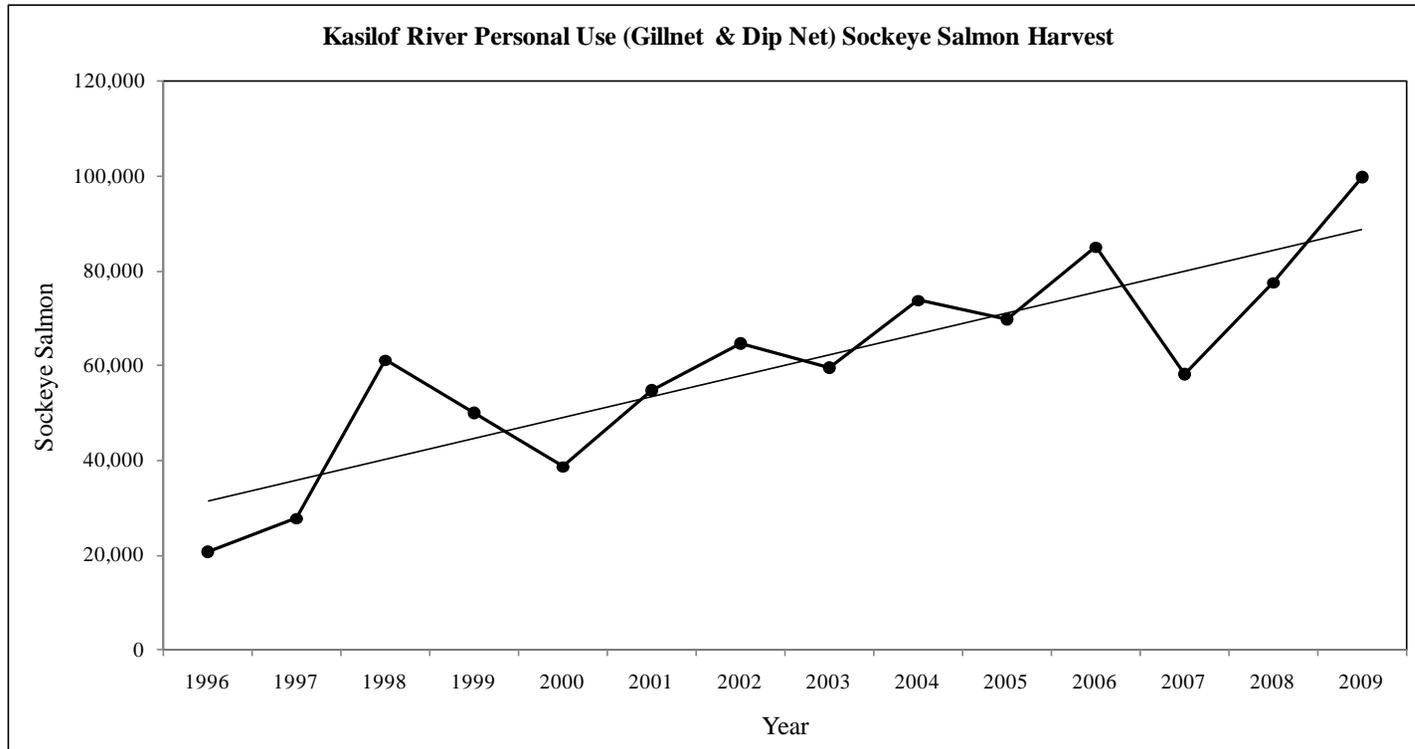


Figure 185-1. Personal use sockeye salmon harvest from the Kasilof River, 1996–2009.

Table 185-1. Kasilof River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Commercial Fisheries			Personal Use Fisheries			Sport Harvest	Percent of Total Run	Sonar Estimate
	Total Run	Number Harvested	Percent of Total Run	Gillnet Harvest	Dip Net Harvest	Percent of Total Run			
1981	601,996	334,739	55.6%	ND	10,300	1.7%	443	0.1%	256,625
1982	720,406	530,334	73.6%	7,543	1,800	1.3%	653	0.1%	180,239
1983	1,068,858	837,220	78.3%	8,846	11,124	1.9%	1,863	0.2%	210,271
1984	686,047	426,256	62.1%	12,926	12,771	3.7%	3,212	0.5%	231,685
1985	1,807,384	1,273,878	70.5%	10,746	16,284	1.5%	1,903	0.1%	505,049
1986	1,717,840	1,391,966	81.0%	9,609	38,674	2.8%	2,171	0.1%	275,963
1987	1,237,175	951,942	76.9%	9,375	18,454	2.2%	10,872	0.9%	249,250
1988	949,475	782,495	82.4%	9,803	3,547	1.4%	2,365	0.2%	151,856
1989 ^a	633,829	462,221	72.9%	9,928	ND	1.6%	4,632	0.7%	158,206
1990 ^a	511,484	359,497	70.3%	7,123	ND	1.4%	971	0.2%	144,136
1991 ^a	704,374	445,511	63.2%	8,380	ND	1.2%	5,216	0.7%	238,269
1992 ^{ab}	1,078,190	879,498	81.6%	ND	ND		3,501	0.3%	184,178
1993 ^a	709,951	550,339	77.5%	7,942	ND	1.1%	2,306	0.3%	149,939
1994 ^b	681,268	457,432	67.1%	ND	3,679	0.5%	2,489	0.4%	205,117
1995 ^b	714,590	487,387	68.2%	ND	4,160	0.6%	3,535	0.5%	204,935
1996	968,395	695,871	71.9%	9,506	11,197	2.1%	2,502	0.3%	249,944
1997	948,610	651,755	68.7%	17,997	9,737	2.9%	4,128	0.4%	266,025
1998	596,876	259,940	43.6%	15,975	45,161	10.2%	3,449	0.6%	273,213
1999	931,633	565,547	60.7%	12,832	37,176	5.4%	4,654	0.5%	312,587
2000	563,421	264,518	46.9%	14,774	23,877	6.9%	5,599	1.0%	256,053
2001	803,921	437,034	54.4%	17,201	37,612	6.8%	6,005	0.7%	307,570
2002	739,119	439,401	59.4%	17,980	46,769	8.8%	4,506	0.6%	226,682
2003	959,620	534,438	55.7%	15,706	43,870	6.2%	5,971	0.6%	359,633
2004	1,664,402	1,005,732	60.4%	25,417	48,315	4.4%	7,430	0.4%	577,581
2005	1,351,010	927,150	68.6%	26,609	43,151	5.2%	5,982	0.4%	348,012
2006	1,644,575	1,182,705	71.9%	28,867	56,144	5.2%	7,723	0.5%	368,092
2007	1,015,914	616,158	60.7%	14,943	43,293	5.7%	3,843	0.4%	336,866
2008	1,051,814	663,463	63.1%	23,432	54,051	7.4%	7,470	0.7%	305,199
2009	845,419	443,366	52.4%	26,646	73,035	11.8%	6,673	0.8%	297,125
2010 ^c	845,000	477,000	56.4%						267,013
Mean									
1996-2009	1,006,050	620,510	61.7%	19,130	40,960	6.0%	5,420	0.5%	316,770
Mean									
All Years	958,420	644,490	67.2%	12,760	23,940	3.8%	4,210	0.4%	269,910

Source : Statewide Harvest Surveys: Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish Biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries Biologist, ADF&G, Soldotna, personal communication.

^a No personal use dip net fishery occurred.

^b No personal use gillnet fishery occurred.

^c Preliminary estimates.

PROPOSAL 186 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Chris Every.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a bag limit of 15 salmon per family in the Kenai River personal use dip net fishery and prohibit personal use fishing until the escapement goal will be achieved.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The Upper Cook Inlet personal use salmon permit covers four fisheries, gillnetting on the Kasilof River, and dipnetting on the Kenai River, Kasilof River, and Fish Creek. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24-hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the number of days the Kenai River personal use salmon fishery would be open or prevent the Kenai River personal use salmon fishery from opening if escapement goals were not met, or if the goal was not expected to be exceeded by the time the fishery is scheduled to close by regulation. It would likely reduce the number of salmon, primarily sockeye salmon, harvested in the Kenai River personal use fishery and would increase crowding into the remaining days the fishery would be open. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

This proposal would also create a difference in bag limits between the Kenai River personal use dip net fishery and the other three fisheries which are contained within same Upper Cook Inlet personal use salmon permit.

BACKGROUND: In 1995, the Alaska Supreme Court overturned an October 1993 Superior Court decision (in *Kenaitze vs. Alaska*) that found unconstitutional the provision in a 1992 state subsistence law that directed the board to designate nonsubsistence use areas. This new ruling re-established the Anchorage/Mat-Su/Kenai nonsubsistence use area. The board convened an emergency meeting by teleconference on May 24, 2005 to close subsistence fisheries in the now nonsubsistence use area. The board delegated the commissioner to readopt the *Upper Cook Inlet Subsistence Salmon Management Plan* as a personal use fishery, having the same regulations as the 1994 subsistence fishery, which included a household annual limit was 25 salmon for the

head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. In 2002, the management plan was modified to manage the fishery more conservatively until inseason abundance information became available. The season dates remained unchanged, but the daily hours were reduced from 24 hours per day to 6:00 a.m. to 11:00 p.m. until the department could project that the total Kenai River late-run sockeye salmon run would exceed two million fish. If the department can determine that the Kenai River late-run sockeye salmon run exceeds two million fish, the department has emergency order authority to liberalize the fishery to 24 hours per day until the season closure on July 31

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. Harvest of sockeye salmon was 103,847 fish in 1998 and 127,630 fish in 2006 (Table 186-1; Figure 186-1). During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The personal use harvest of sockeye salmon during these years averaged 194,527 fish. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years. The average sockeye salmon harvest in the Kenai River during years the fishery was liberalized was 250,641 fish. During 1996–2009, the average harvest per permit has ranged from about 9 to 17 salmon (Table 186-2). Most households do not reach the allowable limit; about 40% of permit holders, on average, attain the allowable bag limit (Table 186-2).

A household bag limit of 15 salmon in the Kenai River personal use dip net fishery could result in an approximate 10% to 13% reduction in dip netting effort (days fished) and a 39% to 44% reduction in harvest of sockeye salmon in the Kenai River personal use fishery (Tables 186-3, 186-4, and 186-5).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 186-1. Kenai River sockeye salmon total run abundance, commercial, personal use, sport and sonar estimate by year, 1981–2010.

Year	Total Run	Commercial Fisheries		Personal Use Dip Net		Inriver Sport		Sonar Estimate
		Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	Number Harvested	Percent of Total Run	
1981	913,763	511,131	55.9%	ND		19,721	2.2%	407,639
1982	2,539,635	1,913,193	75.3%	Unknown		50,103	2.0%	619,831
1983	3,636,921	2,985,442	82.1%	7,562	0.2%	71,267	2.0%	630,340
1984	1,049,519	702,335	66.9%	ND		15,702	1.5%	344,571
1985	2,148,239	1,635,779	76.1%	ND		57,337	2.7%	502,820
1986	2,691,045	2,188,409	81.3%	ND		72,398	2.7%	501,157
1987	8,572,845	6,938,572	80.9%	24,086	0.3%	240,819	2.8%	1,596,871
1988	5,752,895	4,730,749	82.2%	16,880	0.3%	152,751	2.7%	1,021,469
1989	5,862,323	4,145,014	70.7%	48,976	0.8%	277,906	4.7%	1,599,959
1990	2,685,214	2,075,919	77.3%	ND		120,788	4.5%	659,520
1991	1,682,597	1,093,851	65.0%	ND		161,678	9.6%	647,597
1992	7,716,559	6,660,256	86.3%	12,189	0.2%	242,491	3.1%	994,798
1993	3,904,145	3,035,627	77.8%	33,467	0.9%	137,179	3.5%	813,617
1994	3,382,316	2,335,429	69.0%	ND		93,616	2.8%	1,003,446
1995	2,270,352	1,587,520	69.9%	14,352	0.6%	125,428	5.5%	630,447
1996	3,173,542	2,297,324	72.4%	102,821	3.2%	186,291	5.9%	797,847
1997	3,876,451	2,704,036	69.8%	114,619	3.0%	177,133	4.6%	1,064,818
1998	1,470,877	636,171	43.3%	103,847	7.1%	164,536	11.2%	767,558
1999	2,502,572	1,551,907	62.0%	149,504	6.0%	200,574	8.0%	803,379
2000	1,441,611	705,699	49.0%	98,262	6.8%	230,983	16.0%	624,578
2001	1,841,801	1,028,205	55.8%	150,766	8.2%	200,762	10.9%	650,036
2002	2,972,502	1,827,466	61.5%	180,028	6.1%	225,917	7.6%	957,924
2003	3,788,166	2,321,047	61.3%	223,580	5.9%	286,089	7.6%	1,181,309
2004	4,992,136	3,289,237	65.9%	262,831	5.3%	294,793	5.9%	1,385,981
2005	5,550,441	3,818,737	68.8%	295,496	5.3%	294,287	5.3%	1,376,452
2006	2,509,615	862,338	34.4%	127,630	5.1%	173,425	6.9%	1,499,692
2007	3,416,650	2,202,073	64.5%	291,270	8.5%	308,850	9.0%	867,572
2008	2,304,587	1,407,952	61.1%	234,109	10.2%	230,030	10.0%	614,946
2009	2,470,906	1,360,934	55.1%	339,993	13.8%	252,319	10.2%	745,170
2010 ^a	3,259,000	1,887,000	57.9%					970,662
Mean								
1996–2009	3,022,280	1,858,080	61.5%	191,050	6.3%	230,430	7.6%	952,660
Mean								
All Years	3,345,970	2,347,980	70.2%	97,660	2.9%	174,660	5.2%	876,070

Source : Statewide Harvest Surveys; Brannian and Fox 1996; Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication; P. Shields, Commercial Fisheries biologist, ADF&G, Soldotna, personal communication.

^a Preliminary estimates.

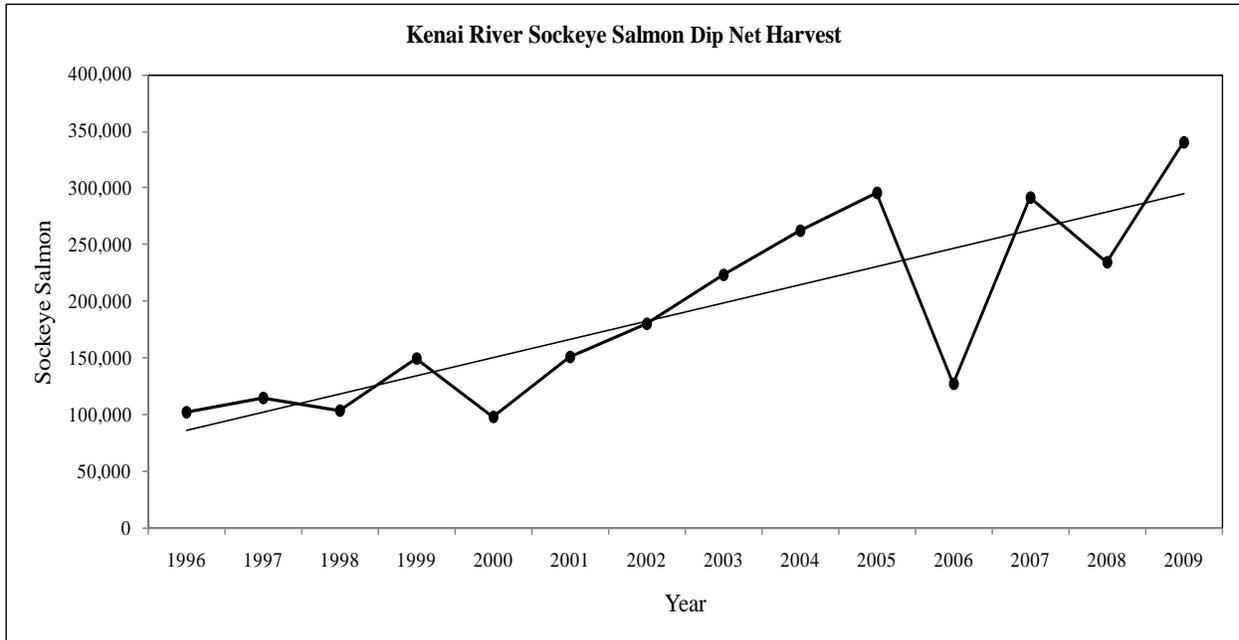


Figure 186-1. Personal use dip net sockeye salmon harvest from the Kenai River, 1996–2009.

Table 186-2. Average harvest of salmon per permit per year, in the Kenai River and Kasilof River personal use fisheries, and percent of permits achieving bag limit by year, 1996–2010.

Year	Average Harvest per permit	Average % of bag limits filled
1996	8.84	35.3
1997	9.67	39.2
1998	10.88	43.2
1999	11.86	44.2
2000	8.88	36.0
2001	12.46	43.7
2002	14.62	48.9
2003	15.12	50.6
2004	15.70	38.6
2005	17.01	39.7
2006	12.42	29.6
2007	15.49	37.5
2008	13.85	34.5
2009	15.24	38.8
2010		
Mean	13.00	39.99

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

Table 186-3. Estimated effort and harvest for bag limit reduction scenarios in the Kenai and Kasilof rivers personal use fisheries, 2007.

	Kenai River Dip Net		Kasilof River Dip Net		Kasilof River Gill Net		
	Days Fished	Sockeye	Days Fished	Sockeye	Days Fished	Sockeye	
Actual Estimates	21,908	291,270	4,627	43,293	1,570	14,943	
Estimated harvest under reduced household limit	10 salmon (all fisheries)	17,772	116,334	3,566	18,560	1,147	6,549
	Effort/Harvest Reduction	4,136	174,936	1,061	24,733	423	8,394
	% Effort/Harvest Reduction	18.9%	60.1%	22.9%	57.1%	26.9%	56.2%
	15 salmon (all fisheries)	18,851	161,114	3,901	25,078	1282	8931
	Effort/Harvest Reduction	3,057	130,156	726	18,215	288	6,012
	% Effort/Harvest Reduction	14.0%	44.7%	15.7%	42.1%	18.3%	40.2%
	10 salmon + 5 (all fisheries)	19,953	200,748	4,115	30,625	1,364	10,615
	Effort/Harvest Reduction	1,955	90,522	512	12,668	206	4,328
	% Effort/Harvest Reduction	8.9%	31.1%	11.1%	29.3%	13.1%	29.0%
	20 salmon (all fisheries)	19,892	197,319	4,451	30,277	1,377	10,728
	Effort/Harvest Reduction	2,016	93,951	176	13,016	193	4,215
	% Effort/Harvest Reduction	9.2%	32.3%	3.8%	30.1%	12.3%	28.2%
	20 salmon + 5 (all fisheries)	21,249	253,514	4,451	38,281	1,505	13,234
	Effort/Harvest Reduction	659	37,756	176	5,012	65	1,709
	% Effort/Harvest Reduction	3.0%	13.0%	3.8%	11.6%	4.1%	11.4%
	15 salmon (Kenai only)	19,159	163,759	4,627	43,293	1,570	14,943
	Effort/Harvest Reduction	2,749	127,510	0	0	0	0
	% Effort/Harvest Reduction	12.5%	43.8%	0.0%	0.0%	0.0%	0.0%

Table 186-4. Estimated effort and harvest for bag limit reduction scenarios in the Kenai and Kasilof rivers personal use fisheries, 2008.

	Kenai River Dip Net		Kasilof River Dip Net		Kasilof River Gill Net		
	Days Fished	Sockeye	Days Fished	Sockeye	Days Fished	Sockeye	
Actual Estimates	20,772	234,109	5,552	54,051	1,534	23,432	
Estimated harvest under reduced household limit	10 salmon (all fisheries)	17,254	104,142	4,370	22,846	1,027	7,362
	Effort/Harvest Reduction	3,518	129,967	1,182	31,205	507	16,070
	% Effort/Harvest Reduction	16.9%	55.5%	21.3%	57.7%	33.0%	68.6%
	15 salmon (all fisheries)	18,433	140,677	4,764	31,077	1,164	10,736
	Effort/Harvest Reduction	2,339	93,432	788	22,974	370	12,696
	% Effort/Harvest Reduction	11.3%	39.9%	14.2%	42.5%	24.1%	54.2%
	10 salmon + 5 (all fisheries)	19,307	171,030	5,025	38,397	1,247	13,395
	Effort/Harvest Reduction	1,465	63,079	527	15,654	287	10,037
	% Effort/Harvest Reduction	7.1%	26.9%	9.5%	29.0%	18.7%	42.8%
	20 salmon (all fisheries)	19,299	169,189	5,036	37,603	1,280	13,782
	Effort/Harvest Reduction	1,473	64,920	516	16,448	254	9,650
	% Effort/Harvest Reduction	7.1%	27.7%	9.3%	30.4%	16.5%	41.2%
	20 salmon + 5 (all fisheries)	20,393	209,998	5,376	47,589	1,423	18,727
	Effort/Harvest Reduction	379	24,111	176	6,462	111	4,705
	% Effort/Harvest Reduction	1.8%	10.3%	3.2%	12.0%	7.2%	20.1%
	15 salmon (Kenai only)	18,694	143,807	5,552	54,051	1,534	23,432
	Effort/Harvest Reduction	2,078	90,302	0	0	0	0
	% Effort/Harvest Reduction	10.0%	38.6%	0.0%	0.0%	0.0%	0.0%

Table 186-5. Estimated effort and harvest for bag limit reduction scenarios in the Kenai and Kasilof rivers personal use fisheries, 2009.

	Kenai River Dip Net		Kasilof River Dip Net		Kasilof River Gill Net		
	Days Fished	Sockeye	Days Fished	Sockeye	Days Fished	Sockeye	
Actual Estimates	26,171	339,993	7,650	73,035	1,761	26,646	
Estimated harvest under reduced household limit	10 salmon (all fisheries)	21,125	137,764	5,723	31,260	1,189	8,562
	Effort/Harvest Reduction	5,046	202,229	1,927	41,775	572	18,084
	% Effort/Harvest Reduction	19.3%	59.5%	25.2%	57.2%	32.5%	67.9%
	15 salmon (all fisheries)	22,707	189,841	6,348	42,532	1,344	12,464
	Effort/Harvest Reduction	3,464	150,151	1,302	30,504	417	14,182
	% Effort/Harvest Reduction	13.2%	44.2%	17.0%	41.8%	23.7%	53.2%
	10 salmon + 5 (all fisheries)	23,904	234,627	6,773	52,194	1,442	15,432
	Effort/Harvest Reduction	2,267	105,366	877	20,841	319	11,214
	% Effort/Harvest Reduction	8.7%	31.0%	11.5%	28.5%	18.1%	42.1%
	20 salmon (all fisheries)	23,928	232,069	6,778	51,239	1,475	15,932
	Effort/Harvest Reduction	2,243	107,923	872	21,796	286	10,714
	% Effort/Harvest Reduction	8.6%	31.7%	11.4%	29.8%	16.2%	40.2%
	20 salmon + 5 (all fisheries)	25,523	296,458	7,358	64,556	1,652	21,434
	Effort/Harvest Reduction	648	43,534	292	8,479	110	5,211
	% Effort/Harvest Reduction	2.5%	12.8%	3.8%	11.6%	6.2%	19.6%
	15 salmon (Kenai only)	23,111	194,280	7,650	73,035	1,761	26,646
	Effort/Harvest Reduction	3,060	145,713	0	0	0	0
	% Effort/Harvest Reduction	11.7%	42.9%	0.0%	0.0%	0.0%	0.0%

PROPOSAL 187 - 5 AAC 77.525. Personal use salmon fishery.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the household limit to 10 salmon in all Cook Inlet personal use salmon fisheries and prohibit additional harvest for each dependent of the permit holder.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the total salmon harvest for each permit holder participating in the Upper Cook Inlet personal use fisheries, regardless of household size. If total harvest was reduced by a large amount it may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. It may initially result in less crowding, however, since, after adapting to the new limit, a larger number of permit holders could participate in the personal use fishery because less time would be needed to attain the lower household limit.

BACKGROUND: In 1995, the Alaska Supreme Court overturned an October 1993 Superior Court decision (in *Kenaitze vs. Alaska*) that found unconstitutional the provision in a 1992 state subsistence law that directed the board to designate nonsubsistence use areas. This new ruling re-established the Anchorage/Mat-Su/Kenai nonsubsistence use area. The board convened an emergency meeting by teleconference on May 24, 2005 to close subsistence fisheries in the now nonsubsistence use area. The board delegated the commissioner to readopt the *Upper Cook Inlet Subsistence Salmon Management Plan* as a personal use fishery, having the same regulations as the 1994 subsistence fishery, which included a household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

During 1996–2009 the average harvest per Upper Cook Inlet personal use salmon permit has ranged from about 9 to 15 salmon (Table 187-1). Most households do not reach the allowable limit; about 40% of permit holders, on average, attain the allowable bag limit (Table 187-1).

A household bag limit of 10 salmon in Upper Cook Inlet personal use fisheries could result in an approximate 56% to 60% reduction in the harvest of sockeye salmon in the Kenai River personal use dip net fishery, a reduction in the harvest of sockeye salmon in the Kasilof River personal use fishery of about 57%, and a 56% to 69% reduction in harvest of sockeye salmon in the Kasilof River personal use gillnet fishery (see tables 186-3, 186-4, and 186-5).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 187-1. Average harvest of salmon per permit per year, in the Kenai River and Kasilof River personal use fisheries, and percent of permits achieving bag limit by year, 1996–2010.

Year	Average Harvest per permit	Average % of bag limits filled
1996	8.84	35.3
1997	9.67	39.2
1998	10.88	43.2
1999	11.86	44.2
2000	8.88	36.0
2001	12.46	43.7
2002	14.62	48.9
2003	15.12	50.6
2004	15.70	38.6
2005	17.01	39.7
2006	12.42	29.6
2007	15.49	37.5
2008	13.85	34.5
2009	15.24	38.8
2010		
Mean	13.00	39.99

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

PROPOSAL 188 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Steve Vanek.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the household permit limit in the Kenai River personal use dip net fishery to 10 salmon per head of household and 5 salmon for each dependent of the permit holder until the lower end of the escapement goal has been met. This proposal also offers an alternative action that would open the dip net fishery on July 20 instead of July 10, while keeping the existing total annual household limit of 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder.

WHAT ARE THE CURRENT REGULATIONS? Personal use salmon fisheries are open only to residents of the state. In Cook Inlet, only one personal use salmon permit may be issued to each household per year. The Upper Cook Inlet personal use salmon permit covers four fisheries, gillnetting on the Kasilof River, and dipnetting on the Kenai River, Kasilof River, and Fish Creek. The total annual limit for each personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. Only one king salmon may be retained from the Kenai River dip net fishery.

Subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River. In the Kenai River, salmon may be taken by dip net from July 10 through July 31, 7 days per week, from 6:00 a.m. to 11:00 p.m. The commissioner may extend, by emergency order, the personal use fishery to 24-hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than two million.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce salmon harvest in the Kenai River personal use fishery and it may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance. If the household limit was reduced, it would reduce the salmon harvest, primarily sockeye salmon, for each permit holder participating in the Kenai River personal use fishery, regardless of household size. If the opening date of the fishery was changed to begin July 20, the proposal would increase crowding into the shortened, 12-day season. The reduced household limit may initially result in less crowding, however, since, after adapting to the new limit, a larger number of permit holders could participate in the personal use fishery because less time would be needed to attain the lower household limit.

This proposal would also create a difference in bag limits between the Kenai River personal use dip net fishery and the other three fisheries which are contained within same Upper Cook Inlet personal use salmon permit.

BACKGROUND: In 1995, the Alaska Supreme Court overturned an October 1993 Superior Court decision (in *Kenaitze vs. Alaska*) that found unconstitutional the provision in a 1992 state subsistence law that directed the board to designate nonsubsistence use areas. This new ruling re-established the Anchorage/Mat-Su/Kenai nonsubsistence use area. The board convened an

emergency meeting by teleconference on May 24, 2005 to close subsistence fisheries in the now nonsubsistence use area. The board delegated the commissioner to readopt the *Upper Cook Inlet Subsistence Salmon Management Plan* as a personal use fishery, having the same regulations as the 1994 subsistence fishery, which included a household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

Beginning with the 1996 season, the board established a season of July 10 to August 5 (later amended to July 31) for the dip net fishery in the Kenai River. Establishment of a regular season provided predictability to this fishery. The regulatory season dates were independent of the abundance of returning salmon and were not tied to the management plans for other user groups. The household annual limit was 25 salmon for the head of the household and 10 additional salmon per member of the household, of which only one king salmon could be retained per household.

The *Kenai River Late-Run Sockeye Salmon Management Plan* (5 AAC 21.360) provides direction to liberalize and restrict the personal use salmon fishery, based upon meeting the optimal escapement goal, when circumstances require. The Kenai River personal use dip net fishery was closed inseason by emergency order in 1998 due to low abundance of Kenai River late-run sockeye salmon, and in 2006 due to late run timing. Harvest of sockeye salmon was 103,847 fish in 1998 and 127,630 fish in 2006 (Table 188-1; Figure 188-1). During 1999–2001, 2008, and 2009, the Kenai River personal use dip net fishery was not liberalized or restricted because of the strengths of the sockeye salmon runs. The personal use harvest of sockeye salmon during these years averaged 194,527 fish. The Kenai River personal use dip net fishery was liberalized during the 2002–2005, 2007, and 2010 seasons. The fishery was liberalized by increasing the daily hours the fishery was open; this liberalization was based on inseason projections of sockeye salmon run strengths greater than two million fish during those years. The average sockeye salmon harvest in the Kenai River during years the fishery was liberalized was 250,641 fish.

During 1996–2009, the average harvest per Upper Cook Inlet personal use permit has ranged from about 9 to 15 salmon (Table 188-2). Most households do not reach the allowable limit; about 40% of permit holders, on average, attain the allowable bag limit (Table 188-2).

A household bag limit of 10 salmon per head of household and 5 salmon for each dependent of the permit holder in Upper Cook Inlet personal use fisheries could result in an approximate 27% to 31% reduction in the harvest of sockeye salmon in the Kenai River personal use dip net fishery (see tables 186-3, 186-4, and 186-5).

The *Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.591) requires that the personal use salmon harvest be distributed from June 1 through August 31, based upon projected sonar estimates. The personal use fishery is open by regulation for the month of September. A preseason schedule is established each year that sets weekly fishing periods for the Chitina Subdistrict personal use salmon fishery based on projected inriver returns. Actual inriver returns are estimated inseason by the sonar project located at Miles Lake. When an escapement of more or less than the projected inriver goal of salmon actually passes the sonar project, the board has instructed the department to decrease or increase personal use fishing time by the corresponding

percentage. For management purposes, a weekly fishery period is from Monday through Sunday. Based upon previous migration studies, a two-week travel period from the Miles Lake sonar project to Wood Canyon, near the lower boundary of the Chitina Subdistrict, is used for management purposes from June through mid July; a three-week travel period is used for mid July until the sonar is removed. Any salmon above the projected daily salmon escapement are considered surplus. Since 1998, when the department determines that a weekly harvestable surplus of 50,000 salmon or more will be present in the Chitina Subdistrict, a supplemental permit for 10 additional sockeye salmon is available to permit applicants who have already met their annual limit.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Management of personal use fisheries differs in other areas of the state based upon characteristics unique to each location. The location of the Kenai River sonar project upstream of the personal use fishery does not allow for use of the management design used on the Copper River.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 188-1. Kenai River personal use dip net fishery total salmon harvest by year, 1996–2009.

Year	Sockeye	Chinook	Coho	Pink	Chum	Total
1996	102,821	295	1,932	2,404	175	107,627
1997	114,619	364	559	619	58	116,219
1998	103,847	254	1,011	1,032	85	106,229
1999	149,504	488	1,009	1,666	102	152,769
2000	98,262	410	1,449	1,457	193	101,771
2001	150,766	638	1,555	1,326	155	154,440
2002	180,028	606	1,721	5,662	551	188,568
2003	223,580	1,016	1,332	1,647	249	227,824
2004	262,831	792	2,661	2,103	387	268,774
2005	295,496	997	2,512	1,806	321	301,132
2006	127,630	1,034	2,235	11,127	551	142,577
2007	291,270	1,509	2,111	1,939	472	297,301
2008	234,109	1,362	2,609	10,631	504	249,215
2009	339,993	1,189	2,401	5,482	285	349,350
Min.	98,262	254	559	619	58	101,771
Mean	191,054	782	1,793	3,493	292	197,414
Max.	339,993	1,509	2,661	11,127	551	349,350

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

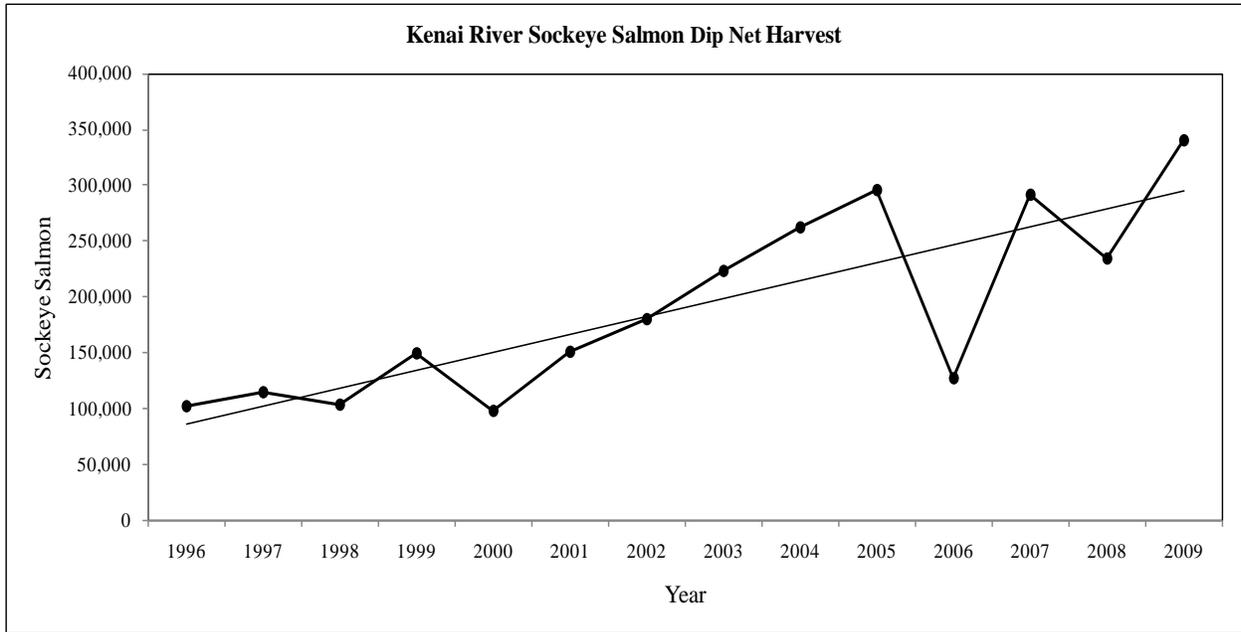


Figure 188-1. Personal use dip net sockeye salmon harvest from the Kenai River, 1996–2009.

Table 188-2. Average harvest of salmon per permit per year, in the Kenai River and Kasilof River personal use fisheries, and percent of permits achieving bag limit by year, 1996–2010.

Year	Average Harvest per permit	Average % of bag limits filled
1996	8.84	35.3
1997	9.67	39.2
1998	10.88	43.2
1999	11.86	44.2
2000	8.88	36.0
2001	12.46	43.7
2002	14.62	48.9
2003	15.12	50.6
2004	15.70	38.6
2005	17.01	39.7
2006	12.42	29.6
2007	15.49	37.5
2008	13.85	34.5
2009	15.24	38.8
2010		
Mean	13.00	39.99

Source: K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

PROPOSAL 189 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Kenai Soldotna Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit retention of king salmon in the Kenai River personal use dip net fishery.

WHAT ARE THE CURRENT REGULATIONS? The total annual limit for each Upper Cook Inlet personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each. Only one king salmon per household permit may be retained from the Kenai River dip net fishery. No retention of king salmon is allowed in the Kasilof or Fish Creek dip net fisheries.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would eliminate king salmon personal use harvest on the Kenai River. This proposal would slightly increase the inriver run strength of late-run Kenai River king salmon, and would have an unknown, but likely unmeasurable effect on the overall performance of the inriver sport fishery.

BACKGROUND: From 1996–2009, the personal use harvest of king salmon in the Kenai River dip net fishery has ranged from 254 to 1,509 fish and averaged 782 fish (Table 189-1). Retention of king salmon in the Kenai River personal use dip net fishery has not been restricted inseason due to concern about achieving the late-run king salmon escapement goal.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The department currently has the emergency order authority to prohibit the retention of king salmon in the Kenai River personal use dip net fishery inseason if the department projects that the escapement goal for late-run king salmon would not be met.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 189-1. Personal use dip net and set gillnet harvest of king salmon, Cook Inlet, 1996–2010.

Year	Kenai River	Kasilof River		Fish Creek
		Gillnet	Dip Net	
1996	295	46	50	37
1997	364	65	35	0
1998	254	126	134	1
1999	488	442	127	0
2000	410	514	134	0
2001	638	174	138	0
2002	606	192	106	ND
2003	1016	400	57	ND
2004	792	163	44	ND
2005	997	87	16	ND
2006	1034	287	55	ND
2007	1509	343	35	ND
2008	1362	151	46	ND
2009	1189	127	34	10
2010				
Min.	254	46	16	0
Mean	782	223	72	7
Max.	1,509	514	138	37

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K.J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

ND - No personal use fishery.

PROPOSAL 190 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Richard Hansen.

WHAT WOULD THE PROPOSAL DO? This proposal would require all salmon caught in Upper Cook Inlet personal use dip net fisheries to be retained, except that only one king per household would be allowed.

WHAT ARE THE CURRENT REGULATIONS? The total annual limit for each Upper Cook Inlet personal use salmon fishing permit is 25 salmon for the head of a household and 10 salmon for each. Only one king salmon per household permit may be retained from the Kenai River dip net fishery. No retention of king salmon is allowed in the Kasilof River, Beluga River, or Fish Creek dip net fisheries.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of king salmon and possibly pink salmon in the Kasilof River and Fish Creek personal use dip net fisheries by an unknown amount.

BACKGROUND: From 1996–2009, the personal use harvest of king salmon in the Kenai River dip net fishery has ranged from 254 to 1,509 fish and averaged 782 fish (Table 190-1). Retention of king salmon in the Kenai River personal use dip net fishery has not been restricted inseason due to concern about achieving the late-run king salmon escapement goal.

Harvest of king salmon in the Kasilof River personal use set gillnet fishery is allowed due to the nonselective nature of the gear. From 1996–2009, the personal use king salmon harvest in this fishery has ranged from 46 to 514 fish and averaged 223 (Table 190-1). In the Kasilof River personal use dip net fishery, the estimated harvest has ranged from 16 to 138 king salmon and averaged 72 fish. An escapement goal for Kasilof River late-run king salmon has not been established.

Current regulations on Fish Creek already allow for the harvest of coho salmon in the personal use fishery although the season for the fishery typically ends on July 31, prior to the onset of the coho salmon run. During the 2009 fishing season, the department issued an emergency order opening the Fish Creek personal use fishery August 1 through August 7. This unusual opening occurred in response to a late surge of sockeye salmon returning to the river and escapement projected to exceed the escapement goal. In an effort to minimize negative impacts on sport fishing for coho salmon, the emergency order stipulated that any salmon caught other than sockeye salmon must be released. During 2010, a total of eight king salmon were enumerated passing through the Fish Creek weir. Fish Creek supports a minor run of early king salmon that return from mid May through June and spawn from late July–August. The Fish Creek stock is similar to several small populations of king salmon that are present in Cook Inlet, and abundance, combined with limited information on population status, preclude establishment of fisheries that target these stocks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The department does not have an inseason assessment program for late-run Kasilof River king salmon and the Fish Creek king salmon run is too small to support an inriver harvest.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 190-1. Personal use dip net and set gillnet harvest of king salmon, Cook Inlet, 1996–2010.

Year	Kenai River	Kasilof River		Fish Creek
		Gillnet	Dip Net	
1996	295	46	50	37
1997	364	65	35	0
1998	254	126	134	1
1999	488	442	127	0
2000	410	514	134	0
2001	638	174	138	0
2002	606	192	106	ND
2003	1016	400	57	ND
2004	792	163	44	ND
2005	997	87	16	ND
2006	1034	287	55	ND
2007	1509	343	35	ND
2008	1362	151	46	ND
2009	1189	127	34	10
2010				
Min.	254	46	16	0
Mean	782	223	72	7
Max.	1,509	514	138	37

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K.J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

ND - No personal use fishery.

PROPOSAL 191 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce allowable mesh size in Upper Cook Inlet personal use salmon dip net fisheries to two inches or less, or prohibit release of caught fish.

WHAT ARE THE CURRENT REGULATIONS? Dip nets are legal gear as defined under the statewide general provisions of 5 AAC 39.105 (d) (24). *Types of legal gear.* A dip net is a bag-shaped net supported on all sides by a rigid frame; the maximum straight-line distance between any two points on the net frame, as measured through the net opening, may not exceed five feet; the depth of the bag must be at least one-half of the greatest straight-line distance, as measured through the net opening; no portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches; the frame must be attached to a single rigid handle and be operated by hand.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? A reduction in mesh size from the current 4.5 inches may result in fewer sockeye salmon harvested in the personal use dip net fisheries. The elimination of gillnet material from dip nets could reduce the overall harvest efficiency of individual personal use fishermen and there may be some unknown decline in harvest. Personal use fishermen may require more time to obtain the same amount of fish. If release were prohibited, it may result in an increase in harvest, since fishermen would have to retain species with more restrictive household permit limits, such as flounder and king salmon.

BACKGROUND: Prior to 1988, there were no restrictions on mesh size that could be used in a dip net. In 1988, the board adopted the current statewide regulation limiting mesh size to a maximum of 4.5 inches. This regulation was in response to staff and public observation indicating more fish were “gilled” than “dipped” when larger mesh was used. At that time, the board agreed that smaller mesh should be used to ensure that the fish were dipped.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department **OPPOSES** changing the maximum mesh size allowed for use with a dip net in Upper Cook Inlet personal use fisheries. The regulation which stipulates the maximum mesh size allowed for use with a dip net is a statewide provision, under 5 AAC 39.105. A uniform statewide standard provides regulatory consistency that is easier to enforce. Alaska Wildlife Troopers reports that abuse of net mesh size is rare. In addition, staff observations of the Upper Cook Inlet personal use salmon fisheries indicate release of fish by dip netters is minimal, excepting occasional observations of the release of flounder, as well as pink and king salmon.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Persons participating in this fishery would be

required to change the type of webbing of their dip nets to meet new regulation specifications if the current webbing did not meet the newly-adopted requirements.

PROPOSAL 192 - 5 AAC 77.525. Personal use salmon fishery.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit possession of sport and personal use-caught salmon on the same day.

WHAT ARE THE CURRENT REGULATIONS? A person may not possess salmon taken under a personal use salmon fishing permit unless both tips of the tail fin have been immediately removed from the salmon. “Immediately” means before concealing the salmon from plain view or transporting the salmon from the fishing site. There is no prohibition on possession of salmon caught sport fishing with those harvested from a personal use fishery on the same day.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would require Alaska residents to remove from their possession salmon taken from a sport or personal use fishery before they possessed salmon taken from either of the aforementioned fisheries on that same day. It would likely reduce opportunity for Alaska residents to participate in either sport or personal use fisheries by making it difficult to participate in a sport fishery and a personal use fishery during the same day.

BACKGROUND: The current regulation provides the means to enforce personal use fishing limits, as well as to differentiate salmon harvested in the various fisheries. “Possession limit” means the maximum number of unpreserved fish a person may have in possession. “Preserved fish” means fish prepared in such a manner, and in an existing state of preservation, as to be fit for human consumption after a 15-day period, and does not include unfrozen fish temporarily stored in coolers than contain ice, dry ice, or fish that are lightly salted.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Current regulations are adequate to differentiate whether salmon were taken in a personal use fishery or sport fishery.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 193 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit dipnetting from boats in the Kenai River personal use dip net fishery.

WHAT ARE THE CURRENT REGULATIONS? Salmon may be taken by dip net in the Kenai River from a boat, in the area from an ADF&G regulatory marker located near the Kenai city dock upstream to the downstream side of the Warren Ames Bridge; however, salmon may not be taken from a boat powered by a two stroke motor other than a motor manufactured as a direct fuel injection motor. Salmon may also be taken from shore, in the area from ADF&G regulatory markers located on Cook Inlet beaches outside the terminus of the river upstream to the downstream side of the Warren Ames Bridge, except dipnetting is closed on the north shore from an ADF&G regulatory marker located below the end of Main Street, upstream to an ADF&G regulatory marker located near the Kenai city dock.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely result in an initial reduction in the salmon harvest from the Kenai River personal use fishery. Harvest may rebound to present levels when participants adapt to the new regulation and fish from the area open to dipnetting from shore. This proposal would displace those who would have fished from a boat to the shore, thereby increasing crowding in the area open to dipnetting from shore. This proposal may result in an increase in the harvest of sockeye salmon in other fisheries, primarily the commercial fishery, depending on abundance.

BACKGROUND: From 1996–2009, the total personal use harvest of salmon in the Kenai River dip net fishery has ranged from 101,771 to 349,350 and averaged 197,414 fish (Table 193-1). The department estimates of this personal use salmon harvest are by fishery location and participants do not record if the fish were harvested from a boat or from shore.

The Department of Natural Resources (DNR) and the Army Corps of Engineers have completed studies to better understand the effect of boat wakes on Kenai River channel morphology, including wakes generated by combinations of boat hull designs, engine horsepower, and weight loading. Results of these studies concluded that the Kenai River was maintaining a natural channel and that boats with V-hull configuration and heavy loads generated the largest waves, as well as wave energy, while boats with flat-bottomed configuration produced small waves with less wave energy. In addition, they concluded that increasing engine horsepower may slightly reduce wave size from boats with V-hull configuration.

A DNR regulation allowing the use motors of up to and including those with a total prop shaft rating of 50 horsepower in the Kenai River Special Management Area (KRSMA) was adopted in 2008. Additional DNR motor horsepower restrictions specify that motors with a total prop shaft rating greater than 35 horsepower must be a four-stroke or a direct fuel injection motor. Furthermore, during the month of July, no one may operate a motorized boat on the Kenai River in the KRSMA unless the motor is a four-stroke or a direct fuel injection motor. Beginning in 2013, all power boats operating in the KRSMA year-round are required to use either a four-

stroke or a direct fuel injection motor. Lastly, in 2008 the board adopted a regulation prohibiting the taking of fish in the Kenai River personal use dip net fishery from a boat powered by a two-stroke motor, unless it is a direct fuel injection motor.

The National Marine Fisheries Service has proposed to include the mouth of the Kenai River as critical habitat for beluga whales in Cook Inlet. There is no evidence at this time to indicate the personal use fishery in this area is impacting beluga whales.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 193-1. Kenai River personal use dip net fishery total salmon harvest by year, 1996–2009.

Year	Sockeye	Chinook	Coho	Pink	Chum	Total
1996	102,821	295	1,932	2,404	175	107,627
1997	114,619	364	559	619	58	116,219
1998	103,847	254	1,011	1,032	85	106,229
1999	149,504	488	1,009	1,666	102	152,769
2000	98,262	410	1,449	1,457	193	101,771
2001	150,766	638	1,555	1,326	155	154,440
2002	180,028	606	1,721	5,662	551	188,568
2003	223,580	1,016	1,332	1,647	249	227,824
2004	262,831	792	2,661	2,103	387	268,774
2005	295,496	997	2,512	1,806	321	301,132
2006	127,630	1,034	2,235	11,127	551	142,577
2007	291,270	1,509	2,111	1,939	472	297,301
2008	234,109	1,362	2,609	10,631	504	249,215
2009	339,993	1,189	2,401	5,482	285	349,350
Min.	98,262	254	559	619	58	101,771
Mean	191,054	782	1,793	3,493	292	197,414
Max.	339,993	1,509	2,661	11,127	551	349,350

Source: Reimer and Sigurdsson 2004; Dunker and Lafferty 2007; K. J. Dunker, Sport Fish biologist, ADF&G, Anchorage, personal communication.

PROPOSAL 194 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit dipnetting from boats in the Kenai River personal use fishery from ADF&G regulatory markers located on Cook Inlet beaches outside the terminus of the river upstream for a distance of one mile.

WHAT ARE THE CURRENT REGULATIONS? Salmon may be taken by dip net in the Kenai River from a boat, in the area from an ADF&G regulatory marker located near the Kenai city dock upstream to the downstream side of the Warren Ames Bridge; however, that salmon may not be taken from a boat powered by a two stroke motor other than a motor manufactured as a direct fuel injection motor. Salmon may also be taken from shore, in the area from ADF&G regulatory markers located on the Cook Inlet beaches outside the terminus of the river upstream to the downstream side of the Warren Ames Bridge, except dipnetting is closed on the north shore from an ADF&G regulatory marker located below the end of Main Street, upstream to an ADF&G regulatory marker located near the Kenai city dock.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in duplication of an existing regulation.

BACKGROUND: In the Kenai River personal use dip net fishery, dipnetting from a boat is prohibited by regulation in this area.

DEPARTMENT COMMENTS: The department recommends **NO ACTION** on this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 195 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Southcentral Alaska Dipnetters Association.

WHAT WOULD THE PROPOSAL DO? This proposal would open the Fish Creek personal use salmon dip net fishery by regulation on July 1 instead of by emergency order.

WHAT ARE THE CURRENT REGULATIONS? The commissioner will open, by emergency order, the personal use dip net fishery in Fish Creek from July 10 through July 31, if the department projects that the escapement of sockeye salmon into Fish Creek will be above the upper end of the escapement goal of 70,000 fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would open the dip net fishery on Fish Creek regardless of the run strength of sockeye salmon. It is likely that the escapement goal would not be met in years of low or average sockeye salmon returns.

BACKGROUND: The Fish Creek personal use salmon fishery was opened by regulation from June 10 through June 30 from 1996–2001. In 2002, the board adopted changes to the opening of the fishery in response to low sockeye salmon returns. The fishery could only be opened by emergency order when the department projected the escapement of sockeye salmon into Fish Creek would be above the upper end of the escapement goal of 70,000 fish. This strategy has helped to avoid overharvesting sockeye salmon during years of low or average sockeye salmon runs.

The Big Lake system (Fish Creek) has been stocked with sockeye salmon by the department and later, by Cook Inlet Aquaculture Association since 1975. Sockeye salmon escapements at Fish Creek have been erratic over the past decade, with a low of 14,000 in 2005 to high of 125,000 in 2010 (Table 195-1). The contribution of hatchery sockeye salmon in the run to Fish Creek has been as high as 74%, with a more recent contribution of 36% in 2009 and 67% in 2010. The stocking program was discontinued in 2008 and the last year of hatchery fish returning to this system will be 2011. Without the return of hatchery fish, it is likely there will be little opportunity to open Fish Creek to dipnetting.

Because Fish Creek is relatively small in size, the harvest power of the personal use fishery can be substantial, often harvesting upwards of 95% of the daily inriver return. The Fish Creek personal use fishery has been open only in two (2009 and 2010) of the past ten years. If the personal use fishery had opened on July 1, it is likely that the escapement goal would not have been met each year from 2004–2007.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department **OPPOSES** the biological issues presented in the proposal because it would likely result in a failure to achieve the escapement goal during low or average returns. An alternative that may provide increased harvest opportunity while still managing for achievement of the escapement goal would be to open the fishery by emergency order

when the escapement goal was projected to be met (rather than exceeded), while still ensuring that personal use harvest would not reduce escapement below the goal. Another consideration is that it is likely that harvestable surpluses of sockeye salmon sufficient enough to support a personal use fishery in Fish Creek will not be available once hatchery fish no longer return to the system.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 195-1. Contribution of hatchery fish to the Fish Creek sockeye salmon escapement and sockeye salmon harvest in the personal use fishery, 2002–2010.

Year	Escapement			Personal Use Harvest
	Total Escapement	Hatchery Contribution Percent	Total "Wild" Escapement	
2002	90,482	2%	1,810	88,672
2003	91,952	12%	11,034	80,918
2004	22,157	17%	3,767	18,390
2005	14,215	55%	7,818	6,397
2006	32,562	73%	23,770	8,792
2007	27,948	71%	19,843	8,105
2008	19,339	51%	9,863	9,476
2009	83,480	36%	30,053	53,427
2010	126,836	67%	84,980	41,856
Average	56,552	43%	21,438	35,115

PROPOSAL 196 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: Duane T. Gluth.

WHAT WOULD THE PROPOSAL DO? This proposal would open the Beluga River personal use salmon dip net fishery 10 days earlier and expand the area open to dipnetting by an additional ¼-mile.

WHAT ARE THE CURRENT REGULATIONS? In the Beluga River, salmon may be taken by dip net only as follows:

(1) salmon, other than king salmon, may be taken only by a person 60 years of age or older; a person authorized to take salmon under this subsection may not authorize a proxy to take or attempt to take salmon on behalf of that person under *5 AAC 77.016* and *AS 16.05.405* ;

(2) from July 20 through August 31, the fishery is open 24 hours per day from the Beluga River Bridge downstream to an ADF&G regulatory marker located approximately one mile below the bridge;

(3) the annual limit is as specified in *5 AAC 77.525*; king salmon may not be retained; any king salmon caught must be released immediately and returned to the water unharmed;

(4) the commissioner will close, by emergency order, the fishery when 500 salmon, other than king salmon, have been harvested;

(5) a permit holder for this fishery shall report weekly to the department as specified in the permit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal could result in an additional 150–200 salmon harvested and would provide increased access to the fishery from shore when the Beluga River water level is high. In addition, an earlier starting date would likely increase the incidental catch of king salmon.

BACKGROUND: The Beluga River personal use salmon fishery was created by the board in 2008 to provide an opportunity for elderly Alaska residents to harvest coho, pink, chum, and sockeye salmon. The harvest of king salmon is prohibited. The opening date was chosen to minimize the incidental catch of king salmon. The harvest has ranged from 53 salmon in 2010 to 225 salmon in 2009 (Table 196-1). The predominant species harvested for all three years were sockeye and coho salmon. The area currently open provides little opportunity to dipnet from the shore when the Beluga River is running high.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Expanding the area open to dipnetting will not interfere with the department's ability to manage the target species of the fishery within the allowed harvest level, but the department is concerned about opening the fishery earlier because it would increase the incidental catch of king salmon in an area where king salmon escapements have not been met the last 4–5 years.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 196-1. Beluga River personal use salmon harvest, 2008–2010.

Year	# Permits	Harvest				Total
		Sockeye	Chum	Coho	Pink	
2008	20	31	0	35	0	66
2009	11	140	0	78	7	225
2010	14	47	5	1	0	53
Average	15	73	2	38	2	115

PROPOSAL 197 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a personal use fishery for salmon on the Eklutna River drainage from August 1 through September 15.

WHAT ARE THE CURRENT REGULATIONS? Personal use fishing for salmon is prohibited in Eklutna River. The Eklutna River drainage is open year-round to sport fishing for salmon (except king salmon) from its mouth upstream to the Glenn Highway Bridge. Upstream of the Glenn Highway bridge, the open season for salmon (except king salmon) is January 1–September 30.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would jeopardize the sustainability of Eklutna River salmon stocks.

BACKGROUND: Currently, the only personal use salmon fisheries in Northern Cook Inlet are in Fish Creek and Beluga River. These personal use dip net fisheries were established in 1987 and 2008, respectively, and are governed by 5 AAC 77.540. *Upper Cook Inlet Personal Use Management Plan*. The Fish Creek personal use fishery is intended to harvest surplus sockeye salmon, while the Beluga River personal use fishery provides harvest opportunity for residents over the age of 60.

Eklutna River salmon stocks are likely harvested by three main user groups in a mixed stock fishery: sport, commercial, and to a lesser extent, educational fishery users. Eklutna River salmon stocks are small in abundance and susceptible to overexploitation. Sport fisheries participation is low, as well, and because of the lack of participation, harvest and effort from this system seldom appears in the Statewide Harvest Survey. Most of the land adjacent to the creek is owned by Eklutna, Inc., an ANSCA corporation.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department **OPPOSES** the biological aspects of the proposal due to concerns regarding the sustainability of Eklutna River salmon given the limited abundance in this system.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 198 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a personal use fishery for pink salmon in Deshka River from August 1 through September 15.

WHAT ARE THE CURRENT REGULATIONS? Personal use fishing for salmon is prohibited in the Deshka River. The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) allows for the use of setnets or dip nets in areas open to personal use salmon fishing.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of Deshka River pink salmon by an unknown amount and would likely increase mortality of coho salmon, rainbow trout, and Dolly Varden caught incidentally and released. This proposal would also cause gear conflicts between personal use fishermen using dip nets or setnets and sport fishermen using a fishing rod in the same area.

BACKGROUND: Currently the only personal use salmon fisheries in Northern Cook Inlet are in Fish Creek and Beluga River. These personal use dip net fisheries were established in 1987 and 2008, respectively, and are governed by 5 AAC 77.540. *Upper Cook Inlet Personal Use Management Plan*. The Fish Creek personal use fishery is intended to harvest surplus sockeye salmon, while the Beluga River personal use fishery provides harvest opportunity for residents over the age of 60.

Pink salmon escapement into the Deshka River is monitored with a weir located at river mile seven. Generally, pink salmon abundance is much higher during even years than during odd years. The average escapement of pink salmon to the Deshka River during even years is approximately 450,000 fish, while in odd years only about 10,000 pink salmon pass the weir. Escapement during even years has diminished over the past ten years (Table 198-1). The Cook Inlet commercial salmon fishery harvests approximately 481,000 pink salmon per year, but it is unknown how many are from the Deshka stock due to the mixed stock nature of the fishery. The sport fishery harvests an average of approximately 100 pink salmon per year.

Weir counts for coho salmon are wide-ranging, from 10,400 fish in 2010 to 63,000 fish in 2004 (Table 198-2). Run timing for coho salmon can vary considerably due to the river's tendency toward relatively low and warm water conditions during the coho salmon return, and unpredictable periods of fish movement following changes in weather and precipitation. The large range in escapements and run timing make it challenging to predict run size during the coho salmon season. Anglers, on average, harvest approximately 4,500 coho salmon per year on the Deshka River (Table 198-2). Previous studies conducted on the Little Susitna River indicate that catch and release mortality associated with rod and reel can be as high as 70% for coho salmon that are not fully freshwater-hardened. It is likely that coho salmon incidentally caught in the dip net fishery would display similar mortalities. This has not been an issue in the Fish

Creek personal use fishery since coho and sockeye salmon run timing is staggered; however, coho salmon run timing generally overlaps the pink salmon run on the Deshka River.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department **OPPOSES** any increase in mortality on nontargeted coho salmon. Given the difficulties in predicting coho run size and timing inseason, any personal use fishery coinciding with the coho salmon run could result in overexploited coho on years when the coho run is low. In addition, it is possible that during odd years the Deshka River may not support adequate numbers of pink salmon to provide for a personal use fishery on a sustained yield basis.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 198-1. Pink salmon escapement and harvest on the Deshka River, 2000–2010.

Year	Pink Salmon Escapement			Harvest
	Even year	Odd year	Total	
2000	1,279,148		1,279,148	799
2001		4,688	4,688	291
2002	946,259		946,259	185
2003		9,214	9,214	24
2004	390,087		390,087	249
2005		7,088	7,088	77
2006	83,454		83,454	76
2007		3,954	3,954	70
2008	12,947		12,947	78
2009		26,092	26,092	23
2010	9,330		9,330	N/A
Average	453,538	10,207	252,024	187

Table 198-2. Effort and coho salmon escapement and harvest on the Deshka River, 2000–2010.

Year	Coho Salmon	
	Escapement	Harvest
2000	26,387	8,687
2001	29,927	6,556
2002	24,612	3,616
2003	17,305	4,946
2004	62,940	4,440
2005	47,887	3,616
2006	59,419	6,042
2007	10,575	2,550
2008	12,724	3,426
2009	27,348	4,060
2010	10,393	N/A
Average	29956	4794

PROPOSAL 199 - 5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a personal use fishery for chum salmon on the Talkeetna River drainage from August 1 through September 15.

WHAT ARE THE CURRENT REGULATIONS? Personal use fishing for salmon is prohibited in the Talkeetna River. The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) allows for the use of setnets or dipnets in areas open to personal use salmon fishing. .

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of Talkeetna River chum salmon by an unknown amount and would likely increase mortality associated with incidental catch of coho salmon and resident fish stocks. This proposal would also cause gear conflicts between personal use fishermen using dip nets or setnets and sport fishermen using a fishing rod in the same area.

BACKGROUND: Currently, the only personal use salmon fisheries in Northern Cook Inlet are in Fish Creek and Beluga River. These personal use dip net fisheries were established in 1987 and 2008, respectively, and are governed by 5 AAC 77.540. *Upper Cook Inlet Personal Use Salmon Fishery Management Plan*. The Fish Creek personal use fishery is intended to harvest surplus sockeye salmon, while the Beluga River personal use fishery provides harvest opportunity for residents over the age of 60.

Chum salmon escapement into the Talkeetna River is not monitored by the department. The commercial fishery, on average, harvests approximately 480,000 chum salmon per year. It is unknown how many chum salmon in the commercial fishery harvest are from Talkeetna stocks due to the mixed stock nature of the fishery. The sport fishery harvests an average of 400 chum salmon per year; however, in the past two years, sport harvest numbers from this system have been considerably below average (Table 199-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department **OPPOSES** the biological aspects of this proposal because a personal use fishery on this system may not be sustainable. The department has no means of inseason monitoring of the escapement of chum salmon in the Talkeetna River.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 199-1. Chum and coho salmon harvest on the Talkeetna River, 2000–2009.

Year	Harvest	
	Chum	Coho
2000	408	7,703
2001	899	5,195
2002	701	5,640
2003	486	3,984
2004	493	4,454
2005	609	3,359
2006	123	3,224
2007	317	2,166
2008	103	4,128
2009	277	3,114
Average	442	4,297

COMMITTEE E – UPPER COOK INLET COHO SALMON, KENAI GUIDES, AND KENAI/KASILOF RESIDENT SPECIES (27 PROPOSALS)

COHO SALMON SPORT FISHERIES: 21, 22, 200, 201, 202, 203, 204, 205, 206

KENAI RIVER GUIDES: 207, 207, 209, 210, 211, 212, 213, 214

KENAI RIVER RESIDENT SPECIES: 215, 216, 217, 218, 219, 220, 221, 222, 223

PROPOSAL 21 - 5 AAC 62.122. Special provisions and localized additions and exceptions to the seasons, bag possession, and size limits, and methods and means for the West Cook Inlet Area.

PROPOSED BY: David Coray.

WHAT WOULD THE PROPOSAL DO? This proposal would lower the coho salmon bag limit from three fish to two fish in waters south of West Forelands, to and including Chinitna Bay.

WHAT ARE THE CURRENT REGULATIONS? In flowing waters between the Susitna River and West Foreland, the bag limit for coho salmon 16 inches or greater in length is two per day and four in possession. In flowing waters between West Foreland and Cape Douglas, the bag limit for coho salmon 16 inches or greater in length is three per day and six in possession (Figure 21-1).

A person who takes a daily bag limit of coho salmon 16 inches or more in length in the West Cook Inlet waters may not fish for any species in West Cook Inlet waters for the remainder of that day.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may or may not result in a decrease in the overall harvest. Adoption of this proposal may decrease angler effort by some small, but unknown, amount, simply because, given the choice, anglers would probably prefer to participate in a fishery where they could harvest three fish rather than two.

BACKGROUND: The department has limited information regarding the status of coho salmon stocks returning to the West Cook Inlet area south of the West Foreland. The majority of coho salmon sport harvest occurs in the Kustatan River (previous 5-year average of approximately 3,500 fish) and Silver Salmon Creek (previous 5-year average of approximately 1,000), with harvests of a few to a few hundred occurring in some of the smaller streams such as Shelter Creek. Harvest estimates from the Statewide Harvest Survey are relatively stable (Table 21-1). Additionally, commercial fishing effort directed at Westside Cook Inlet coho salmon is currently at a low level.

Coho salmon return to numerous small systems throughout the area, making stock assessment of all drainages difficult. However, returns to the Kustatan River and Silver Salmon Creek since 2000 appear to be good.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. There appear to be no coho salmon conservation problems in the proposed area and the current harvest levels appear sustainable. This proposal was also listed for consideration during the Lower Cook Inlet Finfish meeting where the board tabled action on the proposal until the Upper Cook Inlet meeting.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

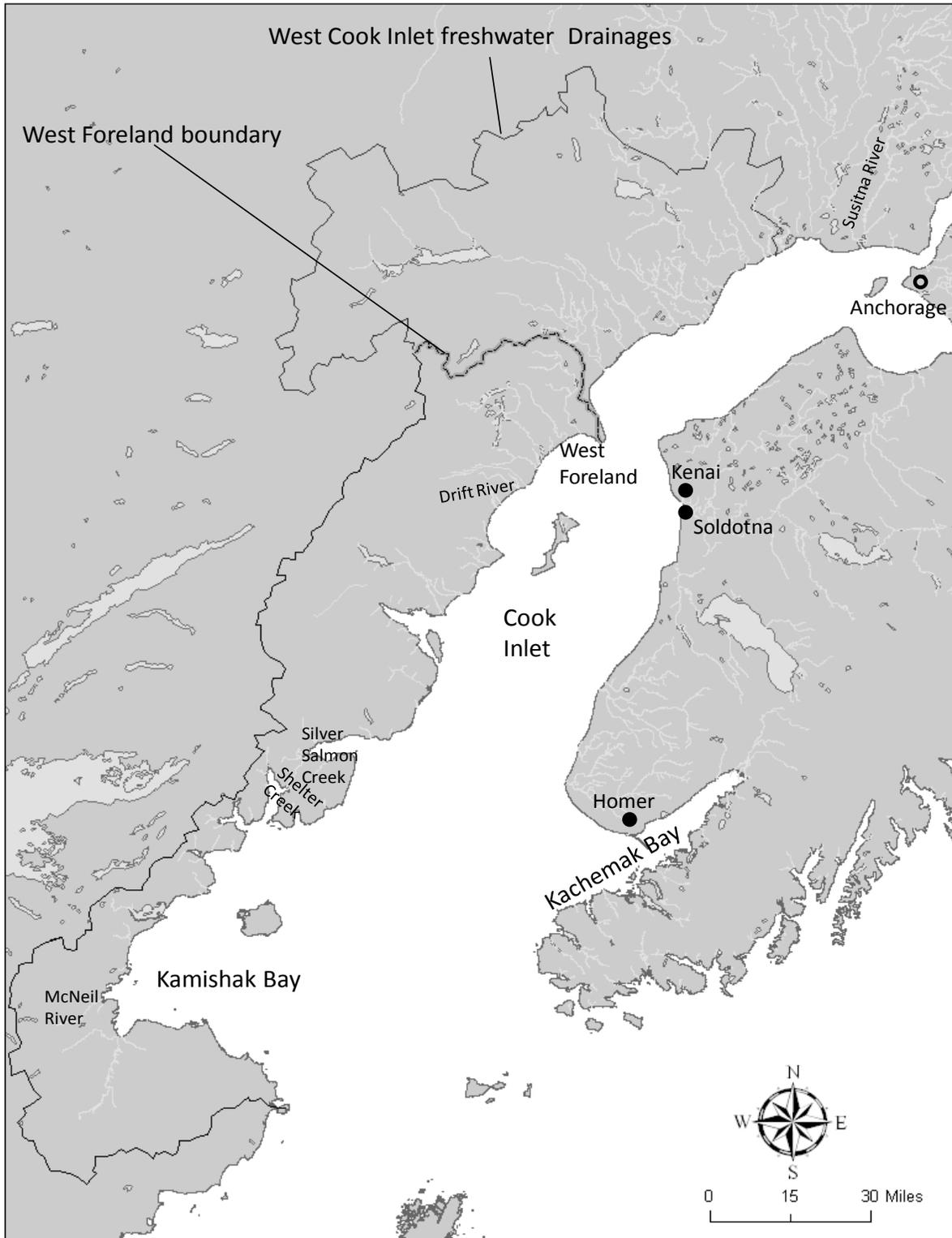


Figure 21-1. Map of West Cook Inlet freshwater drainages.

Table 21-1. Coho salmon catch and harvest from Western Cook Inlet freshwater drainages, 1996–2009.

Year	North of West Forelands						South of West Forelands							
	Theodore River		Chuitna River		Total		Kustatan River		Big River System		Silver Salmon Creek		Total	
	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1996	460	361	2,088	1,254	4,350	2,732	10,600	6,266	924	600	6,066	1,979	22,741	11,025
1997	256	187	2,388	1,156	4,159	1,979	6,750	3,605	698	305	935	408	10,721	5,071
1998	411	380	3,551	2,384	5,286	3,526	6,369	3,999	601	264	1,104	422	9,898	5,429
1999	473	290	2,492	1,579	5,609	3,352	3,908	3,178	1,306	463	2,082	590	10,492	6,161
2000	2,678	1,161	4,318	1,872	10,712	4,525	9,725	5,699	566	325	2,293	1,013	15,626	8,200
2001	1,322	1,029	6,334	3,284	11,299	6,178	8,353	4,920	857	508	3,178	2,054	16,579	9,825
2002	2,455	1,208	5,170	2,586	11,389	5,910	11,463	5,795	1,633	497	2,598	942	20,920	8,034
2003	313	225	2,635	1,467	4,912	2,790	6,263	3,967	7,393	2,876	7,377	2,269	26,676	10,867
2004	1,299	645	2,719	1,655	7,409	3,161	7,698	3,984	7,426	2,648	10,902	1,389	32,944	11,505
2005	317	229	2,223	972	5,001	2,336	6,201	3,551	11,144	3,916	7,053	1,568	27,867	9,948
2006	1,327	282	1,409	531	5,323	1,888	5,251	3,556	6,128	3,997	5,234	997	22,837	9,892
2007	936	811	2,129	1,577	5,131	3,749	5,249	4,057	5,120	2,981	1,998	1,041	14,531	8,771
2008	50	31	3,263	1,401	4,631	2,340	5,345	3,868	8,922	7,124	776	356	17,469	12,333
2009	1,643	313	2,485	707	6,775	2,302	3,960	2,639	4,085	3,032	2,812	1,133	12,548	7,412
Average														
1996-2009	996	511	3,086	1,602	6,570	3,341	6,938	4,220	4,057	2,110	3,886	1,154	18,704	8,891

PROPOSAL 22 - 5 AAC 62.120. General provisions for season, bag, possession, and size limits, and methods and means for the West Cook Inlet Area.

PROPOSED BY: Kenai River Sportfishing Association and Mayor's Blue Ribbon Sportsmen's Committee, Matanuska-Susitna Borough.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the daily limit of coho salmon from two to three in West Cook Inlet (WCI) streams between the Susitna River and West Foreland.

WHAT ARE THE CURRENT REGULATIONS? In flowing waters between the Susitna River and West Foreland, the bag limit for coho salmon 16 inches or greater in length is two per day and four in possession. In flowing waters between West Foreland and Cape Douglas, the bag limit for coho salmon 16 inches or greater in length is three per day and six in possession (Figure 22-1).

A person who takes a daily bag limit of coho salmon 16 inches or more in length in WCI waters may not fish for any species in WCI waters for the remainder of that day.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal could increase the overall harvest of coho salmon in that area by approximately 200–500 fish. Given low angler effort compared to road accessible areas, increasing limits from two fish per day to three fish per day for WCI streams would likely not increase the harvest above sustainable levels.

BACKGROUND: Poor returns of coho salmon to Upper Cook Inlet (UCI) in 1997 and 1999, in concert with not meeting escapement objectives, prompted the board to restrict sport fisheries on select Knik Arm and Susitna River streams to allow more coho salmon on the spawning grounds. In 2000, the board conducted a special out-of-cycle session to address Cook Inlet coho salmon. Because of the broad decline in coho salmon abundance, restrictive action was taken in a wide geographic range (i.e., Anchorage, Kenai, Susitna River, Knik Arm, and parts of WCI). Coho salmon restrictions were placed on both sport and commercial fisheries throughout most of the UCI area. In the sport fishery, coho salmon limits were reduced from three fish per day to two fish per day. Possession limits were reduced from six to four in some areas, while in other cases, possession limits were equal to the bag limit. In addition to these restrictions, the board took action to close Wasilla Creek to salmon fishing. Commercial fishing restrictions consisted of reducing time, net lengths, and number of nets in selected areas as described in the *Northern District Salmon Management Plan* (5 AAC 21.358).

However, in remote systems that experienced relatively low angler use and that had good to above average returns, restrictions implemented in 2000 may not have been necessary. In recent years (2005 and 2010), coho salmon returns to the several systems in the WCI area have experienced above average returns. In 2005, sport fish restrictions were relaxed on some Westside Susitna River streams where coho bag and possession limits were increased from two per day and four in possession to three per day and six in possession. Some remote Northern Cook Inlet areas could likely support an increase in harvest, such as Westside Susitna River and

WCI streams. Others, such as Eastside Susitna River tributaries and Knik Arm systems, which are road-accessible and receive high angler use, may not be able to sustain an increase in harvest during years with low or below-average returns. For example, in 1999, sport harvests of coho salmon for the Little Susitna River and Cottonwood, Fish, and Jim creeks were 8,964, 537, 233, and 2,612, respectively, while escapements objectives were only met for one of these four systems despite inseason restrictions (Table 22-1). In the case of the Little Susitna River in 1999, sport harvest was nearly three times the escapement.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, staff believes that an increase in bag and possession limits of one fish in the WCI Area would likely be sustainable since the average overall coho salmon sport harvest in WCI streams north of West Forelands is fewer than 3,500 fish. This proposal was also listed for consideration during the Lower Cook Inlet Finfish meeting where the board tabled action on the proposal until the Upper Cook Inlet meeting.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 22-1. Coho salmon harvest and escapement from Knik Arm sport fisheries, 1981–2009.

Year	Little Susitna River		Wasilla Creek		Cottonwood Creek		Fish Creek		Jim Creek		
	Harvest	Escapement (weir)	Harvest	Escapement (foot survey)	Harvest	Escapement (foot survey)	Harvest	Escapement (weir)	Escapement (foot survey)		
									Harvest	McRoberts Creek	Jim Creek Drainage
1981	5,940		814	302	1,373	423		2,382	1,801		
1982	7,116		1,624	276	1,886	737		5,201 ^a	2,306		
1983	2,835		345	32	518	506		2,342 ^a	774		
1984	14,253		1,920	966	1,895	935		4,510 ^a	3,429		
1985	7,764		1,900	247	1,005	334	284	5,089 ^a	2,523	662	662
1986	6,039	6,999	944	288	690	121	364	2,166 ^a	2,948	439	439
1987	13,003		1,195	403	1,159	360	833	3,871 ^a	3,676	667	667
1988	19,009	20,491	1,273	112	746	293	1,637	2,162 ^a	11,078	1,911	1,911
1989	14,129	15,232	975	106	876	147	784	3,479 ^a	4,220	597	597
1990	7,497	14,310	1,012	84	286	167	398	2,719 ^a	6,184	599	1,188
1991	16,450	37,601	844	139	176	158	486	1,297 ^a	2,920	484	902
1992	20,033	20,393	413	14	348	6	526	1,705	3,409	11	70
1993	27,610	33,378	1,133	136	736	265	741	2,328	2,878	503	1,038
1994	17,665	27,820	1,390	418	1,100	232	492	350 ^a	3,946	506	2,625
1995	14,451	11,817	445	104	340	242	435	390 ^a	3,549	702	1,990
1996	16,753	15,803	872	143	762	168	607	682 ^a	3,911	72	511
1997	7,756	9,894 ^b	708	229	372	386	148	2,578 ^a	1,786	701	1,264
1998	14,469	15,159	970	176	1,098	537	1,334	5,463	4,197	922	1,482
1999	8,864	3,017 ^b	313	267	537	131	233	1,766	2,612	12	332
2000	20,357	15,436	0	654	282	876	470	5,218	5,653	657	3,218
2001	17,071	30,587	0	505	647	983	361	9,247	8,374	1,019	1,594
2002	19,278	47,938	664	1,196	561	1,191	1,233	14,651	14,707	2,473	4,103
2003	13,672	10,877	261	294	665	229	112	1,231	6,415	1,421	1,814
2004	15,307	40,199	488	1,148	532	430	774	1,415 ^a	11,766	4,652	5,697
2005	10,203	16,839 ^b	347	130	668	619	535	3,011 ^a	10,114	1,464	3,347
2006	12,399	8,786 ^b	857	737	789	912	281	4,967 ^a	19,259	2,389	4,139
2007	11,089	17,573	324	430	856	1,024	120	6,868 ^a	11,848	725	1,875
2008	13,498	18,485	1,086	1,536	308	1,821	993	4,868 ^a	17,545	1,890	2,919
2009	8,346	9,523	1,002	978	1,503	942	1,178	8,214	18,414	1,331	2,524
Average											
2005-2009	11,107	14,241	723	762	825	1,064	621	5,586	15,436	1,560	2,961
BEG 1999-2001	9,600-19,200		300		300		2,700		830		
SEG 2002-2010	10,100-17,700						1,200-4,400 ^c		450-700		

^a 1982-1991 weir count plus stream survey; 1994-1996 and 2004-2008 weir was removed on August 15 before the majority of the coho run. In 1997 the weir was out on September 1.

^b Incomplete or partial count due to submersion of the weir during high water.

^c Fish Creek SEG discontinued in 2004.

PROPOSAL 200 - 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits, and methods and means for the Susitna River Drainage Area.

PROPOSED BY: Kenai River Sportfishing Association and the Mat-Su Mayor's Blue Ribbon Sportsmen's Committee.

(NOTE: The proposal book correctly stated the regulation to change, but incorrectly stated the issue and subsequent proposal information. The proposal addresses the Susitna River Drainage Area, not the West Cook Inlet Area. Staff comments below pertain to the Susitna River Drainage Area.)

WHAT WOULD THE PROPOSAL DO? This proposal would increase the bag and possession limit for coho salmon in Units 2, 3, 5, and 6 of the Susitna River Drainage Area from two per day/two in possession to three per day/three in possession.

WHAT ARE THE CURRENT REGULATIONS? The bag and possession limit for coho salmon greater than 16 inches is two per day/two in possession in Units 2, 3, 5, and 6 of the Susitna River Drainage Area. In Unit 1, the bag and possession limit for coho salmon is three per day/six in possession.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase effort and harvest of coho salmon within Unit 2 (Parks Highway streams) to levels which may not be sustainable on years of average to below average return years. The proposal would also increase harvest in Units 3 (upper Susitna River), 5 (Talkeetna River), and 6 (Chulitna River) by a small, but likely sustainable, amount.

BACKGROUND: Poor returns of coho salmon to UCI in 1997 and 1999, in concert with not meeting escapement objectives, prompted the board to restrict sport fisheries on select Knik Arm and Susitna River streams to allow more coho salmon on the spawning grounds. In 2000, the board conducted a special out-of-cycle session to address Cook Inlet coho salmon. Because of the broad decline in coho salmon abundance, restrictive action was taken in a wide geographic range (i.e., Anchorage, Kenai, Susitna River, Knik Arm, and parts of WCI). Coho salmon restrictions were placed on both sport and commercial fisheries throughout most of the UCI area. In the sport fishery, coho salmon limits were reduced from three fish per day to two fish per day. Possession limits were reduced from six to four in some areas, while in other cases, possession limits were equal to the bag limit. In addition to these restrictions, the board took action to close Wasilla Creek to salmon fishing. Commercial fishing restrictions consisted of reducing time, net lengths, and number of nets in selected areas as described in the *Northern District Salmon Management Plan* (5 AAC 21.358).

However, in remote systems that experienced relatively low angler use and that had good to above average returns, restrictions implemented in 2000 may not have been necessary. In recent years the board relaxed some of the restrictions imposed on the Central District commercial drift fleet, such as extending the fishing season. Sport fish restrictions were also relaxed on some of the Westside Susitna and WCI streams, where coho bag and

possession limits were increased from two per day, four in possession to three per day, six in possession. Some additional remote NCI areas could likely support an increase in harvest, such as some upper Susitna River and WCI streams. Others, such as Eastside Susitna River tributaries and Knik Arm systems, which are road-accessible and receive high angler use, may not be able to sustain an increase in harvest during years with low or below average returns. For example, in 1999, sport harvests of coho salmon for the Little Susitna River and Cottonwood, Fish, and Jim creeks were 8,964, 537, 233, and 2,612, respectively, while escapement objectives were only met for one of these four systems despite inseason restrictions. In the case of the Little Susitna River in 1999, sport harvest was nearly three times the escapement. In five of the past 10 years, the sport harvest of coho salmon from the Little Susitna River exceeded the total inriver escapement; inriver exploitation can exceed 60% on below average runs. In 2009 and 2010, the Little Susitna River failed to achieve the escapement goal (10,100–17,700) for coho salmon.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of the proposal and **OPPOSED** to the biological aspects. The department has little data from which to manage these high-use streams inseason and must rely on angler reports, onsite staff visits, and indications of run strength from Northern District harvest and Deshka weir counts when considering inseason regulatory changes. Under these circumstances, timely emergency orders to restrict a relatively high-use fishery in times of low returns can be difficult and the department recommends retaining the more conservative regulations already in place. Increasing the bag limit on more remote streams (Units 3, 5, and 6) receiving relatively moderate to low angler use in the Susitna River drainage would increase harvest by a relatively small amount which would likely be sustainable over most years.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 201 - 5 AAC 61.120. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 5 of the Susitna River Drainage Area.

PROPOSED BY: Stephan Warta.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the coho salmon bag limit from two per day to three per day for the Talkeetna River drainage.

WHAT ARE THE CURRENT REGULATIONS? Current regulations allow a bag limit of two coho salmon in the Talkeetna River drainage.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? An increase in the bag limit of coho salmon for the Talkeetna River drainage would increase effort and harvest of coho salmon by a small, but unknown, number. It is likely that this increase would be sustainable.

BACKGROUND: Poor returns of coho salmon to Upper Cook Inlet in 1997 and 1999, in addition to not meeting escapement objectives, prompted the board to reduce sport fisheries on select Knik Arm and Susitna River streams to allow more coho salmon on the spawning grounds. In 2000, the board conducted a special out-of-cycle session to address Cook Inlet coho salmon. Because of the broad decline in coho salmon abundance, restrictive action was taken on a wide geographic range (i.e., Anchorage, Kenai, Susitna River, Knik Arm, and parts of West Cook Inlet). As a result, coho salmon restrictions were placed on both sport and commercial fisheries throughout most of the UCI area. In the sport fishery, coho salmon limits were reduced from three to two fish per day, and “where allowed”, possession limits were reduced from six to four; in other cases, possession limits were equal to the bag limit. In addition to these restrictions, the board took action to close Wasilla Creek to salmon fishing. Commercial restrictions consisted of reducing time and net length and number in selected areas as described in the *Northern District Salmon Management Plan* (5 AAC 21.358).

In 2002, the board reinstated the coho fishery in Wasilla Creek and increased the possession limit on Westside Susitna River streams from two to four fish. In 2005, the board liberalized (such as extending the fishing season) some of the restrictions imposed on the Central District commercial drift fleet. In that same year, the board increased the bag and possession limit of coho salmon from two per day, four in possession, to three per day, six in possession, on the majority of Westside Susitna area streams, including the Deshka River, Lake Creek, and the Talachulitna River.

In high angler use systems that are close to major population centers, such as Knik Arm and Eastside Susitna tributaries, restrictions may still be necessary to sustain salmon populations. However, in the Talkeetna River, which experiences relatively low angler participation and is restricted to boat access, restrictions such as those implemented in 2000, are likely unnecessary. Because the Talkeetna River is glacial in nature and a high-water year usually equates to poor fishing success, it is difficult to utilize harvest data

from the department's Statewide Harvest Survey to detect trends in the sport fishery. However, based on reports received from sport fishing guides and anglers, coho salmon returns to the Talkeetna River appear to have been average to above average in recent years.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, it is likely that increasing the bag limit for coho salmon on this system from two to three per day would be sustainable.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 202 - 5 AAC 60.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Kenai River Sportfishing Association and the Mat-Su Mayor's Blue Ribbon Sportsmen's Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the bag limit for coho salmon in the Knik Arm Drainage Area from two per day to three per day.

WHAT ARE THE CURRENT REGULATIONS? The bag and possession limit is two coho salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase effort and harvest of coho salmon in Knik Arm drainages. Popular streams include the Little Susitna River and Jim, Fish, Wasilla, and Cottonwood creeks, as well as numerous clearwater side tributaries of the Knik and Matanuska rivers. These tributaries are all close to major population centers and therefore the harvest of coho salmon would likely increase substantially. The increased harvest may be unsustainable during years of average to low returns.

BACKGROUND: Poor returns of coho salmon to Upper Cook Inlet in 1997 and 1999, in concert with not meeting escapement objectives, prompted the board to reduce the sport fisheries on select Knik Arm and Susitna River streams to allow more coho salmon on the spawning grounds. In 2000, the board conducted a special out-of-cycle session to address Cook Inlet coho salmon. Because of the wide decline in coho salmon abundance, restrictive action was taken on a wide geographic range (i.e., Anchorage, Kenai, Susitna River, Knik Arm, and parts of West Cook Inlet). As a result, coho salmon restrictions were placed on both sport and commercial fisheries throughout most of the Upper Cook Inlet area. In the sport fishery, coho salmon limits were reduced from 3 fish per day to two fish per day, and "where allowed" possession limits were reduced from 6 to four, while in other cases possession limits were equal to the bag limit. In addition to these restrictions, the board took action to close Wasilla Creek to salmon fishing. Commercial restrictions consisted of reducing time and net length and number in selected areas as described in the *Northern District Salmon Management Plan* (5 AAC 21.358).

In recent years, the board relaxed (e.g., extended the fishing season) some of the restrictions imposed on the Central District commercial drift fleet. Sport fish restrictions were also relaxed on some of the Westside Susitna and West Cook Inlet streams, where coho bag and possession limits were increased from two per day, four in possession to three per day, six in possession. Others, such as Knik Arm and Eastside Susitna systems, which are close to major population centers, easily accessed, and receive high angler use, may not be able to sustain an increase in harvest during years with average to below average coho salmon runs. Fish, Cottonwood, and Wasilla creeks are weekend only fisheries with daily hour restrictions. Restrictions on these systems were imposed primarily because these streams are very small in size, are very close and accessible to major population centers, and angler participation is fairly high. The potential for

overexploitation by the sport fishery on these systems would be relatively high if bag limits were increased. In five of the past ten years, the sport harvest of coho salmon from the Little Susitna River exceeded the total inriver escapement; inriver exploitation can exceed 60% on below average runs (Figure 202-1). In 2009 and 2010, the Little Susitna River failed to meet its escapement goal (10,100–17,700) for coho salmon.

Angler participation, which is almost exclusively directed at coho salmon, has increased dramatically on Jim Creek: it has increased nearly threefold in the past 10 years, from 6,868 angler days in 1999 to nearly 28,000 angler days in 2008 (Table 202-2). The sport harvest shows an even more abrupt trend, with 2,612 and 17,545 coho salmon being harvested in 1999 and 2008, respectively.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of the proposal, but is **OPPOSED** to the biological aspects. Increasing the coho bag limit in streams that are road-accessible, close to major population centers, and which receive relatively high angler use, may increase the harvest above a sustainable level on years of average to low returns.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

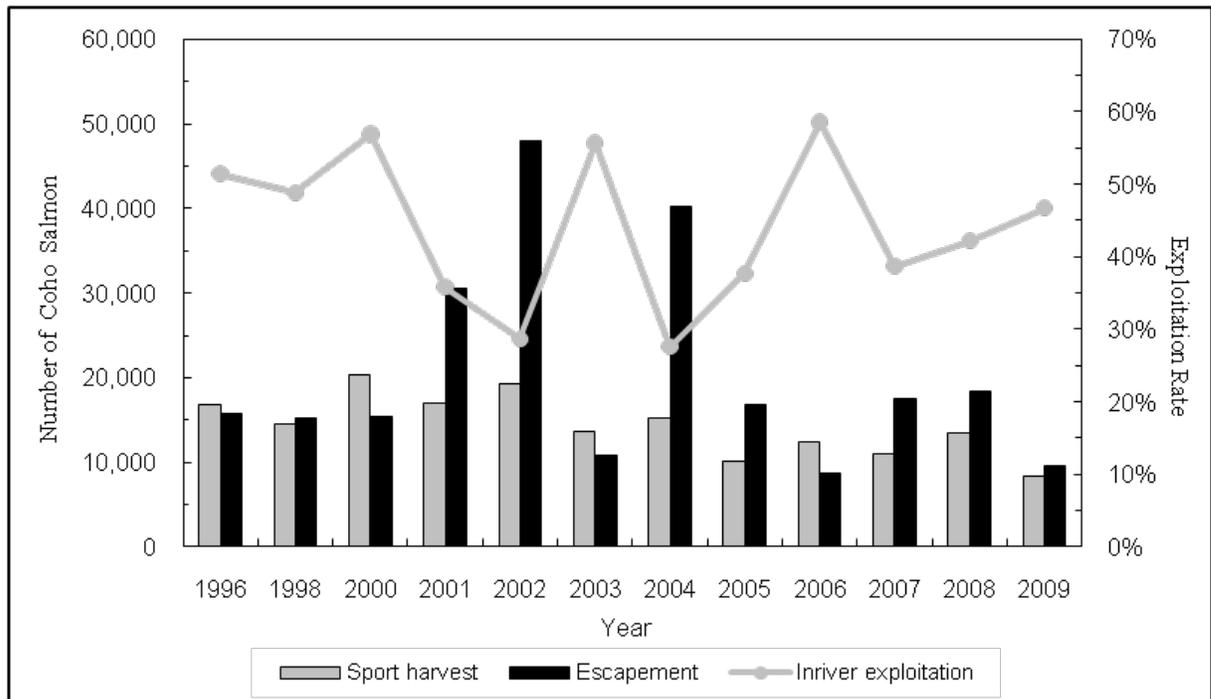


Figure 202-1. Little Susitna River coho salmon harvest, escapement, and inriver exploitation, 1996, 1998, 2000–2009. (Escapement counts in 1997 and 1999 were incomplete due to flooding).

Table 202-1. Coho salmon harvest and escapement from Knik Arm sport fisheries, 1981–2009.

Year	Little Susitna River		Wasilla Creek		Cottonwood Creek		Fish Creek		Jim Creek		
	Harvest	Escapement (weir)	Harvest	Escapement (foot survey)	Harvest	Escapement (foot survey)	Harvest	Escapement (weir)	Escapement (foot survey)		
									Harvest	McRoberts Creek	Jim Creek Drainage
1981	5,940		814	302	1,373	423		2,382	1,801		
1982	7,116		1,624	276	1,886	737		5,201 ^a	2,306		
1983	2,835		345	32	518	506		2,342 ^a	774		
1984	14,253		1,920	966	1,895	935		4,510 ^a	3,429		
1985	7,764		1,900	247	1,005	334	284	5,089 ^a	2,523	662	662
1986	6,039	6,999	944	288	690	121	364	2,166 ^a	2,948	439	439
1987	13,003		1,195	403	1,159	360	833	3,871 ^a	3,676	667	667
1988	19,009	20,491	1,273	112	746	293	1,637	2,162 ^a	11,078	1,911	1,911
1989	14,129	15,232	975	106	876	147	784	3,479 ^a	4,220	597	597
1990	7,497	14,310	1,012	84	286	167	398	2,719 ^a	6,184	599	1,188
1991	16,450	37,601	844	139	176	158	486	1,297 ^a	2,920	484	902
1992	20,033	20,393	413	14	348	6	526	1,705	3,409	11	70
1993	27,610	33,378	1,133	136	736	265	741	2,328	2,878	503	1,038
1994	17,665	27,820	1,390	418	1,100	232	492	350 ^a	3,946	506	2,625
1995	14,451	11,817	445	104	340	242	435	390 ^a	3,549	702	1,990
1996	16,753	15,803	872	143	762	168	607	682 ^a	3,911	72	511
1997	7,756	9,894 ^b	708	229	372	386	148	2,578 ^a	1,786	701	1,264
1998	14,469	15,159	970	176	1,098	537	1,334	5,463	4,197	922	1,482
1999	8,864	3,017 ^b	313	267	537	131	233	1,766	2,612	12	332
2000	20,357	15,436	0	654	282	876	470	5,218	5,653	657	3,218
2001	17,071	30,587	0	505	647	983	361	9,247	8,374	1,019	1,594
2002	19,278	47,938	664	1,196	561	1,191	1,233	14,651	14,707	2,473	4,103
2003	13,672	10,877	261	294	665	229	112	1,231	6,415	1,421	1,814
2004	15,307	40,199	488	1,148	532	430	774	1,415 ^a	11,766	4,652	5,697
2005	10,203	16,839 ^b	347	130	668	619	535	3,011 ^a	10,114	1,464	3,347
2006	12,399	8,786 ^b	857	737	789	912	281	4,967 ^a	19,259	2,389	4,139
2007	11,089	17,573	324	430	856	1,024	120	6,868 ^a	11,848	725	1,875
2008	13,498	18,485	1,086	1,536	308	1,821	993	4,868 ^a	17,545	1,890	2,919
2009	8,346	9,523	1,002	978	1,503	942	1,178	8,214	18,414	1,331	2,524
Average											
2005-2009	11,107	14,241	723	762	825	1,064	621	5,586	15,436	1,560	2,961
BEG 1999-2001	9,600-19,200		300		300		2,700		830		
SEG 2002-2010	10,100-17,700						1,200-4,400 ^c		450-700		

^a 1982-1991 weir count plus stream survey; 1994-1996 and 2004-2008 weir was removed on August 15 before the majority of the coho run. In 1997 the weir was out on September 1.

^b Incomplete or partial count due to submersion of the weir during high water.

^c Fish Creek SEG discontinued in 2004.

Table 202-2. Coho salmon harvest and fishing effort from Knik Arm sport fisheries, 1996–2009.

Year	Little Susitna											
	River	Jim Creek ^a		Wasilla Creek		Cottonwood Creek		Fish Creek		Eklutna Tailrace		
	Harvest	Harvest	Angler-days ^b	Harvest	Angler-days ^b	Harvest	Angler-days ^b	Harvest	Angler-days ^b	Harvest	Angler-days ^b	
1996	16,753	3,911	7,561	872	1,386	762	1,783	607	934	1,217	6,448	
1997	7,756	1,786	5,349	708	1,188	372	2,070	148	1,104	728	3,835	
1998	14,469	4,197	5,272	970	1,171	1,098	3,454	1,334	2,256	1,422	5,100	
1999	8,864	2,612	6,860	313	990	537	3,506	233	2,182	1,453	6,150	
2000	20,357	5,653	10,975	0	328	282	1,265	470	1,408	5,053	7,938	
2001	17,071	8,374	13,028	0	419	647	2,627	361	1,670	3,399	10,166	
2002	19,278	14,707	17,989	664	1,037	561	1,534	1,233	2,776	7,073	11,767	
2003	13,672	6,415	13,474	261	757	665	2,238	112	758	3,128	8,423	
2004	15,307	11,766	19,342	488	1,079	532	3,282	774	2,029	5,084	9,588	
2005	10,203	10,114	19,605	347	684	668	1,484	535	1,461	4,899	19,339	
2006	12,399	19,259	25,271	857	869	789	3,867	281	948	6,104	20,465	
2007	11,089	11,848	21,342	324	1,194	856	3,448	120	907	3,298	22,619	
2008	13,498	17,545	27,874	1,086	1,394	308	2,718	993	1,343	2,253	20,586	
Means												
1996-2008	13,901	9,091	14,919	530	961	621	2,560	554	1,521	3,470	11,725	
2004-2008	12,499	14,106	22,687	620	1,044	631	2,960	541	1,338	4,328	18,519	
2009	8,346	11,573	16,486	1,002	1,619	1,503	2,512	1,178	2,050	6,767	22,625	

^a Includes other Knik River tributaries

^b Participation directed at coho salmon represents only a portion of the annual effort.

PROPOSAL 203 - 5 AAC 59.120. General provision for seasons, bag, possession, and size limits, and methods and means for the Anchorage Bowl Drainage Area.

PROPOSED BY: Kenai River Sportfishing Association and the Mat-Su Mayor's Blue Ribbon Sportsmen's Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the bag limit for streams that support wild coho salmon runs in Anchorage Area drainages, including Turnagain Arm, from two per day to three per day.

WHAT ARE THE CURRENT REGULATIONS? The coho salmon bag limit is two per day, two in possession. Three Anchorage Area streams, Ship Creek, Campbell Creek, and Bird Creek, are stocked with coho salmon and have bag limits of three per day, three in possession.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase effort and harvest of wild coho salmon in Anchorage Area drainages that are not stocked. There are 12 streams in the Anchorage Area that allow fishing for coho salmon, only three are stocked. These streams are all within Anchorage/Eagle River/Chugach metropolitan area and therefore, the harvest of coho salmon would likely increase substantially.

BACKGROUND: Poor returns of coho salmon to UCI in 1997 and 1999 resulted in not meeting escapement objectives and prompted the board to reduce bag limits to allow more coho salmon on the spawning grounds. In 2000, the board conducted a special out-of-cycle session to address Cook Inlet coho salmon. Because of the wide decline in coho salmon abundance, restrictive action was taken on sport and commercial fisheries over a broad geographic range, including nearly all of UCI. In the sport fishery, coho salmon limits were reduced from three fish per day to two fish per day, and possession limits were reduced from six to four, or in other cases, possession limits were set equal to the bag limit. Commercial restrictions consisted of reducing time and net length and number in selected areas as described in the *Northern District Salmon Management Plan* (5 AAC 21.358).

In recent years, the board relaxed (e.g., extending the fishing season) some of the restrictions imposed on the Central District commercial drift fleet. Sport fish restrictions were also relaxed on some of the Westside Susitna and WCI streams, where coho bag and possession limits were increased from two per day, four in possession to three per day, six in possession. The Anchorage Area coho salmon fishery is a mix of stocked and wild fisheries. Stocked fisheries on Ship Creek, Campbell Creek, and Bird Creek with more liberal bag limits help to move angling pressure from wild stocks of coho salmon to hatchery-enhanced runs. Target stocking goals for Ship Creek are 240,000 coho salmon smolt. Campbell Creek goals are 75,000 coho salmon smolt, and the Bird Creek goal is 100,000 smolt.

Most of the Anchorage Area streams do not have consistent escapement survey data due to their glacial nature and inclement weather during the fall. Effort, catch, and harvest are reported in the Statewide Harvest Survey. The three stocked coho salmon fisheries, Ship, Campbell, and Bird creeks, provide eight times the effort as measured in angler days, and nearly triple the catch and harvest of the four area wild coho salmon fisheries (Table 203-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of the proposal, but is **OPPOSED** to the biological aspects. Increasing the coho bag limit in streams that are road-accessible, within major population centers, and which receive relatively high angler use, may increase the harvest above a sustainable level on years of average to low returns.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 203-1. Anchorage Area effort, catch, harvest and escapement of coho salmon, five-year average (2005–2009).

Stocked Streams	2005-2009 Average			
	Effort	Catch	Harvest	Escapment
Ship Creek	33,822	8,883	5,710	1,266
Campbell Creek	5,598	2,393	1,207	467
Bird Creek	12,261	6,432	3,757	214
Total	51,681	17,708	10,674	1,947
Wild Streams	2005-2009 Average			
	Effort	Catch	Harvest	Escapment
Twentymile River	2,841	2,863	1,847	NA
Portage Creek	717	623	323	NA
Glacier Creek	1,756	453	355	NA
Placer River	1,088	1,674	961	NA
Total	6,402	5,613	3,486	

NA = No aerial surveys conducted since 2006.

PROPOSAL 204 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area; and 5 AAC 57.170. Kenai River Coho Salmon Management Plan.

PROPOSED BY: Kenai River Sportfishing Association and Mayor's Blue Ribbon Sportsmen's Committee, Matanuska-Susitna Borough.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the bag and possession limit to three coho salmon in the Kenai River Drainage Area.

WHAT ARE THE CURRENT REGULATIONS? In the Kenai River Drainage Area, except in the Russian River, the bag and possession limit for coho salmon 16 inches or greater is two fish from July 1 through August 31. The bag and possession limit for coho salmon 16 inches or greater is three fish in the Kenai River from Skilak Lake downstream to the mouth from September 1 through November 30, and in the Kenai River between Kenai and Skilak lakes from September 1 through October 31. In the Russian River, the bag and possession limit for coho salmon coho salmon 16 inches or greater is one fish; the Russian River closes to fishing for coho salmon on October 1.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of coho salmon and likely increase exploitation rates to unsustainable levels during years of below average returns.

BACKGROUND: The *Kenai River Coho Salmon Management Plan* (5 AAC 57.170) was first adopted in 1996 in response to a decline in coho salmon smolt abundance and increased harvest of returning adults in the Kenai River. A special board meeting was convened in 1997 through a petition submitted by the department based on high Kenai River coho salmon harvests beginning in 1993 and 1994 which were thought to be unsustainable, and declining Moose River (Kenai River tributary) coho salmon smolt counts. As a result of that meeting, restrictions affecting all users were put into regulation to conserve Kenai River coho salmon. Additional restrictive regulations were added to the plan from 1997–1999. These regulations were an attempt to reduce the total harvest of Kenai River coho salmon by 20% from combined sport and commercial users and originally had a sunset clause of December 2002. The restrictions placed on the Kenai River coho salmon sport fishery from the 1997 board meeting included:

1. The Kenai River coho salmon sport fishing season was established from July 1–September 30.
2. Guides could not sport fish when guiding clients.
3. No fishing from a guided vessel on Mondays downstream from the confluence of the Moose and Kenai rivers.
4. No fishing for coho salmon in a guided vessel on Mondays upstream from the confluence of the Moose and Kenai rivers, but fishing for other species was allowed.

In 1999, the board again addressed this fishery by reducing the coho salmon bag limit in the Russian River and in that area of the Kenai River downstream from the confluence of the Russian and Kenai rivers to the ferry crossing from three per day to one per day. This

conservation measure was in response to an increasingly popular clearwater fishery at the Russian River where stocks are subject to higher exploitation rates.

In 2000, a special board meeting was convened through a petition submitted by the governor based on low abundance of coho salmon throughout Cook Inlet. As an outcome of this meeting, more restrictions were put in place to conserve both Kenai River and Northern District coho salmon. The restrictions placed on the Kenai River coho salmon sport fishery from the 2000 board meeting included:

1. The bag and possession limit was reduced from three fish to two fish Cook Inlet-wide (excepting West Cook Inlet and terminal fisheries targeting hatchery fish). Anglers in the Kenai River must stop fishing for all species below the outlet of Skilak Lake for the remainder of the day after retaining a daily bag limit of two coho salmon.
2. Closing the Kenai River downstream of Skilak Lake from August 1–3 for coho salmon fishing.
3. Bait was prohibited in the Kenai River from October 1 to June 30.

The net result of the management plan on the Kenai River sport fishery was the overall reduction of coho salmon harvest. Currently, the department does not manage the Kenai River coho salmon sport fishery inseason based upon abundance because no escapement goal has been established for the Kenai River. There are no coho salmon escapement goals for the other streams in the Northern Kenai Peninsula Management Area where the limit for coho salmon was reduced from three daily and in possession to two daily and in possession.

Coho salmon fishing regulations were liberalized for the Kenai River by the board in 2005 and 2008. Changes resulted in a net gain in fishing time, area, and a seasonal increase in the bag limit, as well as less restrictive fishing methods. Coho salmon fishing regulations for other Northern Kenai Peninsula Management Area streams were not changed.

In 2005, several liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. A 31-day season extension for coho salmon fishing within the Kenai River drainage: from September 30 to October 31.
2. Bait was allowed from July 1 through October 31 downstream of the Upper Killey River and bait with multiple hooks from August 1 through October 31 was allowed.
3. The August 1–3 coho salmon fishing closure downstream of Skilak Lake was repealed, allowing a continuous season from July 1 through October 31.
4. The regulation prohibiting fishing after a person takes a bag limit of two coho salmon below Upper Killey River was reduced to below the Soldotna Bridge, allowing a person to continue to fish upstream of the Soldotna Bridge.
5. Fishing from a guide vessel was allowed on Mondays for other species upstream of the confluence of the Moose and Kenai rivers.

In 2008, liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. An increase in the bag and possession limit from two fish to three fish beginning September 1.

2. A 30-day season extension for coho salmon fishing within the lower Kenai River drainage downstream of Skilak Lake, from October 31 to November 30.
3. Bait was allowed from July 1 through November 30 downstream of the Upper Killey River and bait with multiple hooks from August 1 through November 30 was allowed.

A two coho salmon daily bag limit will provide a sustainable fishery despite changes in adult runs and juvenile survival. This is based on information gathered from research programs on Kenai River coho that indicate the coho salmon runs averaged about 140,000 fish from 1999 to 2004, with harvests averaging just over 62,000 fish (Table 204-1). Overall exploitation rates for Kenai River coho salmon runs prior to 2000 were high, in some cases (84% in 1999) under the previous Kenai River coho salmon management plan, which allowed a three fish bag limit and more liberal commercial fishing in August; under a plan that allowed a two fish bag limit and more restrictive commercial fishing, the exploitation rate ranged from 35% to 47% from 2000 to 2004. New regulations in 2005, which liberalized both the sport and commercial fisheries, are thought to have likely increased the average exploitation rate into the mid 50% range from 2005–2007. Again in 2008, new regulations adopted by the board liberalized both the sport and commercial fisheries on Kenai River coho salmon runs, most likely increasing the average exploitation rate into the high 50% range from 2008 to 2010. If the bag limit in August is increased to three per day, the projected exploitation rate on an average run would be in the low 60% range. Research findings from studies conducted in Southeast Alaska with trans-boundary coho salmon stocks have indicated that an exploitation rate of about 61% is sustainable.

Total Kenai River drainage coho salmon sport harvests prior to 2000 (three coho per day) averaged 53,228 fish annually. Since 2000 (two coho per day), they increased to an average of 54,840 fish, with guided anglers averaging 24.5% of the total harvest during that time (Table 204-2).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The uncertainty surrounding the volatile nature of annual coho salmon run strength greatly increases the likelihood that coho salmon stocks will be exploited at unsustainable harvest rates during periods of low coho salmon productivity if harvests increased in the Kenai River. The department is **NEUTRAL** on the allocative aspects of this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 204-1. Estimated harvest, total run and exploitation of Kenai River coho salmon, 2000–2004.

Year	Escapement ^{a,b}	Harvest			Research Mortality	Total Run	Total Harvest ^e	Exploitation Rate ^f
		Sport ^c	Personal Use	Commercial ^d				
1999	7,889	35,361	1,009	3,894	193	48,346	40,457	0.837
2000	72,742	52,489	1,449	2,965	555	130,200	56,903	0.437
2001	75,122	55,004	1,555	1,934	540	134,155	58,493	0.436
2002	133,612	66,104	1,721	6,115	968	208,520	73,940	0.355
2003	79,915	51,944	1,332	2,578	209	135,978	55,854	0.411
2004	95,394	72,565	2,661	11,149	2,106	183,875	86,375	0.470
Average (1999-2004)	77,446	55,578	1,621	4,773	762	140,179	62,004	0.491
Average (2000-2004)	91,357	59,621	1,744	4,948	876	158,546	66,313	0.422

Note: 1991-1993 and 1998 Kenai River coho salmon creel data was used to calculate the effect of increasing the bag limit from 2 to 3 fish, only boat angler interviews/data were selected for use for 1991-1993 due to the lack of data from shore anglers; sho

^a Kenai River coho salmon total returns were estimated during 1999-2004.

^b Sources: Carlon and Evans 2007, Massengill and Evans 2007.

^c Source: Statewide Harvest Survey.

^d Sources: Massengill and Carlon 2004 a,b; Massengill and Carlon 2007 a,b; Massengill 2007.

^e Aggregate of all harvest estimates (sport, commercial, and personal-use/subsistence).

^f (Estimated Grand Total Harvest) / (Estimated Total Return).

ND = No Data

Table 204-2. Guided and unguided sport harvest of Kenai River coho salmon and the total Kenai River drainage sport harvest 1984–2009.

Year	Bag Limit	Season		Guided		Unguided		Kenai River Harvest ^a	Total Drainage Harvest
		Start	End	Harvest	%	Harvest	%		
1984	3	entire year		5,490	9.2	54,154	90.8	59,644	62,076
1985	3	entire year		4,006	9.0	40,529	90.8	44,635	46,090
1986	3	entire year		13,883	23.1	46,227	76.9	60,110	62,938
1987	3	entire year		4,976	15.0	28,234	85.0	33,210	37,484
1988	3	entire year		4,456	9.1	44,238	90.7	48,785	51,950
1989	3	entire year		15,835	28.6	39,424	71.3	55,275	59,575
1990	3	entire year		15,274	25.3	45,051	74.7	60,325	63,497
1991	3	entire year		30,789	40.4	45,367	59.6	76,163	80,674
1992 ^b	3	entire year		20,794	39.8	31,516	60.2	52,310	56,877
1993	3	entire year		23,743	47.0	26,795	53.0	50,538	52,855
1994	3	entire year		41,170	47.5	45,541	52.5	86,711	91,490
1995	3	entire year		23,587	51.1	22,596	48.9	46,183	50,346
1996 ^c	3	entire year		13,728	32.5	28,565	67.5	42,293	47,860
1997 ^d	3/1 ^e	7/1	9/30	3,101	19.2	13,063	80.8	16,164	20,770
1998	3	7/1	9/30	5,217	19.3	21,750	80.7	26,967	31,579
1999 ^f	3	7/1	9/30	8,087	25.6	23,550	74.4	31,637	35,591
2000 ^g	2	7/1	9/30	9,349	19.3	39,170	80.7	48,519	52,489
2001	2	7/1	9/30	13,518	27.2	36,264	72.8	49,782	55,027
2002	2	7/1	9/30	14,444	24.2	45,206	75.8	59,650	66,160
2003	2	7/1	9/30	11,964	25.6	34,658	74.3	46,657	52,370
2004 ^h	2	7/1	10/31	14,845	22.5	51,070	77.4	65,952	72,658
2005 ⁱ	2	7/1	10/31	12,285	24.4	38,071	75.5	50,411	54,297
2006	2	7/1	10/31	9,233	24.5	28,281	75.1	37,639	43,118
2007	2	7/1	10/31	10,312	27.1	27,705	72.9	38,017	41,263
2008 ^j	2/3	7/1	11/30	13,618	26.4	38,006	73.6	51,624	55,520
2009	2/3	7/1	11/30	11,759	23.5	38,201	76.5	49,960	55,495
Average (1984-1999)				14,634	27.6	34,788	72.4	49,434	53,228
Average (2000-2009)				12,133	24.5	37,663	75.5	49,821	54,840

Source: Statewide Harvest Survey (Mills 1984-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b, *In prep.* a-b).

^a Includes Kenai R guided/unguided not specified; reach not specified.

^b No fishing after 3 coho harvested, to prevent "boat limits."

^c Closed sections of 5 rm below lakes to all fishing to protect spawning coho salmon, from Jan 1 to June 14.

^d Guides restricted on Mondays

^e Emergency order reduced bag limit to one per day on 8/11/98.

^f Repealed c.

^g Coho closed from 8/1–8/3.

^h Extended season to October 31.

ⁱ Repealed g, allowed to fish after limit of coho upstream of Soldotna Bridge; guides allowed to fish upstream of Moose River for other species.

^j Two per day in August/three per day in September through November.

^k Includes entire Kenai R drainage (Russian R, Beaver Cr, Funny R, Grant Cr, Hidden Cr/Lk, Jean Lk, Kenai Lk, Moose R, Quartz Cr, Sevena Lk, Skilak Lk, Soldotna Cr, and Trail Lk).

PROPOSAL 23 - 5 AAC 56.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Kenai River Sportfishing Association and Mayor's Blue Ribbon Sportsmen's Committee, Matanuska-Susitna Borough.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the coho salmon bag limit in the Kenai Peninsula Area from two fish to three fish.

WHAT ARE THE CURRENT REGULATIONS? In flowing waters on the Kenai Peninsula, the bag limit for coho salmon 16 inches or greater in length is two per day and four in possession.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the overall harvest of coho salmon in that area by an unknown amount. In Kenai Peninsula streams (excluding the Kenai River), the increased harvest may be unsustainable, particularly in streams with small runs or in years with below average runs.

BACKGROUND: All road-accessible streams on the Kenai Peninsula support popular coho salmon sport fisheries. The Kasilof River drainage, Swanson River drainage, Anchor River, and Deep Creek are thought to have larger runs than the Ninilchik River and Bishop, Resurrection, and Stariski creeks. Sport fishing for salmon is open only in the lower sections (upstream two miles from the mouth) of Lower Cook Inlet Management Area (LCIMA) streams of Anchor and Ninilchik rivers, and Deep and Stariski creeks.

Coho salmon escapement has been periodically monitored with weirs in the Anchor River and Deep Creek, while runs in other streams have not been monitored as frequently. Weir count information indicates run sizes fluctuate widely across years. In the Anchor River, coho salmon escapement has been monitored from 1987 through 1992 and from 2004 through 2010. For both periods, coho salmon escapement has ranged from fewer than 3,000 (1987 and 2009) to more than 18,000 fish (1989 and 2005). From 1996 through 2001, annual coho salmon escapement in Deep Creek has ranged from 1,537 in 1997 to 6,164 in 2001 (Table 23-1). In the Swanson River the number of coho salmon enumerated at a weir in 1988 and 1989 was 23,514 and 20,841, respectively. In the Kasilof River, abundance of coho salmon estimated by a tagging project was 16,000 in 2009. A feature of the Kasilof and Swanson rivers fisheries is the directed coho fisheries that occur within tributaries of each drainage. These include fisheries in the Swanson River Canoe Trail lakes and Crooked Creek, a tributary of the Kasilof River. There are no coho salmon escapement goals for any Kenai Peninsula area streams.

The annual harvest of coho salmon from streams on the Kenai Peninsula varies between streams and years. From 1977–2006, the average annual coho salmon harvest is higher in Anchor River (2,692) and Deep Creek (1,414) than Ninilchik River (961) and Stariski Creek (271). The annual harvest of coho salmon in each system has approximately ranged from 1,000–5,000 in the Anchor River, 300–3,500 in Deep Creek, 100–3,000 in Ninilchik River, and 25–1,000 in Stariski Creek (Table 23-2). The average annual sport harvest from Anchor River, Deep Creek, and Ninilchik River has slightly increased since 2000 when the bag limit was reduced from three to

two coho salmon. Since the bag limit reduction in other streams on the Kenai Peninsula, the average coho salmon harvest has increased compared to those observed prior to the bag limit reduction. For instance, in the Kasilof and Swanson river drainages, harvests averaged approximately 2,900 and 1,900 fish, respectively, prior to 2000 (Table 23-3). Harvests in the Kasilof River drainage now average 3,700 fish, and those from the Swanson River drainage now average about 2,200 fish. Six Mile and Resurrection creeks support coho salmon fisheries with harvests that now average about 472 and 130 fish, respectively; more than double previous harvests estimated for these locations. The larger harvest is likely due to a combination of factors, including an increase in participation in these coho salmon fisheries and favorable coho salmon production. The variation in the annual coho salmon harvest from Kenai Peninsula streams is not well understood, but is likely due in part to the wide fluctuation in run strength and angler effort, as well as the bag limit.

Based on escapement data and harvest estimates, harvest rates in the Anchor River and Deep Creek have been high in some years. The average annual inriver harvest rate of coho salmon has ranged from 11.5% in 1989 to 59% in 2009. From 1997–2002, the inriver harvest rate of coho salmon in Deep Creek ranged from 27% in 1999 to 60% in 1998. Generally, smaller runs are harvested at a higher rate than large runs.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal due to the wide range of differences in coho salmon production among streams of the Kenai Peninsula. The uncertainty surrounding the volatile nature of annual coho salmon run strength greatly increases the likelihood that coho salmon stocks will be exploited at unsustainable harvest rates during periods of low coho salmon productivity if the bag limit were increased for streams of the Kenai Peninsula. This proposal was also listed for consideration during the Lower Cook Inlet Finfish meeting where the board tabled action on the proposal until the Upper Cook Inlet meeting.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 23-1. Anchor River and Deep Creek coho salmon harvest, catch and escapement, 1977–2009.

Year	Anchor River					Deep Creek				
	Effort (days fished)	Harvest	Catch	Escapement	Exploitation rate (%)	Effort (days fished)	Harvest	Catch	Escapement	Exploitation rate (%)
1977	31,515	1,339				11,399	306			
1978	42,671	1,559				13,872	1,383			
1979	44,220	4,006				12,560	362			
1980	33,272	2,649				8,796	478			
1981	34,257	2,949				10,127	464			
1982	24,709	2,379				12,149	366			
1983	28,881	1,395				13,505	545			
1984	26,919	1,135				15,760	1,197			
1985	31,715	2,239				19,802	2,301			
1986	34,938	1,021				17,354	588			
1987	39,045	2,010		2,409	45.5	16,734	1,050			
1988	24,356	2,219		2,805	44.2	12,115	1,528			
1989	19,145	2,635		20,187	11.5	13,414	2,254			
1990	28,829	2,782	4,666			23,567	1,111	2,039		
1991	22,187	3,169	3,980			17,048	1,290	1,710		
1992	24,028	2,267	4,850	4,596	33.0	15,226	737	1,239		
1993	29,338	4,003	6,657			19,535	1,722	2,790		
1994	27,856	3,360	5,136			18,357	1,895	2,970		
1995	25,888	3,080	5,141			12,727	1,014	1,636		
1996	16,016	1,762	4,025			9,629	2,313	3,818		
1997	17,020	1,636	4,017			9,712	1,115	1,943	2,017	35.6
1998	14,310	2,386	3,949			9,206	2,035	3,635	1,537	57.0
1999	21,184	1,780	3,807			11,367	2,651	3,991	2,267	53.9
2000	22,971	2,604	4,807			12,174	2,018	3,660	3,425	37.1
2001	19,195	2,960	6,327			7,834	1,828	2,529	3,747	32.8
2002	19,245	3,830	7,510			8,925	1,832	3,663	6,164	37.3
2003	17,482	3,999	12,133			8,959	1,751	3,179		
2004	20,452	4,383	10,194	5,728	43.3	10,575	2,474	4,624		
2005	20,079	5,314	11,639	18,977	21.9	10,182	2,202	4,631		
2006	17,065	3,920	7,634	10,181	27.8	7,128	1,606	3,302		
2007	34,390	3,962	9,881	8,226	32.5	9,382	1,932	3,158		
2008	26,182	4,790	7,658	5,951	44.6	9,332	1,631	3,174		
2009	22,057	3,882	6,332	2,692	59.1	8,367	1,323	2,341		
Averages										
1977-2009	26,104	2,830	6,517	8,175	28.5	12,631	1,433	3,002	3,193	37.5

Table 23-2. Ninilchik River and Stariski Creek coho salmon harvest and catch, 1977–2009.

Year	Ninilchik River		Stariski Creek	
	Harvest	Catch	Harvest	Catch
1977	122		133	
1978	88		201	
1979	200		275	
1980	321		155	
1981	432		410	
1982	241		119	
1983	210		251	
1984	549		0	
1985	697		25	
1986	336		187	
1987	924		127	
1988	709		146	
1989	379		396	
1990	368	633	169	287
1991	789	899	280	339
1992	785	1,433	97	138
1993	845	1,636	392	602
1994	1,089	1,486	446	464
1995	620	971	72	72
1996	1,071	1,332	426	482
1997	402	948	111	178
1998	836	963	1,168	1,289
1999	2,980	5,127	153	436
2000	1,724	3,354	419	534
2001	708	1,196	270	328
2002	1,655	3,238	367	384
2003	2,526	4,596	309	470
2004	3,425	4,440	374	915
2005	1,339	2,663	379	475
2006	2,472	3,069	280	407
2007	1,591	2,225	385	502
2008	692	986	283	1,386
2009	895	1,853	139	265
Averages				
1977-2006	961	2,234	271	459
2007-2009	1,059	1,688	269	718

Table 23-3. Northern Kenai Peninsula Management Area (except Kenai River drainage) coho salmon sport harvest, 1981–2009.

Year	Kasilof River Drainage				Swanson River Drainage			Other NKPMA Drainages				Total
	Tustumena Lake ^a	Kasilof River	Crooked Creek	Total	Swanson River	Swanson Canoe Route Lakes	Total	Six Mile Creek	Resurrection Creek	Chickaloon River	Other ^b	
1981	NA	335	NA	335	NA	NA	NA	NA	NA	NA	NA	NA
1982	NA	325	NA	325	NA	NA	NA	NA	NA	NA	NA	NA
1983	NA	409	NA	409	525	NA	525	NA	NA	NA	NA	NA
1984	NA	1,085	NA	1,085	1,484	NA	1,484	NA	NA	NA	NA	NA
1985	NA	560	NA	560	NA	187	187	NA	NA	NA	NA	NA
1986	NA	1,783	497	2,280	NA	969	969	45	13	NA	0	58
1987	36	3,785	NA	3,821	NA	1,485	1,485	72	36	NA	0	108
1988	200	2,928	291	3,419	5,603	546	6,149	236	18	NA	55	309
1989	111	4,222	1,952	6,285	6,379	127	6,506	79	127	NA	0	206
1990	236	1,590	486	2,312	1,501	0	1,501	316	125	NA	0	441
1991	52	4,754	265	5,071	811	81	892	125	29	NA	0	154
1992	32	3,304	251	3,587	1,984	49	2,033	49	89	154	97	389
1993	258	3,698	867	4,823	3,477	10	3,487	344	171	439	0	954
1994	30	4,457	1,026	5,513	1,876	0	1,876	534	81	18	27	660
1995	218	5,349	98	5,665	1,132	0	1,132	472	39	0	0	511
1996	144	2,612	471	3,227	2,578	76	2,654	551	224	155	0	930
1997	345	1,286	0	1,631	1,153	0	1,153	381	84	20	56	541
1998	119	2,107	0	2,226	2,371	123	2,494	470	274	115	0	859
1999	48	3,269	0	3,317	2,054	0	2,054	92	233	0	0	325
2000	229	2,965	0	3,194	2,506	0	2,506	429	52	136	0	617
2001	90	3,173	110	3,373	1,959	117	2,076	459	125	19	86	689
2002	93	6,046	35	6,174	2,467	0	2,467	1,025	114	22	163	1,324
2003	46	4,082	0	4,128	3,087	80	3,167	262	125	23	0	410
2004	338	4,217	270	4,825	1,466	45	1,511	582	138	0	0	720
2005	117	3,124	117	3,358	2,367	0	2,367	146	39	120	72	377
2006	85	3,782	54	3,921	2,028	32	2,060	545	121	0	0	666
2007	15	1,740	0	1,755	1,660	10	1,670	252	289	0	0	541
2008	252	3,613	0	3,865	2,814	0	2,814	354	195	0	0	549
2009	61	2,725	63	2,849	1,790	0	1,790	664	103	0	0	767
Avg. (1981-1999)	96	2,519	327	2,942	1,733	192	1,925	198	81	47	12	339
Avg. (2000-2009)	133	3,547	65	3,744	2,214	28	2,243	472	130	32	32	666
Avg. (1981-2009)	109	2,873	236	3,218	1,899	136	2,035	293	98	42	19	452

Source: All harvest estimates from Statewide Harvest Survey (Mills 1982-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, *In prep.* a-b.).

^a Tustumena Lake data includes harvests from creeks draining into Tustumena Lake (Nikolai Creek 1998, 2000; Glacier Creek 2004).

^b Harvest data from Ingram Creek (1988, 2001, 2002), Otter Creek (1992, 1994, 1997), Sunrise Creek (2005).

PROPOSAL 205 - 5 AAC 56.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area; and 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: James K. Johnson.

WHAT WOULD THE PROPOSAL DO? This proposal would increase bag and possession limit to three coho salmon on the Kenai and Kasilof rivers.

WHAT ARE THE CURRENT REGULATIONS? In the Kenai River Drainage Area, except in the Russian River, the bag and possession limit for coho salmon 16 inches or greater is two fish from July 1 through August 31. The bag and possession limit for coho salmon 16 inches or greater is three fish in the Kenai River from Skilak Lake downstream to the mouth from September 1 through November 30, and in the Kenai River between Kenai and Skilak lakes from September 1 through October 31. In the Russian River, the bag and possession limit for coho salmon 16 inches or greater is one fish; the Russian River closes to fishing for coho salmon on October 1

In the Kasilof River, the bag and possession limit for coho salmon greater than 16 inches is two fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of coho salmon and may increase exploitation rates to unsustainable levels during years of below average returns.

BACKGROUND: The *Kenai River Coho Salmon Management Plan* (5 AAC 57.170) was first adopted in 1996 in response to a decline in coho salmon smolt abundance and increased harvest of returning adults in the Kenai River. A special board meeting was convened in 1997 through a petition submitted by the department based on high Kenai River coho salmon harvests beginning in 1993 and 1994 which were thought to be unsustainable, and declining Moose River (Kenai River tributary) coho salmon smolt counts. As a result of that meeting, restrictions affecting all users were put into regulation to conserve Kenai River coho salmon. Additional restrictive regulations were added to the plan from 1997–1999. These regulations were an attempt to reduce the total harvest of Kenai River coho salmon by 20% from combined sport and commercial users and originally had a sunset clause of December 2002. The restrictions placed on the Kenai River coho salmon sport fishery from the 1997 board meeting included:

1. The Kenai River coho salmon sport fishing season was established from July 1–September 30.
2. Guides could not sport fish when guiding clients.
3. No fishing from a guided vessel on Mondays downstream from the confluence of the Moose and Kenai rivers.
4. No fishing for coho salmon in a guided vessel on Mondays upstream from the confluence of the Moose and Kenai rivers, but fishing for other species was allowed.

In 1999, the board again addressed this fishery by reducing the coho salmon bag limit in the Russian River and in that area of the Kenai River downstream from the confluence of the Russian and Kenai rivers to the ferry crossing from three per day to one per day. This conservation measure was in response to an increasingly popular clearwater fishery at the Russian River, where stocks are subject to higher exploitation rates.

In 2000, a special board meeting was convened through a petition submitted by the governor based on low abundance of coho salmon throughout Cook Inlet. As an outcome of this meeting, more restrictions were put in place to conserve both Kenai River and Northern District coho salmon. The restrictions placed on the Kenai River coho salmon sport fishery from the 2000 board meeting included:

1. The bag and possession limit was reduced from three fish to two fish Cook Inlet-wide (excepting West Cook Inlet and terminal fisheries targeting hatchery fish). Anglers in the Kenai River must stop fishing for all species below the outlet of Skilak Lake for the remainder of the day after retaining a daily bag limit of two coho salmon.
2. Closing the Kenai River downstream of Skilak Lake from August 1–3 for coho salmon fishing.
3. Bait was prohibited in the Kenai River from October 1 to June 30.

The net result of the management plan on the Kenai River sport fishery was the overall reduction of coho salmon harvest. Currently, the department does not manage the Kenai River coho salmon sport fishery inseason based upon abundance because no escapement goal has been established for the Kenai River. There are no coho salmon escapement goals for the other streams in the Northern Kenai Peninsula Management Area where the limit for coho salmon was reduced from three daily and in possession to two daily and in possession.

Coho salmon fishing regulations were liberalized for the Kenai River by the board in 2005 and 2008. Changes resulted in a net gain in fishing time, area, and a seasonal increase in the bag limit, as well as less restrictive fishing methods. Coho salmon fishing regulations for other Northern Kenai Peninsula Management Area streams were not changed.

In 2005, several liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. A 31-day season extension for coho salmon fishing within the Kenai River drainage: from September 30 to October 31.
2. Bait was allowed from July 1 through October 31 downstream of the Upper Killey River and bait with multiple hooks from August 1 through October 31 was allowed.
3. The August 1–3 coho salmon fishing closure downstream of Skilak Lake was repealed, allowing a continuous season from July 1 through October 31.
4. The regulation prohibiting fishing after a person takes a bag limit of two coho salmon below Upper Killey River was reduced to below the Soldotna Bridge, allowing a person to continue to fish upstream of the Soldotna Bridge.
5. Fishing from a guide vessel was allowed on Mondays for other species upstream of the confluence of the Moose and Kenai rivers.

In 2008, liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. An increase in the bag and possession limit from two fish to three fish beginning September 1.
2. A 30-day season extension for coho salmon fishing within the lower Kenai River drainage downstream of Skilak Lake, from October 31 to November 30.
3. Bait was allowed from July 1 through November 30 downstream of the Upper Killey River and bait with multiple hooks from August 1 through November 30 was allowed.

The two coho salmon daily bag limit will provide a sustainable fishery despite changes in adult runs and juvenile survival. This is based on information gathered from research programs on Kenai River coho that indicate the coho salmon runs averaged about 140,000 fish from 1999 to 2004 with harvests averaging just over 62,000 fish (Table 205-1). Overall exploitation rates for Kenai River coho salmon runs prior to 2000 were high, in some cases (84% in 1999) under the previous Kenai River coho salmon management plan which allowed a three fish bag limit and more liberal commercial fishing in August; under a plan that allowed a two fish bag limit and more restrictive commercial fishing, the exploitation rate ranged from 35% to 47% from 2000 to 2004. New regulations in 2005, which liberalized both the sport and commercial fisheries, are thought to have likely increased the average exploitation rate into the mid 50% range from 2005–2007. Again in 2008, new regulations adopted by the board liberalized both the sport and commercial fisheries on Kenai River coho salmon runs, most likely increasing the average exploitation rate into the high 50% range from 2008 to 2010. If the bag limit in August is increased to three per day, the projected exploitation rate on an average run would be in the low 60% range. Research findings from studies conducted in Southeast Alaska with trans-boundary coho salmon stocks have indicated that an exploitation rate of about 61% is sustainable.

Total Kenai River drainage coho salmon sport harvests prior to 2000 (three coho per day) averaged 53,228 fish annually. Since 2000, (two coho per day), they increased to an average of 54,840 fish, with guided anglers averaging 24.5% of the total harvest during that time (Table 205-2).

Total Kasilof River drainage coho salmon sport harvests prior to 2000 (three coho per day) averaged 2,942 fish annually. Since 2000, (two coho per day), they increased to an average of 3,744 fish (Table 205-3).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The uncertainty surrounding the volatile nature of annual coho salmon run strength greatly increases the likelihood that coho salmon stocks will be exploited at unsustainable harvest rates during periods of low coho salmon productivity if harvests increased in the Kenai River. The department is **NEUTRAL** on the allocative aspects of this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 205-1. Estimated harvest, total run and exploitation of Kenai River coho salmon, 2000–2004.

Year	Escapement ^{a,b}	Harvest			Research Mortality	Total Run	Total Harvest ^e	Exploitation Rate ^f
		Sport ^c	Personal Use	Commercial ^d				
1999	7,889	35,361	1,009	3,894	193	48,346	40,457	0.837
2000	72,742	52,489	1,449	2,965	555	130,200	56,903	0.437
2001	75,122	55,004	1,555	1,934	540	134,155	58,493	0.436
2002	133,612	66,104	1,721	6,115	968	208,520	73,940	0.355
2003	79,915	51,944	1,332	2,578	209	135,978	55,854	0.411
2004	95,394	72,565	2,661	11,149	2,106	183,875	86,375	0.470
Average (1999-2004)	77,446	55,578	1,621	4,773	762	140,179	62,004	0.491
Average (2000-2004)	91,357	59,621	1,744	4,948	876	158,546	66,313	0.422

Note: 1991-1993 and 1998 Kenai River coho salmon creel data was used to calculate the effect of increasing the bag limit from 2 to 3 fish, only boat angler interviews/data were selected for use for 1991-1993 due to the lack of data from shore anglers; sho

^a Kenai River coho salmon total returns were estimated during 1999-2004.

^b Sources: Carlon and Evans 2007, Massengill and Evans 2007.

^c Source: Statewide Harvest Survey.

^d Sources: Massengill and Carlon 2004 a,b; Massengill and Carlon 2007 a,b; Massengill 2007.

^e Aggregate of all harvest estimates (sport, commercial, and personal-use/subsistence).

^f (Estimated Grand Total Harvest) / (Estimated Total Return).

ND = No Data

Table 205-2. Guided and unguided sport harvest of Kenai River coho salmon and the total Kenai River drainage sport harvest 1984–2009.

Year	Bag Limit	Season		Guided		Unguided		Kenai River Harvest ^a	Total Drainage Harvest
		Start	End	Harvest	%	Harvest	%		
1984	3	entire year		5,490	9.2	54,154	90.8	59,644	62,076
1985	3	entire year		4,006	9.0	40,529	90.8	44,635	46,090
1986	3	entire year		13,883	23.1	46,227	76.9	60,110	62,938
1987	3	entire year		4,976	15.0	28,234	85.0	33,210	37,484
1988	3	entire year		4,456	9.1	44,238	90.7	48,785	51,950
1989	3	entire year		15,835	28.6	39,424	71.3	55,275	59,575
1990	3	entire year		15,274	25.3	45,051	74.7	60,325	63,497
1991	3	entire year		30,789	40.4	45,367	59.6	76,163	80,674
1992 ^b	3	entire year		20,794	39.8	31,516	60.2	52,310	56,877
1993	3	entire year		23,743	47.0	26,795	53.0	50,538	52,855
1994	3	entire year		41,170	47.5	45,541	52.5	86,711	91,490
1995	3	entire year		23,587	51.1	22,596	48.9	46,183	50,346
1996 ^c	3	entire year		13,728	32.5	28,565	67.5	42,293	47,860
1997 ^d	3/1 ^e	7/1	9/30	3,101	19.2	13,063	80.8	16,164	20,770
1998	3	7/1	9/30	5,217	19.3	21,750	80.7	26,967	31,579
1999 ^f	3	7/1	9/30	8,087	25.6	23,550	74.4	31,637	35,591
2000 ^g	2	7/1	9/30	9,349	19.3	39,170	80.7	48,519	52,489
2001	2	7/1	9/30	13,518	27.2	36,264	72.8	49,782	55,027
2002	2	7/1	9/30	14,444	24.2	45,206	75.8	59,650	66,160
2003	2	7/1	9/30	11,964	25.6	34,658	74.3	46,657	52,370
2004 ^h	2	7/1	10/31	14,845	22.5	51,070	77.4	65,952	72,658
2005 ⁱ	2	7/1	10/31	12,285	24.4	38,071	75.5	50,411	54,297
2006	2	7/1	10/31	9,233	24.5	28,281	75.1	37,639	43,118
2007	2	7/1	10/31	10,312	27.1	27,705	72.9	38,017	41,263
2008 ^j	2/3	7/1	11/30	13,618	26.4	38,006	73.6	51,624	55,520
2009	2/3	7/1	11/30	11,759	23.5	38,201	76.5	49,960	55,495
Average (1984-1999)				14,634	27.6	34,788	72.4	49,434	53,228
Average (2000-2009)				12,133	24.5	37,663	75.5	49,821	54,840

Source: Statewide Harvest Survey (Mills 1984-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b, *In prep.* a-b).

^a Includes Kenai R guided/unguided not specified; reach not specified.

^b No fishing after 3 coho harvested, to prevent "boat limits."

^c Closed sections of 5 rm below lakes to all fishing to protect spawning coho salmon, from Jan 1 to June 14.

^d Guides restricted on Mondays

^e Emergency order reduced bag limit to one per day on 8/11/98.

^f Repealed c.

^g Coho closed from 8/1–8/3.

^h Extended season to October 31.

ⁱ Repealed g, allowed to fish after limit of coho upstream of Soldotna Bridge; guides allowed to fish upstream of Moose River for other species.

^j Two per day in August/three per day in September through November.

^k Includes entire Kenai R drainage (Russian R, Beaver Cr, Funny R, Grant Cr, Hidden Cr/Lk, Jean Lk, Kenai Lk, Moose R, Quartz Cr, Sevena Lk, Skilak Lk, Soldotna Cr, and Trail Lk).

Table 205-3. Kasilof River drainage coho salmon sport harvest, 1981–2009.

Year	Kasilof River Drainage				Total
	Bag Limit	Tustumena Lake ^a	Kasilof River	Crooked Creek ^b	
1981	3	NA	335	NA	335
1982	3	NA	325	NA	325
1983	3	NA	409	NA	409
1984	3	NA	1,085	NA	1,085
1985	3	NA	560	NA	560
1986	3	NA	1,783	497	2,280
1987	3	36	3,785	NA	3,821
1988	3	200	2,928	291	3,419
1989	3	111	4,222	1,952	6,285
1990	3	236	1,590	486	2,312
1991	3	52	4,754	265	5,071
1992	3	32	3,304	251	3,587
1993	3	258	3,698	867	4,823
1994	3	30	4,457	1,026	5,513
1995	3	218	5,349	98	5,665
1996	3	144	2,612	471	3,227
1997	3	345	1,286	0	1,631
1998	3	119	2,107	0	2,226
1999	3	48	3,269	0	3,317
2000	2	229	2,965	0	3,194
2001	2	90	3,173	110	3,373
2002	2	93	6,046	35	6,174
2003	2	46	4,082	0	4,128
2004	2	338	4,217	270	4,825
2005	2	117	3,124	117	3,358
2006	2	85	3,782	54	3,921
2007	2	15	1,740	0	1,755
2008	2	252	3,613	0	3,865
2009	2	61	2,725	63	2,849
Avg. (1981-1999)		96	2,519	327	2,942
Avg. (2000-2009)		133	3,547	65	3,744

al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, In prep.a-b).

^a Tustumena Lake data includes harvests from creeks draining into Tustumena Lake (Nikolai Creek 1998, 2000; Glacier Creek 2004).

^b Upstream from weir. 1997 and 1998 weir not in place. Beginning in 1999, weir was removed each season prior to the end of the coho run. Enumeration discontinued in 2008. (Weir removed 8/27/99, 9/26/00, 8/15/01, 8/15/02, 8/12/03, 8/15/04, 10/12/05, 10/14/06, and 9/24/07; remainder of coho run passed through uncounted.)

^c Harvest data from Ingram Creek (1988, 2001, 2002), Otter Creek (1992, 1994, 1997), Sunrise Creek (2005).

PROPOSAL 206 - 5AAC 57.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Middle Section of the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would move the current boundary that separates different coho salmon bag limits in the Russian River downstream approximately 0.75 miles. This proposal would align the coho salmon bag limit with adjacent waters in the Russian River Sanctuary Area and Russian River, by reducing the limits for coho salmon from two per day and in possession down to one per day and in possession in that area of the mainstem Kenai River from the ferry crossing downstream to the power lines.

WHAT ARE THE CURRENT REGULATIONS? In the Russian River and the Russian River Sanctuary area, which consists of waters upstream from department regulatory markers located downstream of the ferry crossing on the Kenai River to department regulatory markers located approximately 300 yards upstream of the public boat launch at Sportsman's Landing, including the waters around the upstream end of the island near the Russian River mouth, and the Russian River from its mouth upstream 100 yards to department regulatory markers (Figure 206-1), the bag and possession limit for salmon, other than king salmon 16 inches or greater in length is three fish, of which only one per day and in possession may be a coho salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce fishing effort and the harvest of coho salmon within that section of the Upper Kenai River mainstem near the mouth of the Russian River by an unknown, but likely small, amount. This proposal would reduce the occurrence of anglers unwittingly exceeding the bag limit and aid in enforcement.

BACKGROUND: In 1999, the board reduced the coho salmon bag limit in the Russian River and in that area of the Kenai River downstream from the confluence of the Russian and Kenai rivers to the ferry crossing from three per day to one per day. This conservation measure was in response to the increasingly popular clearwater fishery at the Russian River, where stocks are subject to higher exploitation rates. Salmon that migrate up the Russian River tend to hold in the waters from the mouth downstream to just past the power lines, and are more susceptible to harvest given the clearwater conditions. Russian River coho salmon harvests prior to 1999 (3 fish per day) averaged 2,862 fish annually, while from 1999 to 2009 (one fish per day) they have averaged 4,769 fish (Table 206-1).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The differing bag limit for coho salmon at the Russian- Kenai rivers confluence area occurs nearly in the middle of a high use area. The present boundary line separating the different coho salmon bag limits is confusing to the public and is difficult to enforce because anglers can boat and walk through the area from several access points. In addition, adjusting the coho salmon bag limit demarcation downstream approximately one-quarter of a mile to the power line crossing on the Kenai River would align salmon limits with inseason regulatory actions taken for sockeye salmon in this area, thereby avoiding further confusion for the public and aiding in enforcement.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

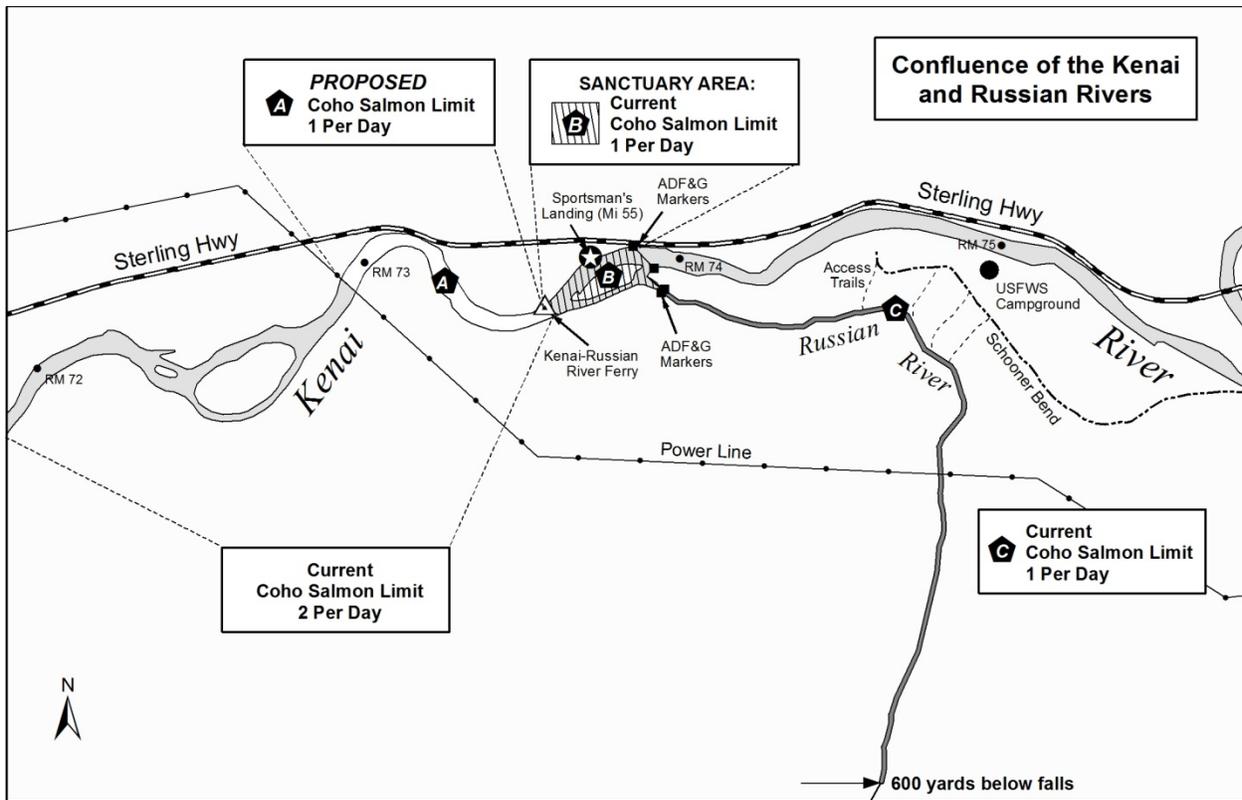


Figure 206-1. Map of upper Kenai River and Russian River confluence area and proposed area for coho salmon bag limit change.

Table 206-1. Coho salmon harvest in the Russian River, 1977–2009.

Year	Bag Limit	Harvest
1977	3	1,472
1978	3	1,446
1979	3	1,098
1980	3	1,025
1981	3	346
1982	3	1,275
1983	3	1,490
1984	3	2,432
1985	3	1,543
1986	3	2,783
1987	3	4,220
1988	3	2,983
1989	3	4,062
1990	3	3,106
1991	3	4,378
1992	3	4,535
1993	3	2,290
1994	3	4,607
1995	3	4,077
1996	3	4,599
1997	3	4,586
1998	3	4,612
1999	1	3,910
2000	1	3,938
2001	1	5,222
2002	1	6,093
2003	1	5,197
2004	1	6,574
2005	1	3,868
2006	1	5,431
2007	1	3,169
2008	1	3,739
2009	1	5,313
Average (1977-1998)		2,862
Average (1999-2009)		4,769

PROPOSAL 207 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River Drainage Area.

PROPOSED BY: Kenai Area Fisherman’s Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would repeal the provision that allows anglers to fish from a registered guide vessel for purposes of a charitable or educational event on the first Sunday in June on the Kenai River downstream of the outlet of Skilak Lake.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday or Monday from May 1 through July 31 (except Memorial Day), except that a person may fish from a registered sport fishing guide vessel during the last two Sundays in May and the first Sunday in June under the terms of a permit issued by the commissioner, for approved charitable nonprofit organizations or for educational public service activities.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase the time required to catch a king salmon for participants in these events because the run tends to peak in early to mid June. This proposal would also provide an additional day unguided anglers would be able to fish without the presence of guide boats on the river.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

In 2003, the regulation for sport fishing from a registered guide vessel downstream of Skilak Lake was modified to allow fishing from a registered guide vessel during the last two Sundays in May under terms of a permit issued by the commissioner for approved charitable nonprofit organizations or for educational public service activities. A third day, the first Sunday in June, was added into regulation in 2008. The commissioner issued a permit in 2008 and 2009 to provide for one day of fishing from a registered guide boat for the purpose of participation in the Wounded Warriors of Alaska program. The permit allowed previously-identified guide boats to be used to provide uncompensated guiding services for up to 100 Wounded Warrior, Distinguished Combat Cross, Purple Heart, and combat veterans participating in the event. During 2008, 39 registered guide vessels were used during the event and 34 vessels were used in 2009. A permit was also issued in 2010 for participation in the “Project Healing Waters Fly Fishing” program, but this event was cancelled due to a sport fishing closure on the river at the time the event was to take place.

Guided anglers have expended, on average, approximately 60% of the total fishing effort in June from 2003 to 2010, the time period when the slot limit has been in effect (Table 207-1). The proportion of guided harvest during that time ranged from 64% to 81%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 207-1. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers on the Kenai River from the mouth upstream to the Soldotna Bridge during the month of June, 1987–2010.

June Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	a	a	a	a	a	a
1982	a	a	a	a	a	a
1983	a	a	a	a	a	a
1984	a	a	a	a	a	a
1985	a	a	a	a	a	a
1986	a	a	a	a	a	a
1987	87,760	ND	4,476	35,856	ND	4,269
1988	89,903	ND	4,187	47,216	ND	4,992
1989	79,354	ND	1,603	74,335	ND	4,294
1990	ND	ND	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND	ND
1992	ND	ND	ND	ND	ND	ND
1993	64,371	ND	2,217	37,518	ND	3,145
1994	55,518	1,558	1,023	48,346	3,170	2,492
1995	69,095	3,872	2,462	58,236	5,527	3,858
1996	46,030	1,392	906	61,616	3,584	2,716
1997	ND	ND	ND	ND	ND	ND
1998	ND	ND	ND	ND	ND	ND
1999	35,724	1,538	905	57,112	5,057	4,089
2000	19,472	377	154	43,572	1,270	420
2001	18,690	183	109	38,214	1,259	967
2002	3,549	116	91	7,352	271	262
2003	18,460	801	539	28,942	1,511	1,171
2004	24,900	783	592	31,766	2,526	1,405
2005	26,965	1,101	600	40,455	2,972	2,034
2006	26,090	1,392	832	40,886	3,058	2,545
2007	22,498	880	695	40,458	2,884	1,873
2008	25,981	1,347	864	40,019	2,049	1,617
2009	19,066	319	284	26,552	593	501
2010	13,580	227	147	20,100	865	611
Average						
2003–2010	22,192	856	569	33,647	2,057	1,470
Percentage						
2003–2010	40%	29%	28%	60%	71%	72%
Average						
1987–2002	51,770	1,291	1,648	46,307	2,877	2,864
Percentage						
1987–2002	53%	31%	37%	47%	69%	63%

ND = No data.

^aData collection method prevents results specific to June.

PROPOSAL 208 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River Drainage Area.

PROPOSED BY: Ronald Isaacs.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit guided sport fishing in a two-mile section of the lower Kenai River, beginning 0.25 miles above the sonar project at river mile 8.5 and extending downstream to Cunningham Park (Figure 208-1).

WHAT ARE THE CURRENT REGULATIONS? During May, June, and July, sport fishing from a registered guide vessel downstream of Skilak Lake is permitted only from 6:00 a.m. to 6:00 p.m. In addition, downstream from the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday from May 1 through July 31, and on any Monday in July, except that a person may fish from a registered sport fishing guide vessel during the last two Sundays in May and the first Sunday in June under the terms of a permit issued by the commissioner for approved charitable nonprofit organizations or for educational public service activities.

On any Monday in May through July, except for Memorial Day, a person may not fish from a boat in the portion of the Kenai River from the outlet of Skilak Lake to the mouth of the river, except that unguided sport fishing from a nonmotorized vessel is allowed on Mondays in May through July.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would provide unguided anglers a two-mile stretch of river free of competition with guided anglers. This proposal would likely increase the guided effort, catch, harvest, and crowding in other areas of the Kenai River. It is unlikely that there would be any measurable effect on the total effort, catch, and harvest of Kenai River salmon stocks and other fish species.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

Guided anglers have expended on average approximately 59% of the total fishing effort in the early-run Kenai River king salmon fishery, and 46% of the total fishing effort in the late run from the mouth upstream to the Soldotna Bridge, from 2003 to 2010 (Tables 208-1 and 208-2). This is the time period when the king salmon slot limit has been in effect for the early-run fishery only. The proportion of guided harvest during those years ranged from 63% to 77% in the early run, and from 49% to 69% in the late run.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Figure 208-1. Map of the lower Kenai River.



Table 208-1. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the early run from May 16 to June 30, 1981–2010.

May 16–June 30 Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	47,913	ND	1,618	19,857	ND	1,846
1982	76,329	ND	2,144	22,799	ND	1,797
1983	64,651	ND	1,729	43,823	ND	3,526
1984	89,549	ND	1,695	40,610	ND	2,211
1985	87,199	ND	2,591	50,339	ND	4,181
1986	100,371	ND	2,958	41,724	ND	3,379
1987	122,876	ND	5,806	48,078	ND	5,418
1988	134,807	ND	5,601	66,636	ND	6,348
1989	104,702	ND	1,833	93,927	ND	4,878
1990	33,807	ND	153	38,992	ND	570
1991	24,320	ND	298	23,279	ND	593
1992	28,217	ND	653	26,113	ND	712
1993	76,500	ND	2,784	46,773	ND	4,062
1994	72,433	2,259	1,524	61,766	4,140	3,198
1995	90,073	4,679	3,009	75,917	6,681	4,724
1996	58,551	1,461	981	71,629	4,091	3,185
1997	37,792	1,991	1,282	64,451	4,791	3,660
1998	17,506	736	157	38,631	1,133	491
1999	40,816	1,634	993	69,972	5,562	4,541
2000	27,371	562	289	54,248	1,747	860
2001	24,215	257	148	45,988	1,580	1,280
2002	5,232	125	91	9,780	294	285
2003	23,840	973	628	35,218	1,840	1,320
2004	30,523	1,168	773	34,768	2,633	1,512
2005	32,492	1,176	651	47,000	3,254	2,226
2006	27,985	1,419	833	44,786	3,104	2,564
2007	25,460	917	710	44,796	3,027	1,934
2008	28,838	1,408	900	43,736	2,145	1,702
2009	23,703	388	334	29,336	670	564
2010	16,345	286	193	23,394	918	645
Average						
2003–2010	26,148	967	628	37,879	2,199	1,558
Percentage						
2003–2010	41%	31%	29%	59%	69%	71%
Average						
1981–2002	62,056	1,523	1,743	47,970	3,335	2,807
Percentage						
1981–2002	56%	31%	38%	44%	69%	62%

ND = No data.

Table 208-2. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the late run from July 1 to July 31, 1981–2010.

July 1–July 31 Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	66,309	ND	1,988	30,351	ND	2,162
1982	92,931	ND	2,083	34,897	ND	2,257
1983	110,172	ND	3,405	54,756	ND	4,919
1984	208,309	ND	3,888	42,062	ND	2,614
1985	171,109	ND	4,395	40,398	ND	2,705
1986	159,943	ND	4,855	47,379	ND	3,198
1987	193,630	ND	5,573	69,622	ND	5,194
1988	235,043	ND	8,042	88,331	ND	8,393
1989	186,382	ND	3,281	86,507	ND	4,727
1990	161,071	ND	2,269	85,477	ND	3,544
1991	147,293	ND	2,985	82,706	ND	3,864
1992	112,091	ND	2,504	75,324	ND	4,176
1993	201,695	ND	7,413	92,213	ND	7,866
1994	244,729	10,502	7,760	110,049	8,037	6,628
1995	200,397	7,126	4,914	123,585	6,773	5,211
1996	128,438	2,631	2,131	110,057	4,352	3,853
1997	137,226	5,740	4,480	126,416	6,796	5,856
1998	89,854	10,502	2,406	98,872	8,037	3,575
1999	134,264	6,613	4,422	118,196	10,584	7,605
2000	134,020	6,907	5,480	114,362	8,228	6,585
2001	127,395	8,458	5,496	109,238	11,294	8,240
2002	100,808	7,282	4,917	90,868	9,584	6,436
2003	115,688	12,652	6,200	91,768	16,117	7,637
2004	127,725	8,185	5,003	110,690	14,329	9,491
2005	125,235	12,248	6,893	105,550	13,416	8,420
2006	140,490	9,516	5,895	117,210	10,272	7,295
2007	112,575	5,273	2,853	106,644	8,135	6,405
2008	98,903	4,437	3,525	99,597	6,491	5,748
2009	99,938	4,786	3,124	77,238	5,566	4,254
2010	88,995	3,141	2,748	69,194	2,898	2,627
Average						
2003–2010	113,694	7,530	4,530	97,236	9,653	6,485
Percentage						
2003–2010	54%	44%	41%	46%	56%	59%
Average						
1981–2002	151,960	7,307	4,304	83,258	8,187	4,982
Percentage						
1981–2002	65%	47%	46%	35%	53%	54%

ND = No data.

PROPOSAL 209 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River Drainage Area.

PROPOSED BY: Kenai Area Fisherman's Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would modify existing Kenai River guide hours from 6:00 a.m.–6:00 p.m., to 7:00 a.m.–7:00 p.m.

WHAT ARE THE CURRENT REGULATIONS? During May, June, and July, sport fishing from a registered guide vessel downstream of Skilak Lake is permitted only from 6:00 a.m. to 6:00 p.m. In addition, downstream of the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday or Monday from May 1 through July 31 (except Memorial Day).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Guided anglers would start and stop fishing one hour later, which would allow unguided anglers an additional hour of fishing in the early morning without the presence of guided vessels. It is unlikely that there would be any measurable effect on total effort, catch, and harvest of king salmon.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

Guided anglers have expended, on average, approximately 59% of the total fishing effort in the early-run Kenai River king salmon fishery, and 46% of the total fishing effort in the late run from the mouth upstream to the Soldotna Bridge, from 2003 to 2010 (Tables 209-1 and 209-2). This is the time period when the king salmon slot limit has been in effect for the early-run fishery only. The proportion of guided harvest during that time ranged from 63% to 77% in the early run, and from 49% to 69% in the late run. Using department freshwater logbook data, the average proportion of guided nonresident anglers from 2006 to 2009 in May, June, and July was 75%, 84%, and 87%, respectively (Tables 209-3, 209-4, and 209-5).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 209-1. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the early run from May 16 to June 30, 1981–2010.

May 16–June 30 Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	47,913	ND	1,618	19,857	ND	1,846
1982	76,329	ND	2,144	22,799	ND	1,797
1983	64,651	ND	1,729	43,823	ND	3,526
1984	89,549	ND	1,695	40,610	ND	2,211
1985	87,199	ND	2,591	50,339	ND	4,181
1986	100,371	ND	2,958	41,724	ND	3,379
1987	122,876	ND	5,806	48,078	ND	5,418
1988	134,807	ND	5,601	66,636	ND	6,348
1989	104,702	ND	1,833	93,927	ND	4,878
1990	33,807	ND	153	38,992	ND	570
1991	24,320	ND	298	23,279	ND	593
1992	28,217	ND	653	26,113	ND	712
1993	76,500	ND	2,784	46,773	ND	4,062
1994	72,433	2,259	1,524	61,766	4,140	3,198
1995	90,073	4,679	3,009	75,917	6,681	4,724
1996	58,551	1,461	981	71,629	4,091	3,185
1997	37,792	1,991	1,282	64,451	4,791	3,660
1998	17,506	736	157	38,631	1,133	491
1999	40,816	1,634	993	69,972	5,562	4,541
2000	27,371	562	289	54,248	1,747	860
2001	24,215	257	148	45,988	1,580	1,280
2002	5,232	125	91	9,780	294	285
2003	23,840	973	628	35,218	1,840	1,320
2004	30,523	1,168	773	34,768	2,633	1,512
2005	32,492	1,176	651	47,000	3,254	2,226
2006	27,985	1,419	833	44,786	3,104	2,564
2007	25,460	917	710	44,796	3,027	1,934
2008	28,838	1,408	900	43,736	2,145	1,702
2009	23,703	388	334	29,336	670	564
2010	16,345	286	193	23,394	918	645
Average						
2003–2010	26,148	967	628	37,879	2,199	1,558
Percentage						
2003–2010	41%	31%	29%	59%	69%	71%
Average						
1981–2002	62,056	1,523	1,743	47,970	3,335	2,807
Percentage						
1981–2002	56%	31%	38%	44%	69%	62%

ND = No data.

Table 209-2. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the late run from July 1 to July 31, 1981–2010.

July 1–July 31 Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	66,309	ND	1,988	30,351	ND	2,162
1982	92,931	ND	2,083	34,897	ND	2,257
1983	110,172	ND	3,405	54,756	ND	4,919
1984	208,309	ND	3,888	42,062	ND	2,614
1985	171,109	ND	4,395	40,398	ND	2,705
1986	159,943	ND	4,855	47,379	ND	3,198
1987	193,630	ND	5,573	69,622	ND	5,194
1988	235,043	ND	8,042	88,331	ND	8,393
1989	186,382	ND	3,281	86,507	ND	4,727
1990	161,071	ND	2,269	85,477	ND	3,544
1991	147,293	ND	2,985	82,706	ND	3,864
1992	112,091	ND	2,504	75,324	ND	4,176
1993	201,695	ND	7,413	92,213	ND	7,866
1994	244,729	10,502	7,760	110,049	8,037	6,628
1995	200,397	7,126	4,914	123,585	6,773	5,211
1996	128,438	2,631	2,131	110,057	4,352	3,853
1997	137,226	5,740	4,480	126,416	6,796	5,856
1998	89,854	10,502	2,406	98,872	8,037	3,575
1999	134,264	6,613	4,422	118,196	10,584	7,605
2000	134,020	6,907	5,480	114,362	8,228	6,585
2001	127,395	8,458	5,496	109,238	11,294	8,240
2002	100,808	7,282	4,917	90,868	9,584	6,436
2003	115,688	12,652	6,200	91,768	16,117	7,637
2004	127,725	8,185	5,003	110,690	14,329	9,491
2005	125,235	12,248	6,893	105,550	13,416	8,420
2006	140,490	9,516	5,895	117,210	10,272	7,295
2007	112,575	5,273	2,853	106,644	8,135	6,405
2008	98,903	4,437	3,525	99,597	6,491	5,748
2009	99,938	4,786	3,124	77,238	5,566	4,254
2010	88,995	3,141	2,748	69,194	2,898	2,627
Average						
2003–2010	113,694	7,530	4,530	97,236	9,653	6,485
Percentage						
2003–2010	54%	44%	41%	46%	56%	59%
Average						
1981–2002	151,960	7,307	4,304	83,258	8,187	4,982
Percentage						
1981–2002	65%	47%	46%	35%	53%	54%

ND = No data.

Table 209-3. Kenai River guided freshwater logbook data for month of May, 2006–2009.

May	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	146	129	26%	364	74%	493	79	43	1	1	9	0	3	0	
Bridge to Moose R.	6	2	12%	15	88%	17	5	1	0	0	3	0	0	0	
Moose R. to Skilak Lk.	12	1	3%	36	97%	37	0	0	0	0	316	0	62	0	
Skilak Lk. To Kenai Lk.	1	0	0%	4	100%	4	2	2	6	6	22	0	0	0	
Unknown Reach	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Total	165	132	24%	419	76%	551	86	46	7	7	350	0	65	0	
2007															
Mouth to Bridge	151	101	22%	350	78%	451	69	53	36	1	13	0	1	0	
Bridge to Moose R.	7	2	10%	18	90%	20	10	6	0	0	1	0	0	0	
Moose R. to Skilak Lk.	16	6	15%	33	85%	39	0	0	0	0	248	0	23	2	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	17	13	30%	31	70%	44	0	0	0	0	150	0	4	0	
Total	191	122	22%	432	78%	554	79	59	36	1	412	0	28	2	
2008															
Mouth to Bridge	139	70	17%	332	83%	402	70	51	4	4	45	0	2	1	
Bridge to Moose R.	2	0	0%	6	100%	6	1	1	0	0	18	0	2	0	
Moose R. to Skilak Lk.	12	2	6%	32	94%	34	0	0	0	0	158	7	28	0	
Skilak Lk. To Kenai Lk.	6	1	10%	9	90%	10	0	0	0	0	16	0	0	0	
Unknown Reach	1	0	0%	3	100%	3	0	0	0	0	0	0	0	0	
Total	160	73	16%	382	84%	455	71	52	4	4	237	7	32	1	
2009															
Mouth to Bridge	138	148	37%	247	63%	395	86	57	2	2	14	0	2	0	
Bridge to Moose R.	4	3	33%	6	67%	9	1	1	0	0	21	0	5	0	
Moose R. to Skilak Lk.	5	1	10%	9	90%	10	0	0	0	0	21	0	14	0	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	2	2	50%	2	50%	4	0	0	0	0	13	0	0	0	
Total	149	154	37%	264	63%	418	87	58	2	2	69	0	21	0	
2006 - 2009 Average	166	120	25%	374	75%	495	81	54	12	4	267	2	37	1	

Table 209-4. Kenai River guided freshwater logbook data for month of June, 2006–2009.

June	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden	
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
2006														
Mouth to Bridge	2,041	1,080	15%	6,071	85%	7,151	3,550	2,010	194	158	1,199	97	346	66
Bridge to Moose R.	274	119	13%	787	87%	906	624	337	87	47	1,319	84	54	4
Moose R. to Skilak Lk.	113	38	11%	305	89%	343	97	45	27	19	1,388	30	184	3
Skilak Lk. To Kenai Lk.	336	101	10%	901	90%	1,002	2	2	1,995	1,340	2,019	28	386	14
Unknown Reach	10	4	15%	22	85%	26	2	2	8	6	118	0	0	0
Total	2,774	1,342	14%	8,086	86%	9,428	4,275	2,396	2,311	1,570	6,043	239	970	87
2007														
Mouth to Bridge	1,832	906	15%	5,252	85%	6,158	2,371	1,451	58	53	770	70	245	45
Bridge to Moose R.	271	140	16%	714	84%	854	664	313	5	5	629	17	74	1
Moose R. to Skilak Lk.	158	60	13%	406	87%	466	55	41	5	1	2,639	44	316	18
Skilak Lk. To Kenai Lk.	370	96	9%	1,031	91%	1,127	4	0	1,538	1,114	2,023	50	388	6
Unknown Reach	88	19	7%	238	93%	257	41	32	82	45	499	3	60	2
Total	2,719	1,221	14%	7,641	86%	8,862	3,135	1,837	1,688	1,218	6,560	184	1,083	72
2008														
Mouth to Bridge	1,715	1,015	18%	4,773	82%	5,788	2,135	1,594	65	58	438	38	133	17
Bridge to Moose R.	225	70	10%	631	90%	701	333	217	16	16	623	23	9	0
Moose R. to Skilak Lk.	132	39	10%	363	90%	402	19	13	88	77	2,284	14	195	1
Skilak Lk. To Kenai Lk.	410	116	9%	1,126	91%	1,242	3	2	1,331	967	2,423	21	311	2
Unknown Reach	43	18	14%	113	86%	131	28	20	103	92	168	1	14	0
Total	2,525	1,258	15%	7,006	85%	8,264	2,518	1,846	1,603	1,210	5,936	97	662	20
2009														
Mouth to Bridge	1,154	828	22%	2,930	78%	3,758	612	443	19	19	262	10	56	4
Bridge to Moose R.	133	56	14%	358	86%	414	72	51	15	8	552	7	67	1
Moose R. to Skilak Lk.	114	61	20%	245	80%	306	13	9	140	78	1,713	27	223	11
Skilak Lk. To Kenai Lk.	457	205	15%	1,175	85%	1,380	22	22	4,197	3,336	2,039	22	445	4
Unknown Reach	32	22	23%	73	77%	95	10	8	34	34	175	4	15	4
Total	1,890	1,172	20%	4,781	80%	5,953	729	533	4,405	3,475	4,741	70	806	24
2006 - 2009 Average	2,477	1,248	16%	6,879	84%	8,127	2,664	1,653	2,502	1,868	5,820	148	880	51

Table 209-5. Kenai River guided freshwater logbook data for month of July, 2006–2009.

July	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	5,279	2,361	12%	17,654	88%	20,015	9,924	5,978	279	163	1,556	52	794	67	
Bridge to Moose R.	217	54	7%	696	93%	750	203	127	289	177	1,660	123	59	4	
Moose R. to Skilak Lk.	225	58	8%	642	92%	700	75	41	65	30	3,501	19	805	19	
Skilak Lk. To Kenai Lk.	640	146	7%	1,885	93%	2,031	13	8	1,115	683	4,977	46	2,445	33	
Unknown Reach	52	17	9%	164	91%	181	67	46	0	0	358	0	228	1	
Total	6,413	2,636	11%	21,041	89%	23,677	10,282	6,200	1,748	1,053	12,052	240	4,331	124	
2007															
Mouth to Bridge	5,024	2,586	14%	15,750	86%	18,336	8,199	5,001	763	672	957	45	483	34	
Bridge to Moose R.	259	63	7%	853	93%	916	276	169	712	501	1,426	16	116	4	
Moose R. to Skilak Lk.	247	71	9%	711	91%	782	106	70	945	677	3,886	67	741	15	
Skilak Lk. To Kenai Lk.	601	137	7%	1,751	93%	1,888	5	2	1,532	702	4,308	74	2,760	22	
Unknown Reach	226	66	9%	691	91%	757	225	131	284	202	815	16	317	13	
Total	6,357	2,923	13%	19,756	87%	22,679	8,811	5,373	4,236	2,754	11,392	218	4,417	88	
2008															
Mouth to Bridge	4,773	2,409	14%	14,713	86%	17,122	6,359	4,693	586	516	731	30	434	32	
Bridge to Moose R.	347	61	5%	1,118	95%	1,179	351	279	605	410	1,176	17	44	4	
Moose R. to Skilak Lk.	216	54	8%	617	92%	671	43	31	860	527	3,269	11	470	3	
Skilak Lk. To Kenai Lk.	694	182	8%	2,016	92%	2,198	9	1	2,465	1,469	3,669	20	1,520	22	
Unknown Reach	55	23	14%	146	86%	169	78	54	44	35	48	0	13	0	
Total	6,085	2,729	13%	18,610	87%	21,339	6,840	5,058	4,560	2,957	8,893	78	2,481	61	
2009															
Mouth to Bridge	3,514	2,113	17%	10,280	83%	12,393	4,767	3,108	537	465	345	15	282	24	
Bridge to Moose R.	242	103	13%	711	87%	814	379	225	334	288	423	4	44	1	
Moose R. to Skilak Lk.	196	91	15%	498	85%	589	115	60	618	472	1,241	0	378	4	
Skilak Lk. To Kenai Lk.	698	235	11%	1,846	89%	2,081	4	0	2,296	1,358	3,841	27	2,807	30	
Unknown Reach	82	26	10%	245	90%	271	50	41	82	74	203	0	69	1	
Total	4,732	2,568	16%	13,580	84%	16,148	5,315	3,434	3,867	2,657	6,053	46	3,580	60	
2006 - 2009 Average															
	5,897	2,714	13%	18,247	87%	20,961	7,812	5,016	3,603	2,355	9,598	146	3,702	83	

PROPOSAL 210 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River drainage area.

PROPOSED BY: Kenai River Professional Guide Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a registered vessel on the Kenai River 24 hours per day, seven days per week during May.

WHAT ARE THE CURRENT REGULATIONS? During May, June, and July, sport fishing from a registered guide vessel downstream of Skilak Lake is permitted only from 6:00 a.m. to 6:00 p.m. In addition, downstream of the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday or Monday from May 1 through July 31 (except Memorial Day), except that a person may fish from a registered sport fishing guide vessel during the last two Sundays in May and the first Sunday in June under the terms of a permit issued by the commissioner for approved charitable nonprofit organizations or for educational public service activities.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the amount of available guided fishing time by 420–492 hours (depending on calendar year). This includes seven to nine days that were previously closed (Sundays and Mondays) to guided fishing. This proposal would increase the amount of guided fishing effort, catch, and harvest of early-run Kenai River king salmon stocks and other fish species by an unknown number. The proposal may increase the effort, catch, and harvest disparity between guided and unguided anglers in the Kenai River king salmon sport fishery.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

The board has adopted management plans structured to constrain the harvest of early-run king salmon stocks to sustainable levels while still providing for fishing opportunity. The management guidelines that the board has adopted through the years have closed specific areas of the river to all fishing, restricted certain areas of the river to shore fishing only, and imposed time and date closures for all guided and unguided boat anglers. In addition, the board has continued to address the harvest disparity that exists between guided and unguided anglers within the Kenai River king salmon sport fishery by reducing the number of hours and days guided anglers may fish, limiting the number of clients allowed to fish from a guided vessel, and prohibiting guides from fishing while clients are present/fishing.

Creel survey information indicates that, during the month of May, guided anglers accounted for 52% of the total fishing effort and 60% of the total harvest (Table 210-1). Creel survey

information also indicates guided anglers are generally more successful at catching king salmon than unguided anglers. During the 2010 early run, the average time to catch a king salmon for guided anglers was 25 hours, compared to 57 hours for unguided anglers (Table 210-2).

Since the inception of the freshwater logbook program in 2006, the number of guided trips on the Kenai River in May has averaged 166 annually, and has ranged from 149 to 191 (Table 210-3). The average proportion of guided nonresident anglers from 2006 to 2009 in May was 75%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 210-1. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the early run from May 16 to May 31, 1987–2010.

Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	a	a	a	a	a	a
1982	a	a	a	a	a	a
1983	a	a	a	a	a	a
1984	a	a	a	a	a	a
1985	a	a	a	a	a	a
1986	a	a	a	a	a	a
1987	35,116	1,873	1,330	12,222	1,209	1,149
1988	44,904	1,838	1,414	19,420	1,882	1,356
1989	25,348	286	230	19,592	558	584
1990	ND	ND	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND	ND
1992	ND	ND	ND	ND	ND	ND
1993	12,129	938	567	9,255	1,144	917
1994	16,915	701	501	13,420	970	706
1995	20,978	807	547	17,681	1,154	866
1996	12,521	69	75	10,013	507	469
1997	ND	ND	ND	ND	ND	ND
1998	ND	ND	ND	ND	ND	ND
1999	5,092	96	88	12,860	505	452
2000	7,899	185	135	10,676	477	440
2001	5,525	74	39	7,774	321	313
2002	1,683	9	0	2,428	23	23
2003	5,380	172	89	6,276	329	149
2004	5,623	385	181	3,002	107	107
2005	5,528	75	51	6,545	282	192
2006	1,895	27	1	3,900	46	19
2007	2,963	37	15	4,338	143	61
2008	2,858	61	36	3,717	96	85
2009	4,638	69	50	2,784	77	63
2010	2,765	59	46	3,294	53	34
Average						
2003–2010	3,956	111	59	4,232	142	89
Percentage						
2003–2010	48%	44%	40%	52%	56%	60%
Average						
1987–2002	17,101	625	448	12,304	795	661
Percentage						
1987–2002	58%	44%	40%	42%	56%	60%

ND = No data.

^aData collection method prevents results specific to May.

Table 210-2. Average number of hours for an angler to catch a king salmon in the early run on the Kenai River from the mouth upstream to the Soldotna Bridge based on an inseason angler creel survey, 2003–2010.

	Average hours to catch a king salmon during the early run								Mean
	2003	2004	2005	2006	2007	2008	2009	2010	
Guided	19.14	14.70	14.44	14.43	14.75	20.39	59.55	25.49	22.86
Unguided	24.40	26.14	27.63	19.72	27.69	20.49	61.15	57.23	33.06

Table 210-3. Kenai River guided freshwater logbook data for month of May, 2006–2009.

May	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	146	129	26%	364	74%	493	79	43	1	1	9	0	3	0	
Bridge to Moose R.	6	2	12%	15	88%	17	5	1	0	0	3	0	0	0	
Moose R. to Skilak Lk.	12	1	3%	36	97%	37	0	0	0	0	316	0	62	0	
Skilak Lk. To Kenai Lk.	1	0	0%	4	100%	4	2	2	6	6	22	0	0	0	
Unknown Reach	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Total	165	132	24%	419	76%	551	86	46	7	7	350	0	65	0	
2007															
Mouth to Bridge	151	101	22%	350	78%	451	69	53	36	1	13	0	1	0	
Bridge to Moose R.	7	2	10%	18	90%	20	10	6	0	0	1	0	0	0	
Moose R. to Skilak Lk.	16	6	15%	33	85%	39	0	0	0	0	248	0	23	2	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	17	13	30%	31	70%	44	0	0	0	0	150	0	4	0	
Total	191	122	22%	432	78%	554	79	59	36	1	412	0	28	2	
2008															
Mouth to Bridge	139	70	17%	332	83%	402	70	51	4	4	45	0	2	1	
Bridge to Moose R.	2	0	0%	6	100%	6	1	1	0	0	18	0	2	0	
Moose R. to Skilak Lk.	12	2	6%	32	94%	34	0	0	0	0	158	7	28	0	
Skilak Lk. To Kenai Lk.	6	1	10%	9	90%	10	0	0	0	0	16	0	0	0	
Unknown Reach	1	0	0%	3	100%	3	0	0	0	0	0	0	0	0	
Total	160	73	16%	382	84%	455	71	52	4	4	237	7	32	1	
2009															
Mouth to Bridge	138	148	37%	247	63%	395	86	57	2	2	14	0	2	0	
Bridge to Moose R.	4	3	33%	6	67%	9	1	1	0	0	21	0	5	0	
Moose R. to Skilak Lk.	5	1	10%	9	90%	10	0	0	0	0	21	0	14	0	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	2	2	50%	2	50%	4	0	0	0	0	13	0	0	0	
Total	149	154	37%	264	63%	418	87	58	2	2	69	0	21	0	
2006 - 2009 Average															
	166	120	25%	374	75%	495	81	54	12	4	267	2	37	1	

PROPOSAL 211 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River drainage area.

PROPOSED BY: Kenai River Professional Guide Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a registered guide vessel on the Kenai River on Sundays during normal guide hours (6:00 a.m.–6:00 p.m.) in May.

WHAT ARE THE CURRENT REGULATIONS? During May, June, and July, sport fishing from a registered guide vessel downstream of Skilak Lake is permitted only from 6:00 a.m. to 6:00 p.m. In addition, downstream of the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday or Monday from May 1 through July 31 (except Memorial Day), except that a person may fish from a registered sport fishing guide vessel during the last two Sundays in May and the first Sunday in June under the terms of a permit issued by the commissioner for approved charitable nonprofit organizations or for educational public service activities.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would allow an additional four to five days (depending on calendar year) that were previously closed to fishing from a registered guide vessel and increase the amount of guided fishing participation effort, catch, and harvest of early-run Kenai River king salmon stocks and other fish species by an unknown number. This proposal would take away half of the available days in the month of May for unguided anglers to fish without guided vessels present. The proposal may increase the effort, catch, and harvest disparity between guided and unguided anglers in the Kenai River king salmon sport fishery.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

The board has adopted management plans structured to constrain the harvest of early-run king salmon stocks to sustainable levels while still providing for fishing opportunity. The management guidelines that the board has adopted through the years have closed specific areas of the river to all fishing, restricted certain areas of the river to shore fishing only, and imposed time and date closures for all guided and unguided boat anglers. In addition, the board has continued to address the harvest disparity that exists between guided and unguided anglers within the Kenai River king salmon sport fishery by reducing the number of hours and days guided anglers may fish, limiting the number of clients allowed to fish from a guided vessel, and prohibiting guides from fishing while clients are present/fishing.

Creel survey information indicates that, during the month of May, guided anglers accounted for 52% of the total fishing effort and 60% of the total harvest (Table 211-1). Creel survey information also indicates guided anglers are generally more successful at catching king salmon than unguided anglers. During the 2010 early run, the average time to catch a king salmon for guided anglers was 25 hours, compared to 57 hours for unguided anglers (Table 211-2).

Since the inception of the freshwater logbook program in 2006, the number of guided trips on the Kenai River in May has averaged 166 annually, and has ranged from 149 to 191 (Table 211-3). The average proportion of guided nonresident anglers from 2006 to 2009 in May was 75%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 211-1. Effort, catch, and harvest of king salmon, as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the early run from May 16 to May 31, 1987–2010.

Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	a	a	a	a	a	a
1982	a	a	a	a	a	a
1983	a	a	a	a	a	a
1984	a	a	a	a	a	a
1985	a	a	a	a	a	a
1986	a	a	a	a	a	a
1987	35,116	1,873	1,330	12,222	1,209	1,149
1988	44,904	1,838	1,414	19,420	1,882	1,356
1989	25,348	286	230	19,592	558	584
1990	ND	ND	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND	ND
1992	ND	ND	ND	ND	ND	ND
1993	12,129	938	567	9,255	1,144	917
1994	16,915	701	501	13,420	970	706
1995	20,978	807	547	17,681	1,154	866
1996	12,521	69	75	10,013	507	469
1997	ND	ND	ND	ND	ND	ND
1998	ND	ND	ND	ND	ND	ND
1999	5,092	96	88	12,860	505	452
2000	7,899	185	135	10,676	477	440
2001	5,525	74	39	7,774	321	313
2002	1,683	9	0	2,428	23	23
2003	5,380	172	89	6,276	329	149
2004	5,623	385	181	3,002	107	107
2005	5,528	75	51	6,545	282	192
2006	1,895	27	1	3,900	46	19
2007	2,963	37	15	4,338	143	61
2008	2,858	61	36	3,717	96	85
2009	4,638	69	50	2,784	77	63
2010	2,765	59	46	3,294	53	34
Average						
2003–2010	3,956	111	59	4,232	142	89
Percentage						
2003–2010	48%	44%	40%	52%	56%	60%
Average						
1987–2002	17,101	625	448	12,304	795	661
Percentage						
1987–2002	58%	44%	40%	42%	56%	60%

ND = No data.

^aData collection method prevents results specific to May.

Table 211-2. Average number of hours for an angler to catch a king salmon in the early run on the Kenai River from the mouth upstream to the Soldotna Bridge based on an inseason angler creel survey, 2003–2010.

	Average hours to catch a king salmon during the early run								Mean
	2003	2004	2005	2006	2007	2008	2009	2010	
Guided	19.14	14.70	14.44	14.43	14.75	20.39	59.55	25.49	22.86
Unguided	24.40	26.14	27.63	19.72	27.69	20.49	61.15	57.23	33.06

Table 211-3. Kenai River guided freshwater logbook data for month of May, 2006–2009.

May	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	146	129	26%	364	74%	493	79	43	1	1	9	0	3	0	
Bridge to Moose R.	6	2	12%	15	88%	17	5	1	0	0	3	0	0	0	
Moose R. to Skilak Lk.	12	1	3%	36	97%	37	0	0	0	0	316	0	62	0	
Skilak Lk. To Kenai Lk.	1	0	0%	4	100%	4	2	2	6	6	22	0	0	0	
Unknown Reach	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Total	165	132	24%	419	76%	551	86	46	7	7	350	0	65	0	
2007															
Mouth to Bridge	151	101	22%	350	78%	451	69	53	36	1	13	0	1	0	
Bridge to Moose R.	7	2	10%	18	90%	20	10	6	0	0	1	0	0	0	
Moose R. to Skilak Lk.	16	6	15%	33	85%	39	0	0	0	0	248	0	23	2	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	17	13	30%	31	70%	44	0	0	0	0	150	0	4	0	
Total	191	122	22%	432	78%	554	79	59	36	1	412	0	28	2	
2008															
Mouth to Bridge	139	70	17%	332	83%	402	70	51	4	4	45	0	2	1	
Bridge to Moose R.	2	0	0%	6	100%	6	1	1	0	0	18	0	2	0	
Moose R. to Skilak Lk.	12	2	6%	32	94%	34	0	0	0	0	158	7	28	0	
Skilak Lk. To Kenai Lk.	6	1	10%	9	90%	10	0	0	0	0	16	0	0	0	
Unknown Reach	1	0	0%	3	100%	3	0	0	0	0	0	0	0	0	
Total	160	73	16%	382	84%	455	71	52	4	4	237	7	32	1	
2009															
Mouth to Bridge	138	148	37%	247	63%	395	86	57	2	2	14	0	2	0	
Bridge to Moose R.	4	3	33%	6	67%	9	1	1	0	0	21	0	5	0	
Moose R. to Skilak Lk.	5	1	10%	9	90%	10	0	0	0	0	21	0	14	0	
Skilak Lk. To Kenai Lk.	0	0	0%	0	0%	0	0	0	0	0	0	0	0	0	
Unknown Reach	2	2	50%	2	50%	4	0	0	0	0	13	0	0	0	
Total	149	154	37%	264	63%	418	87	58	2	2	69	0	21	0	
2006 - 2009 Average	166	120	25%	374	75%	495	81	54	12	4	267	2	37	1	

PROPOSAL 212 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River drainage area.

PROPOSED BY: Scott Eggemeyer.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a registered guide vessel on the Kenai River on Sundays during June.

WHAT ARE THE CURRENT REGULATIONS? During May, June, and July, sport fishing from a registered guide vessel downstream of Skilak Lake is permitted only from 6:00 a.m. to 6:00 p.m. In addition, downstream of the outlet of Skilak Lake, a person may not sport fish from a registered guide vessel on any Sunday or Monday from May 1 through July 31 (except Memorial Day), except that a person may fish from a registered sport fishing guide vessel during the last two Sundays in May and the first Sunday in June under the terms of a permit issued by the commissioner for approved charitable nonprofit organizations or for educational public service activities.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would allow an additional four to five days (depending on calendar year) that were previously closed to fishing from a registered guide vessel and increase the amount of guided fishing participation effort, catch, and harvest of early-run Kenai River king salmon stocks and other fish species by an unknown number. This proposal would take away half of the available days in the month of June for unguided anglers to fish without guided vessels present. The proposal may increase the effort, catch, and harvest disparity between guided and unguided anglers in the Kenai River king salmon sport fishery.

BACKGROUND: Since 1985, during June and July, sport fishing from registered guide vessels has been permitted only from 6:00 a.m. to 6:00 p.m. (except for the years 1986–1988 when during July, the time was 7:00 a.m. to 7:00 p.m.). In 2000, the daily time restrictions were extended to include the month of May. Guided anglers are also restricted from fishing on the Kenai River downstream of Skilak Lake from a registered guide vessel on Sundays or Mondays in May through July (except Memorial Day). These regulations are intended to restrict angling harvest of king salmon by reducing guided angling effort, provide unguided anglers with hours free of competition with guided anglers, and control angler congestion on the Kenai River.

The board has adopted management plans structured to constrain the harvest of early-run king salmon stocks to sustainable levels while still providing for fishing opportunity. The management guidelines that the board has adopted through the years have closed specific areas of the river to all fishing, restricted certain areas of the river to shore fishing only, and imposed time and date closures for all guided and unguided boat anglers. In addition, the board has continued to address the harvest disparity that exists between guided and unguided anglers within the Kenai River king salmon sport fishery by reducing the number of hours and days guided anglers may fish, limiting the number of clients allowed to fish from a guided vessel, and prohibiting guides from fishing while clients are present/fishing.

Since the king salmon slot limit was adopted in 2003, guided anglers have accounted for an average of 59% of the total early-run fishing effort and 71% of the total early-run harvest (Table 212-1). Preliminary estimates from the 2010 season reveal that guided anglers expended an average of 59% of the total fishing effort, while accounting for 77% (645) of the early-run king salmon harvested from the Kenai River below the Soldotna Bridge. Creel survey information indicates that, during the month of June, guided anglers accounted for 60% of the total fishing effort and 72% of the total harvest below the Soldotna Bridge (Table 212-2).

Since the inception of the freshwater logbook program in 2006, the number of guided trips on the Kenai River in June has averaged 2,405 annually, and has ranged from 1,890 to 2,774 (Table 212-3). The average proportion of guided nonresident anglers from 2006 to 2009 in June was 84%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 212-1. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the early run from May 16 to June 30, 1981–2010.

May 16–June 30 Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	47,913	ND	1,618	19,857	ND	1,846
1982	76,329	ND	2,144	22,799	ND	1,797
1983	64,651	ND	1,729	43,823	ND	3,526
1984	89,549	ND	1,695	40,610	ND	2,211
1985	87,199	ND	2,591	50,339	ND	4,181
1986	100,371	ND	2,958	41,724	ND	3,379
1987	122,876	ND	5,806	48,078	ND	5,418
1988	134,807	ND	5,601	66,636	ND	6,348
1989	104,702	ND	1,833	93,927	ND	4,878
1990	33,807	ND	153	38,992	ND	570
1991	24,320	ND	298	23,279	ND	593
1992	28,217	ND	653	26,113	ND	712
1993	76,500	ND	2,784	46,773	ND	4,062
1994	72,433	2,259	1,524	61,766	4,140	3,198
1995	90,073	4,679	3,009	75,917	6,681	4,724
1996	58,551	1,461	981	71,629	4,091	3,185
1997	37,792	1,991	1,282	64,451	4,791	3,660
1998	17,506	736	157	38,631	1,133	491
1999	40,816	1,634	993	69,972	5,562	4,541
2000	27,371	562	289	54,248	1,747	860
2001	24,215	257	148	45,988	1,580	1,280
2002	5,232	125	91	9,780	294	285
2003	23,840	973	628	35,218	1,840	1,320
2004	30,523	1,168	773	34,768	2,633	1,512
2005	32,492	1,176	651	47,000	3,254	2,226
2006	27,985	1,419	833	44,786	3,104	2,564
2007	25,460	917	710	44,796	3,027	1,934
2008	28,838	1,408	900	43,736	2,145	1,702
2009	23,703	388	334	29,336	670	564
2010	16,345	286	193	23,394	918	645
Average						
2003–2010	26,148	967	628	37,879	2,199	1,558
Percentage						
2003–2010	41%	31%	29%	59%	69%	71%
Average						
1981–2002	62,056	1,523	1,743	47,970	3,335	2,807
Percentage						
1981–2002	56%	31%	38%	44%	69%	62%

ND = No data.

Table 212-2. Effort, catch, and harvest of king salmon as estimated from a creel survey, of both guided and unguided anglers, on the Kenai River from the mouth upstream to the Soldotna Bridge during the month of June, 1987–2010.

June Year	Unguided			Guided		
	Effort	Catch	Harvest	Effort	Catch	Harvest
1981	a	a	a	a	a	a
1982	a	a	a	a	a	a
1983	a	a	a	a	a	a
1984	a	a	a	a	a	a
1985	a	a	a	a	a	a
1986	a	a	a	a	a	a
1987	87,760	ND	4,476	35,856	ND	4,269
1988	89,903	ND	4,187	47,216	ND	4,992
1989	79,354	ND	1,603	74,335	ND	4,294
1990	ND	ND	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND	ND
1992	ND	ND	ND	ND	ND	ND
1993	64,371	ND	2,217	37,518	ND	3,145
1994	55,518	1,558	1,023	48,346	3,170	2,492
1995	69,095	3,872	2,462	58,236	5,527	3,858
1996	46,030	1,392	906	61,616	3,584	2,716
1997	ND	ND	ND	ND	ND	ND
1998	ND	ND	ND	ND	ND	ND
1999	35,724	1,538	905	57,112	5,057	4,089
2000	19,472	377	154	43,572	1,270	420
2001	18,690	183	109	38,214	1,259	967
2002	3,549	116	91	7,352	271	262
2003	18,460	801	539	28,942	1,511	1,171
2004	24,900	783	592	31,766	2,526	1,405
2005	26,965	1,101	600	40,455	2,972	2,034
2006	26,090	1,392	832	40,886	3,058	2,545
2007	22,498	880	695	40,458	2,884	1,873
2008	25,981	1,347	864	40,019	2,049	1,617
2009	19,066	319	284	26,552	593	501
2010	13,580	227	147	20,100	865	611
Average						
2003–2010	22,192	856	569	33,647	2,057	1,470
Percentage						
2003–2010	40%	29%	28%	60%	71%	72%
Average						
1987–2002	51,770	1,291	1,648	46,307	2,877	2,864
Percentage						
1987–2002	53%	31%	37%	47%	69%	63%

ND = No data.

^aData collection method prevents results specific to June.

Table 212-3. Kenai River guided freshwater logbook data for month of June, 2006–2009.

June	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	2,041	1,080	15%	6,071	85%	7,151	3,550	2,010	194	158	1,199	97	346	66	
Bridge to Moose R.	274	119	13%	787	87%	906	624	337	87	47	1,319	84	54	4	
Moose R. to Skilak Lk.	113	38	11%	305	89%	343	97	45	27	19	1,388	30	184	3	
Skilak Lk. To Kenai Lk.	336	101	10%	901	90%	1,002	2	2	1,995	1,340	2,019	28	386	14	
Unknown Reach	10	4	15%	22	85%	26	2	2	8	6	118	0	0	0	
Total	2,774	1,342	14%	8,086	86%	9,428	4,275	2,396	2,311	1,570	6,043	239	970	87	
2007															
Mouth to Bridge	1,832	906	15%	5,252	85%	6,158	2,371	1,451	58	53	770	70	245	45	
Bridge to Moose R.	271	140	16%	714	84%	854	664	313	5	5	629	17	74	1	
Moose R. to Skilak Lk.	158	60	13%	406	87%	466	55	41	5	1	2,639	44	316	18	
Skilak Lk. To Kenai Lk.	370	96	9%	1,031	91%	1,127	4	0	1,538	1,114	2,023	50	388	6	
Unknown Reach	88	19	7%	238	93%	257	41	32	82	45	499	3	60	2	
Total	2,719	1,221	14%	7,641	86%	8,862	3,135	1,837	1,688	1,218	6,560	184	1,083	72	
2008															
Mouth to Bridge	1,715	1,015	18%	4,773	82%	5,788	2,135	1,594	65	58	438	38	133	17	
Bridge to Moose R.	225	70	10%	631	90%	701	333	217	16	16	623	23	9	0	
Moose R. to Skilak Lk.	132	39	10%	363	90%	402	19	13	88	77	2,284	14	195	1	
Skilak Lk. To Kenai Lk.	410	116	9%	1,126	91%	1,242	3	2	1,331	967	2,423	21	311	2	
Unknown Reach	43	18	14%	113	86%	131	28	20	103	92	168	1	14	0	
Total	2,525	1,258	15%	7,006	85%	8,264	2,518	1,846	1,603	1,210	5,936	97	662	20	
2009															
Mouth to Bridge	1,154	828	22%	2,930	78%	3,758	612	443	19	19	262	10	56	4	
Bridge to Moose R.	133	56	14%	358	86%	414	72	51	15	8	552	7	67	1	
Moose R. to Skilak Lk.	114	61	20%	245	80%	306	13	9	140	78	1,713	27	223	11	
Skilak Lk. To Kenai Lk.	457	205	15%	1,175	85%	1,380	22	22	4,197	3,336	2,039	22	445	4	
Unknown Reach	32	22	23%	73	77%	95	10	8	34	34	175	4	15	4	
Total	1,890	1,172	20%	4,781	80%	5,953	729	533	4,405	3,475	4,741	70	806	24	
2006 - 2009 Average	2,477	1,248	16%	6,879	84%	8,127	2,664	1,653	2,502	1,868	5,820	148	880	51	

PROPOSAL 213 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River drainage area.

PROPOSED BY: Kenai River Professional Guide Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a registered guide vessel for coho salmon on Mondays during August–November.

WHAT ARE THE CURRENT REGULATIONS? From July 31 or the end of the king salmon season, whichever is later, through November 30, sport fishing from a registered guide vessel for any species of fish on Mondays is prohibited downstream from the confluence of the Moose and Kenai rivers, and sport fishing from a registered guide vessel for coho salmon on Mondays upstream from the confluence of the Moose River and Kenai River is prohibited; any coho salmon caught must be released immediately without further harm.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the amount of available guided fishing time for coho salmon by 408 to 432 hours (an additional 17–18 days, depending on calendar year) that were previously closed to fishing for coho salmon from guide boats below Moose River. This proposal would increase the amount of guided fishing effort, catch, and harvest of Kenai River coho salmon stocks and other fish species by an unknown number. This proposal would remove all the available days during coho salmon season that unguided anglers could fish without guided vessels present.

BACKGROUND: The *Kenai River Coho Salmon Management Plan* (5 AAC 57.170) was first adopted in 1996 in response to a decline in coho salmon smolt abundance and increased harvest of returning adults in the Kenai River. A special board meeting was convened in 1997 through a petition submitted by the department based on high Kenai River coho salmon harvests beginning in 1993 and 1994, which were thought to be unsustainable, and declining Moose River (Kenai River tributary) coho salmon smolt counts. As a result of that meeting, restrictions affecting all users were adopted into regulation to conserve Kenai River coho salmon. Additional restrictive regulations were added to the plan from 1997–99. These regulations were an attempt to reduce the total harvest of Kenai River coho salmon by 20% from combined sport and commercial users, and originally had a sunset clause of December 2002. The restrictions placed on the Kenai River coho salmon sport fishery from the 1997 board meeting included:

1. The Kenai River coho salmon sport fishing season was established from July 1–September 30.
2. Guides could not sport fish when guiding clients.
3. No fishing from a guided vessel on Mondays downstream from the confluence of the Moose and Kenai rivers.
4. No fishing for coho salmon in a guided vessel on Mondays upstream from the confluence of the Moose and Kenai rivers, but fishing for other species was allowed.

In 1999, the board again addressed this fishery by reducing the coho salmon bag limit in the Russian River and in that area of the Kenai River downstream from the confluence of the Russian and Kenai rivers to the ferry crossing from three per day to one per day. This

conservation measure was in response to an increasingly popular clearwater fishery at the Russian River, where stocks are subject to higher exploitation rates.

In 2000, a special board meeting was convened through a petition submitted by the governor based on low abundance of coho salmon throughout Cook Inlet. As an outcome of this meeting, more restrictions were put in place to conserve both Kenai River and Northern District coho salmon. The restrictions placed on the Kenai River coho salmon sport fishery from the 2000 board meeting included:

1. The bag and possession limit was reduced from three fish to two fish Cook Inlet-wide (except for West Side Cook Inlet and terminal fisheries targeting hatchery fish). Anglers in the Kenai River had to stop fishing for all species below the outlet of Skilak Lake for the remainder of the day after retaining a daily bag limit of two coho salmon.
2. The Kenai River downstream of Skilak Lake was closed from August 1–3 for coho salmon fishing.
3. Bait was prohibited in the Kenai River from October 1 to June 30.

The net result of the management plan on the Kenai River sport fishery was an overall reduction of coho salmon harvest. Currently, the department does not manage the Kenai River coho salmon sport fishery inseason based upon abundance because no escapement goal for coho salmon has been established for the Kenai River. There are no coho salmon escapement goals for the other streams in the Northern Kenai Peninsula Management Area where the limit for coho salmon was reduced from three daily and in possession to two daily and in possession.

Coho salmon fishing regulations were liberalized for the Kenai River by the board in 2005 and 2008. Changes resulted in a net gain in fishing time and area, and a seasonal increase in the bag limit, as well as less restrictive fishing methods. Coho salmon fishing regulations for other Northern Kenai Peninsula Management Area streams were not changed.

In 2005, several liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. A 31-day season extension for coho salmon fishing within the Kenai River drainage: from September 30 to October 31.
2. Bait was allowed from July 1 through October 31 downstream of the Upper Killey River and bait with multiple hooks from August 1 through October 31 was allowed.
3. The August 1–3 coho salmon fishing closure downstream of Skilak Lake was repealed, allowing a continuous season from July 1 through October 31.
4. The regulation prohibiting fishing after a person takes a bag limit of two coho salmon below Upper Killey River was reduced to below the Soldotna Bridge, allowing a person to continue to fish upstream of the Soldotna Bridge.
5. Fishing from a guide vessel was allowed on Mondays for other species upstream of the confluence of the Moose and Kenai rivers.

In 2008, liberalizations allowed for the Kenai River coho salmon sport fishery included:

1. The bag and possession limit was increased from two fish to three fish beginning September 1.

2. The season for coho salmon fishing within the lower Kenai River drainage downstream of Skilak Lake was extended by 30 days, from October 31 to November 30.
3. Bait was allowed from July 1 through November 30 downstream of the Upper Killey River, and bait with multiple hooks from August 1 through November 30 was allowed.

In 2008, new regulations adopted by the board liberalized both the sport and commercial fisheries on Kenai River coho salmon runs, most likely increasing the average exploitation rate into the high 50% range each year from 2008 to 2010. Total Kenai River drainage coho salmon sport harvests prior to 2000 (three coho per day) averaged 53,228 fish annually; since 2000 (two coho per day), they increased to an average of 54,840 fish, with guided anglers averaging 24.5% of the total harvest during since 2000 (Table 213-1).

Since inception of the sport fish guide logbook program in 2006, the number of guided trips in August, September, and October has averaged 2,674, 1,086, and 76, respectively (Tables 213-2, 213-3, and 213-4). Using the freshwater logbook data, the average proportion of guided nonresident anglers from 2006 to 2009 in August, September, and October was 90%, 81%, and 46%, respectively.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The uncertainty surrounding the volatile nature of annual coho salmon run strength greatly increases the likelihood that coho salmon stocks will be exploited at unsustainable harvest rates during periods of low coho salmon productivity if harvests increase in the Kenai River. The department is **NEUTRAL** on the allocative aspects of this proposal between guided and unguided users.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 213-1. Guided and unguided sport harvest of Kenai River coho salmon and the total Kenai River drainage sport harvest 1984–2009.

Year	Bag Limit	Season		Guided		Unguided		Kenai River Harvest ^a	Total Drainage Harvest
		Start	End	Harvest	%	Harvest	%		
1984	3	entire year		5,490	9.2	54,154	90.8	59,644	62,076
1985	3	entire year		4,006	9.0	40,529	90.8	44,635	46,090
1986	3	entire year		13,883	23.1	46,227	76.9	60,110	62,938
1987	3	entire year		4,976	15.0	28,234	85.0	33,210	37,484
1988	3	entire year		4,456	9.1	44,238	90.7	48,785	51,950
1989	3	entire year		15,835	28.6	39,424	71.3	55,275	59,575
1990	3	entire year		15,274	25.3	45,051	74.7	60,325	63,497
1991	3	entire year		30,789	40.4	45,367	59.6	76,163	80,674
1992 ^b	3	entire year		20,794	39.8	31,516	60.2	52,310	56,877
1993	3	entire year		23,743	47.0	26,795	53.0	50,538	52,855
1994	3	entire year		41,170	47.5	45,541	52.5	86,711	91,490
1995	3	entire year		23,587	51.1	22,596	48.9	46,183	50,346
1996 ^c	3	entire year		13,728	32.5	28,565	67.5	42,293	47,860
1997 ^d	3/1 ^e	7/1	9/30	3,101	19.2	13,063	80.8	16,164	20,770
1998	3	7/1	9/30	5,217	19.3	21,750	80.7	26,967	31,579
1999 ^f	3	7/1	9/30	8,087	25.6	23,550	74.4	31,637	35,591
2000 ^g	2	7/1	9/30	9,349	19.3	39,170	80.7	48,519	52,489
2001	2	7/1	9/30	13,518	27.2	36,264	72.8	49,782	55,027
2002	2	7/1	9/30	14,444	24.2	45,206	75.8	59,650	66,160
2003	2	7/1	9/30	11,964	25.6	34,658	74.3	46,657	52,370
2004 ^h	2	7/1	10/31	14,845	22.5	51,070	77.4	65,952	72,658
2005 ⁱ	2	7/1	10/31	12,285	24.4	38,071	75.5	50,411	54,297
2006	2	7/1	10/31	9,233	24.5	28,281	75.1	37,639	43,118
2007	2	7/1	10/31	10,312	27.1	27,705	72.9	38,017	41,263
2008 ^j	2/3	7/1	11/30	13,618	26.4	38,006	73.6	51,624	55,520
2009	2/3	7/1	11/30	11,759	23.5	38,201	76.5	49,960	55,495
Average (1984-1999)				14,634	27.6	34,788	72.4	49,434	53,228
Average (2000-2009)				12,133	24.5	37,663	75.5	49,821	54,840

Source: Statewide Harvest Survey (Mills 1984-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b, *In prep.* a-b).

^a Includes Kenai R guided/unguided not specified; reach not specified.

^b No fishing after 3 coho harvested, to prevent "boat limits."

^c Closed sections of 5 rm below lakes to all fishing to protect spawning coho salmon, from Jan 1 to June 14.

^d Guides restricted on Mondays

^e Emergency order reduced bag limit to one per day on 8/11/98.

^f Repealed c.

^g Coho closed from 8/1–8/3.

^h Extended season to October 31.

ⁱ Repealed g, allowed to fish after limit of coho upstream of Soldotna Bridge; guides allowed to fish upstream of Moose River for other species.

^j Two per day in August/three per day in September through November.

^k Includes entire Kenai R drainage (Russian R, Beaver Cr, Funny R, Grant Cr, Hidden Cr/Lk, Jean Lk, Kenai Lk, Moose R, Quartz Cr, Sevena Lk, Skilak Lk, Soldotna Cr, and Trail Lk).

Table 213-2. Kenai River guided freshwater logbook data for month of August, 2006–2009.

	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden	
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
2006														
Mouth to Bridge	1,243	326	7.5%	4,040	92.5%	4,366	4,394	4,120	1,099	883	853	71	826	35
Bridge to Moose R.	250	48	6.1%	738	93.9%	786	630	550	1,652	896	2,087	2	953	4
Moose R. to Skilak Lk.	447	87	6.1%	1,343	93.9%	1,430	1,213	913	2,475	1,492	4,972	31	4,141	54
Skilak Lk. To Kenai Lk.	594	126	6.9%	1,711	93.1%	1,837	85	71	2,507	680	7,274	19	7,833	15
Unknown Reach	15	4	0.0%	43	0.0%	47	23	19	128	124	50	0	105	0
Total	2,549	591	7.0%	7,875	93.0%	8,466	6,345	5,673	7,861	4,075	15,236	123	13,858	108
2007														
Mouth to Bridge	1,210	520	12.8%	3,542	87.2%	4,062	4,895	4,712	605	552	1,024	30	872	46
Bridge to Moose R.	286	50	5.6%	840	94.4%	890	829	727	1,663	1,040	2,577	13	587	4
Moose R. to Skilak Lk.	506	159	10.2%	1,397	89.8%	1,556	1,141	899	2,050	1,356	7,798	43	4,551	21
Skilak Lk. To Kenai Lk.	581	182	0.0%	1,623	0.0%	1,805	47	33	1,029	328	8,719	23	10,070	9
Unknown Reach	169	64	11.0%	517	89.0%	581	233	216	266	186	1,420	26	1,219	5
Total	2,752	975	11.0%	7,919	89.0%	8,894	7,145	6,587	5,613	3,462	21,538	135	17,299	85
2008														
Mouth to Bridge	1,587	571	10.6%	4,836	89.4%	5,407	7,082	6,864	83	43	795	5	573	26
Bridge to Moose R.	173	39	7.2%	502	92.8%	541	562	507	250	164	1,172	3	557	2
Moose R. to Skilak Lk.	466	138	9.5%	1,322	90.5%	1,460	872	763	740	456	7,340	20	5,905	15
Skilak Lk. To Kenai Lk.	771	268	11.0%	2,178	89.0%	2,446	127	104	1,205	511	10,087	22	11,965	45
Unknown Reach	44	12	8.5%	130	91.5%	142	110	91	31	27	183	0	566	0
Total	3,041	1,028	10.3%	8,968	89.7%	9,996	8,753	8,329	2,309	1,201	19,577	50	19,566	88
2009														
Mouth to Bridge	1,012	504	15.1%	2,826	84.9%	3,330	5,098	4,895	215	187	372	6	342	16
Bridge to Moose R.	160	30	6.4%	439	93.6%	469	365	337	432	332	1,568	4	555	1
Moose R. to Skilak Lk.	470	180	12.4%	1,277	87.6%	1,457	1,856	1,579	850	509	6,004	9	5,551	4
Skilak Lk. To Kenai Lk.	671	238	0.0%	1,734	0.0%	1,972	145	103	1,361	784	10,606	12	13,086	19
Unknown Reach	41	21	18.8%	91	81.3%	112	73	73	28	17	229	0	447	2
Total	2,354	973	13.3%	6,367	86.7%	7,340	7,537	6,987	2,886	1,829	18,779	31	19,981	42
2006 - 2009 Average	2674		10.4%		89.6%									

Table 213-3. Kenai River guided freshwater logbook data for month of September, 2006–2009.

	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden	
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
2006														
Mouth to Bridge	310	119	12.3%	845	87.7%	964	1,184	1,084	27	5	540	3	709	4
Bridge to Moose R.	77	23	10.8%	189	89.2%	212	309	205	52	1	511	0	424	1
Moose R. to Skilak Lk.	233	119	17.1%	575	82.9%	694	556	401	303	0	2,593	11	3,059	22
Skilak Lk. To Kenai Lk.	401	190	16.3%	974	83.7%	1,164	210	99	564	0	7,129	2	9,002	8
Unknown Reach	9	11	0.0%	14	0.0%	25	1	1	0	0	245	0	467	0
Total	1,030	462	15.1%	2,597	84.9%	3,059	2,260	1,790	946	6	11,018	16	13,661	35
2007														
Mouth to Bridge	221	79	11.4%	615	88.6%	694	859	825	9	3	310	1	63	0
Bridge to Moose R.	56	32	21.2%	119	78.8%	151	317	227	23	0	659	25	261	9
Moose R. to Skilak Lk.	289	174	19.9%	702	80.1%	876	766	600	86	3	6,446	25	4,281	10
Skilak Lk. To Kenai Lk.	391	236	0.0%	950	0.0%	1,186	66	46	101	0	10,922	46	15,302	24
Unknown Reach	52	23	13.6%	146	86.4%	169	71	70	21	0	1,074	3	764	3
Total	1,009	544	17.7%	2,532	82.3%	3,076	2,079	1,768	240	6	19,411	100	20,671	46
2008														
Mouth to Bridge	340	172	16.0%	905	84.0%	1,077	1,683	1,627	13	0	116	0	119	0
Bridge to Moose R.	44	30	24.0%	95	76.0%	125	215	187	3	0	444	0	222	0
Moose R. to Skilak Lk.	233	155	22.0%	548	78.0%	703	670	546	3	0	3,099	0	2,809	1
Skilak Lk. To Kenai Lk.	479	290	19.8%	1,176	80.2%	1,466	197	88	125	0	10,119	5	14,542	7
Unknown Reach	29	8	9.2%	79	90.8%	87	16	6	0	0	436	0	785	0
Total	1,125	655	18.9%	2,803	81.1%	3,458	2,781	2,454	144	0	14,214	5	18,477	8
2009														
Mouth to Bridge	312	266	27.5%	702	72.5%	968	1,526	1,513	1	1	201	2	161	0
Bridge to Moose R.	73	51	24.1%	161	75.9%	212	164	150	32	0	1,258	2	323	0
Moose R. to Skilak Lk.	324	222	24.2%	694	75.8%	916	985	877	52	6	5,905	1	3,613	0
Skilak Lk. To Kenai Lk.	421	336	0.0%	902	0.0%	1,238	78	48	324	1	9,248	7	14,573	7
Unknown Reach	49	25	17.6%	117	82.4%	142	81	14	121	0	707	0	886	0
Total	1,179	900	25.9%	2,576	74.1%	3,476	2,834	2,602	530	8	17,319	12	19,556	7
2006 - 2009 Average														
	1086		19.4%		80.6%									

Table 213-4. Kenai River guided freshwater logbook data for month of October, 2006–2009.

	Number of Trips	Resident		Nonresident		Total	King Salmon		Sockeye Salmon		Rainbow Trout		Dolly Varden		
		Clients	Percent	Clients	Percent		Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	
2006															
Mouth to Bridge	5	5	50.0%	5	50.0%	10	18	13	0	0	67	4	32	2	
Bridge to Moose R.	10	21	75.0%	7	25.0%	28	45	34	0	0	197	0	86	0	
Moose R. to Skilak Lk.	39	64	59.3%	44	40.7%	108	119	79	0	0	1,405	0	825	0	
Skilak Lk. To Kenai Lk.	10	6	30.0%	14	70.0%	20	5	5	0	0	149	0	154	0	
Unknown Reach	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	
Total	64	96	57.8%	70	42.2%	166	187	131	0	0	1,818	4	1,097	2	
2007															
Mouth to Bridge	1	0	0.0%	3	100.0%	3	0	0	0	0	0	0	0	0	
Bridge to Moose R.	9	17	58.6%	12	41.4%	29	42	42	0	0	140	2	77	0	
Moose R. to Skilak Lk.	44	73	55.3%	59	44.7%	132	157	81	0	0	696	4	288	0	
Skilak Lk. To Kenai Lk.	37	24	0.0%	73	0.0%	97	13	9	5	1	571	0	481	0	
Unknown Reach	1	0	0.0%	2	100.0%	2	4	4	0	0	0	0	0	0	
Total	92	114	43.3%	149	56.7%	263	216	136	5	1	1,407	6	846	0	
2008															
Mouth to Bridge	5	6	37.5%	10	62.5%	16	4	4	0	0	57	0	17	0	
Bridge to Moose R.	12	23	60.5%	15	39.5%	38	25	22	0	0	209	0	151	0	
Moose R. to Skilak Lk.	45	81	61.4%	51	38.6%	132	101	77	0	0	1,066	0	596	0	
Skilak Lk. To Kenai Lk.	18	20	39.2%	31	60.8%	51	4	4	0	0	509	0	290	0	
Unknown Reach	3	1	11.1%	8	88.9%	9	0	0	0	0	66	0	31	0	
Total	83	131	53.3%	115	46.7%	246	134	107	0	0	1,907	0	1,085	0	
2009															
Mouth to Bridge	6	5	25.0%	15	75.0%	20	5	5	0	0	15	0	8	0	
Bridge to Moose R.	2	3	60.0%	2	40.0%	5	0	0	1	0	33	0	4	0	
Moose R. to Skilak Lk.	19	46	78.0%	13	22.0%	59	117	93	0	0	92	0	24	0	
Skilak Lk. To Kenai Lk.	35	45	0.0%	34	0.0%	79	57	39	0	0	418	0	293	2	
Unknown Reach	2	3	60.0%	2	40.0%	5	0	0	1	0	8	0	4	0	
Total	64	102	60.7%	66	39.3%	168	179	137	2	0	566	0	333	2	
2006 - 2009 Average															
	76		53.8%		46.2%										

PROPOSAL 214 - 5 AAC 57.140. Kenai River guiding and guided fishing requirements in the Kenai River Drainage Area.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a registered guide vessel for coho salmon on Mondays during August and September on the Kenai River.

WHAT ARE THE CURRENT REGULATIONS? From July 31 or the end of the king salmon season, whichever is later, through November 30, sport fishing from a registered guide vessel for any species of fish on Mondays is prohibited downstream from the confluence of the Moose and Kenai rivers, and sport fishing from a registered guide vessel for coho salmon on Mondays upstream from the confluence of the Moose River and Kenai River, is prohibited; any coho salmon caught must be released immediately without further harm.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the amount of available guided fishing time by 192 to 240 hours (an additional 8–10 days, depending on calendar year) that were previously closed to fishing for coho salmon from guide boats below Moose River. This proposal would increase the amount of guided fishing effort, catch, and harvest of Kenai River coho salmon stocks and other fish species by an unknown number.

BACKGROUND: Total Kenai River drainage coho salmon sport harvests prior to 2000 (three coho per day) averaged 53,228 fish annually; since 2000 (two coho per day), they increased to an average of 54,840 fish, with guided anglers averaging 24.5% of the total harvest during that time (See Table 213-1). Since inception of the sport guide logbook program in 2006, the number of guided trips in August, September, and October has averaged 2,674, 1,086, and 76, respectively (See Tables 213-2, 213-3, and 213-4). Using the freshwater logbook data, the average proportion of guided nonresident anglers from 2006 to 2009 in August, September, and October was 90%, 81%, and 46%, respectively.

See Proposal 213 comments for additional background information.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The uncertainty surrounding the volatile nature of annual coho salmon run strength greatly increases the likelihood that coho salmon stocks will be exploited at unsustainable harvest rates during periods of low coho salmon productivity if harvests increase in the Kenai River. The department is **NEUTRAL** on the allocative aspects of this proposal between guided and unguided users.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 215 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Allen Tigert and Phil Brna.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit barbed hooks when using beads in the Kenai River.

WHAT ARE THE CURRENT REGULATIONS? In the Kenai River from its mouth upstream to the outlet of Skilak Lake, only one unbaited single-hook lure is allowed from January 1 to June 30. From July 1–July 31, bait is allowed, but anglers must still use only one single-hook lure.

In the Kenai River from its mouth upstream to the Upper Killey River, bait and multiple hooks are allowed from August 1–November 30.

In the Kenai River from the Upper Killey River confluence upstream to Skilak Lake, bait and multiple hooks are allowed from August 1–August 31, and only unbaited single-hook lures are allowed from September 1 to December 31.

In the Upper Kenai River upstream of Skilak Lake, only one unbaited, single-hook, artificial lure is allowed year-round, with the gap between point and shank of three-eighths inch or less.

In waters designated as fly-fishing only waters, sport fishing is permitted only as follows: 1) with not more than one unweighted single hook fly with gap between point and shank of three-eighths inch or less; 2) weights may only be used 18 inches or more ahead of the fly; and 3) beads not attached to the fly are not allowed.

In Cook Inlet flowing waters, attractors (beads) when used with a fly, lure, or bare hook must be either fixed with two inches of the hook or free sliding on the line or leader. A bead not attached to the hook is an attractor, not a fly.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Opportunity to land fish may be reduced since it is generally considered to be more difficult to land fish without a barb on the hook. The hook may be removed from the fish more easily since it is generally considered to be more difficult to remove a hook from a fish that has a barb on it. The effect of barbless hooks on mortality is unknown because research on mortality due to hook type is inconclusive.

BACKGROUND: The first regulation addressing the use and placement of beads for Kenai River drainage waters was adopted by the board in 1998. At that time, information provided to the board indicated that beads attached to the line several inches above the hook were very effective in inducing trout to strike, and beads fished in this manner lead to fish being hooked elsewhere than in the mouth. In the absence of additional information and due to opposition to fishing techniques that increased the snagging of trout, a regulation addressing beads became effective in 1999. This regulation stated “Attractors (beads) must be either fixed to the lure, fly,

or hook or be free-moving on the line or leader, a bead not attached to the hook is defined as an attractor not a fly”. The bead regulation was further modified in 2002 to allow beads to be “fixed” within two inches of the fly or lure or be free to sliding on the entire length of the line or leader.

Studies of fish caught and released using sport fishing gear are inconclusive as to the effect on fish survival using barbless hooks, single hooks, and single barbless hooks. These studies have shown that hooking mortality is generally related to the location of the hook wound. Estimates of the catch-and-release mortality of rainbow trout available through the literature vary considerably. Factors such as gear type, water temperature, fish size, fighting time, and handling techniques influence the mortality rate. Overall, the literature points to the fact that fishing with bait for rainbow trout is not commensurate with conservative management objectives.

Angler participation in rainbow trout fishing, measured by catch of rainbow trout in the Kenai River, has increased greatly since 1984. Catch averaged 15,120 rainbow trout from 1984–1989, 60,720 rainbow trout from 1990–1999, and has continued to increase to an average of about 145,420 from 2000–2009 (Table 215-1). The reported catch for 2009, the most recent year available, was 201,632 rainbow trout. Catch of Russian River rainbow trout averaged 17,157 fish from 1990–1999, and increased to an average catch of 25,970 fish from 2000 - 2009 (Table 215-2). Similar catch trends in the Dolly Varden fishery are also evident as catch averaged 65,208 fish from 1990–1999 and increased to an average of 121,550 Dolly Varden from 2000–2009 (Table 215-3). In 2009, an estimated 143,944 Dolly Varden were caught in the Kenai River. Catch of Russian River Dolly Varden averaged 17,157 fish from 1990–1999, and increased to an average catch of 25,970 fish from 2000–2009 (Table 215-4).

The department does not have an estimate of the catch-and-release mortality rate for rainbow trout or Dolly Varden in the Kenai River fisheries. The department does know that the catch estimates of rainbow trout in the Upper and Middle Kenai River are high in relation to the numbers of rainbow trout thought to inhabit these river sections. Research to estimate the abundance of rainbow trout in a portion of the Upper Kenai River was undertaken during the mid-1980s, 1995, 2001, and in 2009, and in the Middle Kenai River during 1987 and 1999. Research findings show that the abundance of rainbow trout in both areas increased over time. In the Upper River, the population estimate increased from 2,250 rainbow trout in 1986 to 6,364 rainbow trout 1999 (Table 215-5). The preliminary population estimate in 2009 was 5,083 rainbow trout. In the Middle River, the population was estimated to be 1,750 rainbow trout in 1986 and increased to 7,882 rainbow trout by 1999 (Table 215-6). These data point out that the catch rate for the population is high; in other words, most individual rainbow trout are caught and released numerous times over a life span. Presence of visible hooking injuries from these same studies support assumptions that many individuals in the population survive catch-and-release fishing events and survive to be caught again (Table 215-7).

In the Kenai River drainage area, both rainbow trout and Dolly Varden are managed more conservatively than the statewide standard through seasonal closures, a one fish bag limit, and methods and means restrictions. Flowing waters are closed to rainbow trout fishing and/or all fishing from May 2 through June 10. The bag limit is one daily and one in possession for both species throughout the drainage. In Upper Kenai River from the Kenai Lake outlet downstream

to Skilak Lake, harvested fish must be less than 16 inches in total length, while downstream of Skilak Lake fish must be less than 18 inches in total length. In flowing waters of the drainage, bait is prohibited the entire year upstream of Skilak Lake and allowed only seasonally downstream of Skilak Lake.

Overall, the literature points to the fact that fishing with bait for rainbow trout is not commensurate with conservative management objectives. Additional regulations that control hook type are not considered as major factors that contribute to achieving conservative management objectives because the efficacy of these regulations can be difficult to measure. The current management objectives for rainbow trout and Dolly Varden fisheries of the Kenai River are:

1. Provide opportunity for angler participation at a level that can be supported by the fisheries resource and associated habitat.
2. Ensure, through appropriate management and research programs, that rainbow trout and Dolly Varden populations do not decline below levels necessary to ensure sustained yield.

Based upon increases in abundance of rainbow trout, as well as high catch rates of both rainbow trout and Dolly Varden that has been sustained for several years, the management objectives for these fisheries are being met.

Location of the hook in the fish rather than hook type determines the extent of injury to fish. These factors are incorporated into existing bead fishing regulations for Cook Inlet flowing waters that define beads as an attractor. Existing regulations state; “Attractors (beads) when used with a fly, lure, or bare hook must be either fixed within two inches of the hook or free sliding on the line or leader”. “A bead not attached to the hook is an attractor, not a fly”. Use of beads as an attractor is prevalent in fisheries for all species in the Kenai River drainage. “Attractor” is not defined in regulation except under the definition of “artificial lure”. “Artificial lure” means a lure that is man-made, free of bait and is used to attract fish for the purpose of taking them, and includes artificial flies.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because there is no biological evidence to support the conclusion that fishing with a barbless hook when using a bead will reduce hooking injury to a degree that will increase stock abundance. The proposal does not adequately define what a barbless hook is. In order for this proposal to be enforceable, a clear definition of what a barbless hook is must be adopted by the board.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 215-1. Kenai River rainbow trout, catch and harvest by river section, 1984–2009.

Year	Soldotna Bridge to Moose									Kenai River Reach Not								
	Cook Inlet to Soldotna Bridge			River			Moose River to Skilak Outlet			Skilak Inlet to Kenai Lake			Specified ^a			Kenai River Total		
	Catch ^b	Harvest	%	Catch ^b	Harvest	%	Catch ^b	Harvest	%	Catch ^b	Harvest ^c	%	Catch	Harvest	%	Catch ^b	Harvest	%
1984 ^d	3,464	766	22.1	2,911	644	22.1	5,112	1,130	22.1	4,200	928	22.1	ND	ND	ND	15,687	3,468	22.1
1985 ^d	3,398	880	25.9	2,653	850	32.0	5,410	1,500	27.7	3,520	710	20.2	ND	0	ND	14,981	3,940	26.3
1986	2,570	623	24.2	2,380	168	7.1	1,750	901	51.5	2,020	733	36.3	ND	ND	ND	8,720	2,425	27.8
1987	2,220	522	23.5	3,450	670	19.4	6,430	629	9.8	3,870	364	9.4	ND	ND	ND	15,970	2,185	13.7
1988	2,780	295	10.6	1,560	216	13.8	5,880	1,063	18.1	7,580	559	7.4	ND	0	ND	17,800	2,133	12.0
1989	2,020	481	23.8	2,230	354	15.9	6,470	829	12.8	6,870	253	3.7	ND	10	ND	17,590	1,927	11.0
1990	2,624	510	19.4	3,571	943	26.4	5,366	937	17.5	11,995	1,145	9.5	0	0	0.0	23,556	3,535	15.0
1991	3,672	516	14.1	3,844	1,123	29.2	7,930	940	11.9	18,108	740	4.1	31	10	32.3	33,585	3,329	9.9
1992	4,448	427	9.6	3,879	411	10.6	15,127	736	4.9	28,702	403	1.4	ND	ND	ND	52,156	1,977	3.8
1993	6,190	1,149	18.6	5,556	580	10.4	12,651	653	5.2	37,755	192	0.5	0	0	0.0	62,152	2,574	4.1
1994	3,796	506	13.3	3,980	364	9.1	10,968	543	5.0	35,089	163	0.5	ND	ND	ND	53,833	1,576	2.9
1995	4,516	620	13.7	4,087	440	10.8	13,072	780	6.0	33,475	310	0.9	ND	ND	ND	55,150	2,150	3.9
1996	5,513	304	5.5	4,777	646	13.5	8,650	373	4.3	45,471	237	0.5	ND	ND	ND	64,411	1,560	2.4
1997	7,411	739	10.0	6,641	539	8.1	20,047	632	3.2	61,053	0	0.0	ND	ND	ND	95,152	1,910	2.0
1998	5,502	608	11.1	5,380	670	12.5	12,158	737	6.1	42,224	0	0.0	ND	ND	ND	65,264	2,015	3.1
1999	11,415	1,516	13.3	8,325	695	8.3	32,050	1,573	4.9	50,189	0	0.0	ND	ND	ND	101,979	3,784	3.7
2000	16,477	1,292	7.8	9,428	1,083	11.5	18,990	1,084	5.7	78,836	0	0.0	ND	ND	ND	123,731	3,459	2.8
2001	11,216	987	8.8	7,473	868	11.6	22,392	567	2.5	51,130	0	0.0	ND	ND	ND	92,211	2,422	2.6
2002	12,641	995	7.9	8,157	944	11.6	19,355	864	4.5	71,753	0	0.0	2,269	216	9.5	114,175	3,019	2.6
2003	12,844	1,026	8.0	10,913	700	6.4	41,204	372	0.9	54,552	0	0.0	3,536	180	5.1	123,049	2,278	1.9
2004	15,080	1,452	9.6	13,310	978	7.3	34,026	831	2.4	91,443	0	0.0	5,651	50	0.9	159,510	3,311	2.1
2005	14,119	953	6.7	11,585	647	5.6	34,675	607	1.8	57,936	267	0.5	7,949	43	0.5	126,264	2,517	2.0
2006	13,168	588	4.5	13,683	1,109	8.1	33,222	472	1.4	67,741	289	0.4	4,005	41	1.0	131,819	2,499	1.9
2007	11,829	542	4.6	18,832	769	4.1	52,701	684	1.3	90,757	661	0.7	4,851	10	0.2	178,970	2,666	1.5
2008	26,385	696	2.6	20,943	794	3.8	47,956	772	1.6	103,095	941	0.9	4,496	11	0.2	202,875	3,214	1.6
2009	11,502	625	5.4	16,165	543	3.4	67,940	828	1.2	102,745	399	0.4	3,280	59	1.8	201,632	2,454	1.2
Avg. (2005-2009)	15,400	680	4.8	16,240	770	5.0	47,300	670	1.5	84,450	510	0.6	4,920	30	0.8	168,310	2,670	1.6
Avg. (2000-2009)	14,530	920	6.6	13,050	840	7.3	37,250	710	2.3	77,000	260	0.3	4,500	80	1.9	145,420	2,780	2.0
Avg. (1984-2009)	8,340	750	12.5	7,530	680	12.4	20,830	810	9.0	44,700	360	4.6	ND	ND	ND	82,780	2,630	7.1

Source: Statewide Harvest Surveys (SWHS, Mills 1982-1994; Howe et al. 1995, 1996, 2001 a-d; Walker et al. 2003; Jennings et al. 2007, *In prep.*; Jennings et al. 2004; 2006 a-b; G.B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage; personal communication). ND = no data collected.

^a Adopted by SWHS in 2002.

^b Catch estimates from 1984-1989 are unpublished estimates from the SWHS data base (M.J. Mills, Sport Fish Biometrician, ADF&G, Anchorage; personal communication).

^c Retention of rainbow trout was prohibited from 1997 through 2004.

^d In 1984 and 1985, catch estimates were mistakenly reported as harvest in Mills (1985-1986). Corrected harvest numbers are presented here.

Table 215-2. Rainbow trout catch and harvest, and effort for all species, Quartz Creek, Ptarmigan Creek, Kenai Lake, Russian River, and Skilak Lake, 1984–2009.

Year	Russian River			Quartz Creek			Skilak Lake			Kenai Lake			Ptarmigan Creek		
	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest
1984	55,861	ND	324	2,530	ND	87	67	ND	12	502	ND	25	1,857	ND	237
1985	80,054	ND	0	451	ND	69	121	ND	0	607	ND	ND	988	ND	295
1986	70,729	ND	0	4,146	ND	122	413	ND	0	NA ^b	ND	15	1,483	ND	474
1987	91,600	ND	91	5,361	ND	54	4,129	ND	145	580	ND	36	942	ND	18
1988	76,180	ND	91	3,965	ND	54	3,838	ND	72	855	ND	36	1,946	ND	18
1989	53,598	ND	96	4,893	ND	67	2,810	ND	67	377	ND	20	790	ND	29
1990	68,861	4,789	198	5,655	500	198	2,817	458	115	1,042	73	42	2,041	906	260
1991	76,433	7,221	230	5,354	648	94	4,120	637	125	1,064	1,400	115	1,200	700	115
1992	67,443	8,312	253	7,906	1,314	237	3,820	522	95	1,536	135	87	1,750	499	24
1993	61,018	12,377	284	9,152	2,182	174	3,289	857	68	2,586	1,306	615	1,742	1,709	415
1994	65,996	11,744	134	7,241	2,088	268	1,805	614	35	2,524	1,189	356	1,425	912	311
1995	58,090	15,381	151	5,179	780	66	2,957	1,335	56	3,240	654	233	1,914	574	131
1996	50,122	23,041	127	3,018	914	53	1,780	1,536	21	878	90	90	336	464	40
1997	46,914	30,852	130	3,401	1,539	0	2,346	3,042	14	1,734	504	152	758	1,461	0
1998	47,942	20,088	351	3,166	2,252	0	1,645	625	209	520	183	43	701	2,053	0
1999	64,536	37,764	83	4,708	2,132	0	1,182	1,904	119	1,462	1,753	93	883	3,382	0
2000	69,864	34,948	44	2,423	1,212	0	2,072	2,578	181	1,033	327	117	732	1,026	0
2001	55,972	16,007	215	3,105	1,814	0	1,701	568	65	2,509	762	153	430	625	0
2002	68,263	29,484	16	4,245	2,617	0	1,668	939	63	2,502	1,312	58	888	3,268	0
2003	50,448	21,204	182	4,357	3,359	0	2,068	1,009	0	1,097	386	0	899	424	0
2004	60,784	42,875	49	6,589	7,939	0	2,460	911	436	497	140	93	687	3,027	0
2005	55,801	20,026	232	6,106	2,897	0	594	851	32	2,072	252	55	599	1,253	0
2006	70,804	28,059	256	5,582	5,698	0	1,152	1,045	0	619	52	52	1,061	3,612	0
2007	57,755	25,718	261	8,694	6,193	0	1,462	484	0	648	494	49	896	1,291	0
2008	55,444	20,333	219	7,105	5,900	0	1,692	962	18	728	313	88	389	1,087	0
2009	64,518	21,047	214	6,217	8,770	0	1,126	998	0	687	28	18	441	1,750	0
Avg. (2005-2009)	60,864	23,037	236	6,741	5,892	0	1,205	868	10	951	228	52	677	1,799	0
Avg. (2000-2009)	60,965	25,970	169	5,442	4,640	0	1,600	1,035	80	1,239	407	68	702	1,736	0
Avg. (1984-2009)	63,270	21,564	163	5,021	3,037	59	2,044	1,094	75	1,276	568	106	1,068	1,501	91

From: Mills 1982-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al 2004, 2006a-b, 2007, 2009a-b, *In prep* .a-b; except Kenai Lake 1984-1988, M. Mills, ADF&G, SF, pers.comm.

^a Effort (angler days) directed toward all species.

Table 215-3. Kenai River Dolly Varden, catch and harvest, by river section, 1984–2009.

Year	Soldotna Bridge to Moose									Kenai River Reach Not								
	Cook Inlet to Soldotna Bridge			River			Moose River to Skilak Outlet			Skilak Inlet to Kenai Lake			Specified ^a			Kenai River Total		
	Catch	Harvest	Harvest %	Catch	Harvest	Harvest %	Catch	Harvest	Harvest %	Catch	Harvest	Harvest %	Catch	Harvest	Harvest %	Catch	Harvest	Harvest %
1984 ^b	ND	7,506	ND	ND	1,966	ND	ND	11,211	ND	ND	10,724	ND	ND	ND	ND	ND	31,407	ND
1985 ^b	ND	7,560	ND	ND	3,277	ND	ND	8,930	ND	ND	6,468	ND	ND	52	ND	ND	26,287	ND
1986	ND	1,249	ND	ND	771	ND	ND	1,928	ND	ND	1,827	ND	ND	ND	ND	ND	5,775	ND
1987	ND	2,429	ND	ND	1,671	ND	ND	2,139	ND	ND	1,391	ND	ND	ND	ND	ND	7,630	ND
1988	ND	3,531	ND	ND	1,266	ND	ND	3,527	ND	ND	2,653	ND	ND	0	ND	ND	10,977	ND
1989	ND	3,414	ND	ND	1,371	ND	ND	3,649	ND	ND	1,630	ND	ND	19	ND	ND	10,083	ND
1990	7,795	2,738	35.1	5,094	2,424	47.6	7,537	2,741	36.4	14,151	4,079	28.8	0	0	0.0	34,577	11,982	34.7
1991	10,665	4,211	39.5	8,116	3,285	40.5	19,363	4,268	22.0	30,601	2,740	9.0	52	13	25.0	68,797	14,517	21.1
1992	11,822	3,777	31.9	5,899	2,516	42.7	26,348	4,900	18.6	34,754	3,269	9.4	ND	ND	ND	78,823	14,462	18.3
1993	13,019	4,599	35.3	6,079	1,539	25.3	20,778	3,503	16.9	36,451	3,057	8.4	26	26	ND	76,353	12,724	16.7
1994	8,752	3,276	37.4	5,185	1,107	21.4	14,584	2,051	14.1	33,168	2,052	6.2	ND	ND	ND	61,689	8,486	13.8
1995	10,146	4,069	40.1	5,399	1,732	32.1	12,447	2,113	17.0	27,103	1,609	5.9	ND	ND	ND	55,095	9,523	17.3
1996	9,787	2,411	24.6	5,973	1,797	30.1	14,506	1,995	13.8	26,245	1,281	4.9	ND	ND	ND	56,511	7,484	13.2
1997	9,955	2,518	25.3	5,268	1,042	19.8	22,266	2,824	12.7	48,883	573	1.2	ND	ND	ND	86,372	6,957	8.1
1998	7,560	1,977	26.2	5,961	1,787	30.0	11,732	1,847	15.7	35,659	468	1.3	ND	ND	ND	60,912	6,079	10.0
1999	14,752	3,867	26.2	6,316	1,086	17.2	20,053	1,932	9.6	31,826	683	2.1	ND	ND	ND	72,947	7,568	10.4
2000	18,261	3,916	21.4	9,122	1,759	19.3	21,291	1,403	6.6	56,375	349	0.6	ND	ND	ND	105,049	7,427	7.1
2001	16,304	3,763	23.1	8,367	1,613	19.3	28,312	789	2.8	54,802	363	0.7	ND	ND	ND	107,785	6,528	6.1
2002	16,414	2,191	13.3	7,751	1,431	18.5	13,384	1,105	8.3	38,481	766	2.0	1,324	288	21.8	77,354	5,781	7.5
2003	15,520	2,996	19.3	9,765	1,318	13.5	25,972	1,066	4.1	50,969	487	1.0	1,459	246	16.9	103,685	6,113	5.9
2004	14,386	1,759	12.2	13,591	2,129	15.7	23,833	1,220	5.1	89,318	452	0.5	5,072	285	5.6	146,200	5,845	4.0
2005	13,501	1,548	11.5	9,629	934	9.7	27,398	1,243	4.5	62,798	565	0.9	5,615	26	0.5	118,941	4,316	3.6
2006	11,405	971	8.5	8,135	1,061	13.0	24,499	515	2.1	52,048	414	0.8	2,211	257	11.6	98,298	3,218	3.3
2007	8,048	1,201	14.9	10,261	764	7.4	52,701	687	1.3	90,757	584	0.6	4,851	40	0.8	166,618	3,276	2.0
2008	19,177	1,154	6.0	17,063	961	5.6	30,579	604	2.0	78,489	1,003	1.3	2,293	44	1.9	147,601	3,766	2.6
2009	8,278	1,003	12.1	7,825	842	10.8	34,973	384	1.1	91,815	412	0.4	1,053	77	7.3	143,944	2,718	1.9
Avg. (2005-2009)	12,080	1,180	10.6	10,580	910	9.3	34,030	690	2.2	75,180	600	0.8	3,200	90	4.4	135,080	3,460	2.7
Avg. (2000-2009)	14,130	2,050	14.2	10,150	1,280	13.3	28,290	900	3.8	66,590	540	0.9	2,980	160	6.6	121,550	4,900	4.4
Avg. (1984-2009)	12,280	3,060	17.9	8,040	1,590	16.9	22,630	2,640	8.3	49,230	1,920	3.3				93,380	9,270	8.0

Source : Statewide Harvest Surveys from Mills 1985-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b; G. B. Jennings, Sport Fish Program Coord., ADF&G, Anchorage, pers. comm.

^a SWHS began consistently reporting in 2002.

^b In 1984 and 1985, catch estimates were mistakenly reported as harvest in Mills 1985, 1986. Corrected harvest numbers are presented here.

^c Retention of rainbow trout was prohibited from 1997 through 2004.

Table 215-4. Dolly Varden catch and harvest, and effort for all species for Quartz Creek, Russian River, Ptarmigan Creek, Skilak Lake, and Kenai Lake 1984–2009.

Year	Russian River			Quartz Creek			Skilak Lake			Kenai Lake			Ptarmigan Creek		
	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest	Effort ^a	Catch	Harvest
1984	55,861	ND	1,072	2,530	ND	3,791	67	ND	0	502	ND	224	1,857	ND	2,120
1985	80,054	ND	399	451	ND	121	121	ND	0	607	ND	69	988	ND	1,387
1986	70,729	ND	826	4,146	ND	1,605	413	ND	0	ND	ND	76	1,483	ND	2,508
1987	91,600	ND	72	5,361	ND	181	4,129	ND	91	580	ND	109	942	ND	417
1988	76,180	ND	473	3,965	ND	1,292	3,838	ND	110	855	ND	546	1,946	ND	527
1989	53,598	ND	361	4,893	ND	2,399	2,810	ND	438	377	ND	134	790	ND	628
1990	68,861	2,290	760	5,655	8,672	2,842	2,817	583	187	1,042	926	302	2,041	4,081	1,041
1991	76,433	6,134	1,148	5,354	14,329	1,905	4,120	1,240	378	1,064	757	326	1,200	3,445	705
1992	67,443	3,629	664	7,906	9,864	2,441	3,820	1,352	172	1,536	236	98	1,750	4,342	1,188
1993	61,018	4,141	1,001	9,152	21,473	4,317	3,289	653	145	2,586	1,656	764	1,742	8,202	1,057
1994	65,996	4,443	595	7,241	11,702	2,175	1,805	772	233	2,524	1,017	443	1,425	1,877	296
1995	58,090	6,430	554	5,179	4,659	1,004	2,957	1,031	224	3,240	2,730	606	1,914	1,642	801
1996	50,122	5,983	135	3,018	3,186	339	1780	1,311	146	878	230	48	336	231	0
1997	46,914	6,564	376	3,401	13,766	350	2346	5,878	327	1,734	362	160	758	2,128	54
1998	47,942	5,957	73	3,166	16,990	396	1645	214	17	520	67	25	701	4,195	185
1999	64,536	11,791	196	4,708	8,051	223	1182	782	110	1,462	611	88	883	3,191	77
2000	69,864	11,596	168	2,423	6,318	80	2072	1,487	175	1,033	333	95	732	821	44
2001	55,972	11,087	253	3,105	10,280	65	1701	243	48	2,509	456	176	430	3,096	11
2002	68,263	8,566	175	4,242	11,510	114	1668	1,414	134	2,502	935	309	888	1,242	0
2003	50,448	10,504	263	4,357	19,627	123	2068	825	64	1,097	107	54	899	1,028	50
2004	60,784	25,713	324	6,589	31,267	342	2460	653	152	497	40	13	687	3,609	68
2005	55,801	9,218	232	6,106	23,953	216	594	464	0	2,072	262	165	599	3,018	0
2006	70,804	11,390	261	5,582	31,731	219	1152	321	39	619	143	24	1,061	4,291	0
2007	57,755	7,857	196	8,694	44,588	442	1462	607	22	648	376	77	896	2,126	143
2008	55,444	9,481	354	7,105	34,401	152	1692	405	0	728	0	0	389	954	29
2009	64,518	10,741	146	6,217	40,456	135	1126	754	0	687	11	11	441	1,185	0
Avg. (2005-2009)	60,864	9,737	238	6,741	35,026	233	1,205	510	12	951	158	55	677	2,315	34
Avg. (2000-2009)	60,965	11,615	237	5,442	25,413	189	1,600	717	63	1,239	266	92	702	2,137	35
Avg. (1984-2009)	63,270	8,676	426	5,021	18,341	1,049	2,044	1,049	124	1,276	563	190	1,068	2,735	513

Source: Statewide Harvest Surveys from Mills 1985-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b; G. B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage, personal communication.

^a Effort (angler days) directed toward all species.

Note: ND = no data available

Table 215-5. Number of rainbow trout \geq 300 mm fork length in the upper Kenai River, Sportsman's Landing to Jim's Landing, 1986–2009.

Year	Abundance	SE
1986	2,520	363
1987	3,472	482
1995	5,598	735
2001 ^a	6,364 ^a	606 ^a
2009 ^b	5,083 ^b	908 ^b

^a 2001 data reanalyzed using program MARK.

Estimate differs slightly from published estimate.

^b 2009 data is preliminary.

Table 215-6. Number of rainbow trout \geq 200 mm fork length in the middle Kenai River, Naptowne Rapids to Skilak Lake outlet, 1987–1999.

Year	Abundance	SE
1987	1,750	453
1999	7,833	1,276

Table 215-7. Proportion of Kenai River rainbow trout with hooking injuries, 1999–2010.

Length group (mm)	Upper Kenai River		Middle Kenai River	
	2001 ^a	2009 ^a	1999 ^b	2010 ^c
200-249	0.19	0.21	0.16	0.18
250-299	0.45	0.39	0.37	0.23
300-349	0.75	0.61	0.43	0.33
350-399	0.77	0.74	0.52	0.39
400-449	0.86	0.85	0.58	0.77
450-499	0.93	0.92	0.64	0.61
500-549	0.96	0.94	0.61	0.79
550-599	1.00	0.90	0.64	0.67
600-649	ND	1.00	0.80	0.64
650-700	ND	1.00	ND	1.00
Total	0.74	0.77	0.46	0.54

^a Sampling area was from Jim's Landing (rm 69.8) to Sportsman's Landing (rm 73.6).

^b Sampling area was from Naptowne Rapids (rm 39.5) to Skilak Lake outlet (rm 50.0).

^c Sampling area was from Slikok Creek Confluence (rm 18.9) to Naptowne Rapids (rm 39.5).

PROPOSAL 216 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Steve Tvenstrup.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the allowable size limit for rainbow trout in the lower Kenai River from one per day less than 18 inches long, to one per day less than 24 inches long, and allow one rainbow trout greater than 24 inches long per year.

WHAT ARE THE CURRENT REGULATIONS? Rainbow/steelhead trout may be taken from June 11–May 1 in all flowing waters from the mouth of the Kenai River upstream to Skilak Lake, and the waters of Skilak Lake, except the water within a one-half mile radius of the Kenai River inlet; bag and possession limit of one fish less than 18 inches in length; rainbow/steelhead trout 18 inches or greater in length may not be retained; rainbow/steelhead trout caught that are 18 inches or greater in length must be released immediately;

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase the harvest of sexually mature female rainbow trout in the lower Kenai River drainage area.

BACKGROUND: Past regulations governing the harvest of rainbow trout in the Kenai River drainage were liberal and became progressively conservative and complex as the fishery grew in popularity. Numerous incremental regulation changes occurred during the 10–15 year period prior to 2005. During the 2005 Upper Cook Inlet board meeting, several proposals related to the Kenai River drainage rainbow trout were taken under advisement. Considerations were to provide a diversity of fishing opportunity that the department believed would be commensurate with the productive capability of the native rainbow trout population, reconcile the complex system of rainbow trout regulations that often conflicted by time and area through the Kenai River drainage, resolve regulatory inconsistencies throughout the drainage, and create a system of regulations that better served the public. Consequently, the board adopted the statewide standards for lakes of the Kenai River drainage. The regulations adopted for flowing waters of the lower Kenai River allowed for a June 11 through May 1 open season with a bag and possession limit of one rainbow trout less than 18 inches in total length. The new regulatory framework resulted in a net gain in fishing time and area, as well as a more consistent regulatory framework for resident species fisheries of the Kenai River.

Statewide Harvest Survey (SWHS) information gathered from the Kenai River downstream from Skilak Lake to Cook Inlet demonstrate that most anglers release the majority of the rainbow trout that are caught. This is likely due, in part, to the maximum size limit regulation. The retention of fish 18 inches or less excludes a high percentage of the spawning female segment of the rainbow trout population and harvest is focused upon the more abundant smaller-sized fish. The most recent information on the size composition of the rainbow trout population from Skilak Lake downstream to Bing's Landing indicates that in 1999 approximately 85% of the population was less than 18 inches in total length and 99% was less than 24 inches in total length (Table 216-1). Research information indicates that approximately 25% of rainbow trout female

spawners are 18 inches or less. Establishment of a size limit of 18 inches protects 75% of the spawning female rainbow trout from possible harvest. Increasing the maximum size limit would expose nearly all of the spawning population to harvest.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Current regulations for the flowing waters of the lower Kenai River drainage rainbow trout provide harvest opportunity on the abundant size classes of rainbow trout, regulatory consistency, and a fishery thought to be sustainable given the current level of participation. In addition, harvest opportunity of large rainbow trout exists in lower Kenai River drainage lakes with an annual limit of two fish 20 inches or greater in length, and a harvest record is required.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 216-1. Length composition of middle Kenai River rainbow trout, Naptowne Rapids to Skilak Lake outlet , 1987 and 1999.

Length Group (mm)	Abundance		Percent of Total	
	1987	1999	1987	1999
200-249	193	581	11%	7%
250-299	152	1,856	9%	24%
300-349	187	2,015	11%	26%
350-399	258	1,115	15%	14%
400-449	217	1,125	12%	14%
450-499	228	703	13%	9%
500-549	181	309	10%	4%
550-599	117	131	7%	2%
≥600	217	47	12%	1%

Metric Conversion: 300-349 mm (~12"-14")

350-399 mm (~14"-16")

400-449 mm (~16"-18")

450-499 mm (~18"-20")

500-549 mm (~20"-22")

550-599 mm (~22"-24")

≥600 mm (~>24")

PROPOSAL 217 - 5 AAC 56.120. General provisions for seasons, bag possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a bag and possession limit for burbot of two fish for the Kenai Peninsula Area.

WHAT ARE THE CURRENT REGULATIONS? Burbot are classified as “other finfish” in fresh waters of the Kenai Peninsula and have no bag or possession limit. Anglers fishing for burbot on the Kenai Peninsula are allowed to use more than one line and hook if the total aggregate number of hooks used on set lines, closely attended gear, and ice fishing gear, does not exceed 15 or the daily bag limit for burbot in the waters being fished, whichever is less.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would effectively reduce the number of hooks allowed to two, and thereby make ice fishing gear consistent with all other sport fishing gear on the peninsula, except in lakes with invasive northern pike. This proposal would ensure sustainable harvests of burbot in Kenai Peninsula area lakes and reduce the incidental mortality of other resident species.

BACKGROUND: Burbot are classified as “other finfish” in fresh waters of the Kenai Peninsula. Except for Hidden Lake, which is closed to burbot fishing to address incidental harvest and overexploitation of lake trout, sport fishing for burbot is open year around with no bag, possession, or size limit.

Burbot mature at a relatively old age, have strict habitat requirements and their distribution, as well as abundance, in Kenai Peninsula area fresh waters is not fully understood. Because of these factors, burbot, where present, can be overexploited at relatively low harvest rates. Incidental mortality and overexploitation of other resident species that have strict bag, possession, and size limits are also of concern. Although burbot harvests from Kenai Peninsula fresh waters are relatively low, interest in fishing for burbot is growing. Establishing a bag and possession limit of two fish will limit the number of lines and hooks allowed for burbot fishing, thereby allowing for responsible future burbot harvest opportunity and addressing the concern of incidental mortality of other resident species.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Anglers on the Kenai Peninsula are allowed to use up to 15 baited hooks while fishing for burbot, thereby contributing to incidental mortality of other species. Establishing a bag limit for burbot will make ice fishing gear consistent with all other sport fishing gear on the peninsula, except in lakes with invasive northern pike.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 218 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a steelhead/rainbow trout spawning closure from May 2–June 10 for all tributaries of Tustumena Lake.

WHAT ARE THE CURRENT REGULATIONS? From its mouth upstream to the Sterling Highway Bridge, there is no closed season and no retention is allowed year-round. Rainbow/steelhead trout may not be removed from the water.

Upstream from the Sterling Highway Bridge including, Tustumena Lake and its tributaries, general Kenai Peninsula fresh water regulations apply:

1) in flowing waters: no closed season, two per day/two in possession (only one fish 20 inches or longer), annual limit of two, 20 inches or longer, applies.

2) in lakes and ponds: no closed season, five per day/five in possession (only one fish 20 inches or longer), annual limit of two fish, 20 inches or longer, applies.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce fishing mortality for steelhead trout where they spawn during the spring, and make season dates consistent with other spawning trout closures in the area. This proposal would also displace anglers that otherwise fish Tustumena Lake tributaries to waters that may remain open.

BACKGROUND: Kasilof River rainbow/steelhead trout studies completed by U.S. Fish and Wildlife Service show that rainbow/steelhead trout spawn primarily in tributaries of Kasilof River and Tustumena Lake. The majority of rainbow/steelhead trout spawn in Crooked Creek, with some spawning also occurring in Coal Creek. Both are closed to all fishing from January 1–July 31. Spawning also occurs in Nikolai Creek, a Tustumena Lake tributary. The number of adult steelhead trout enumerated at weirs placed in both Crooked and Nikolai creeks indicate the escapements there are of similar order of magnitude (Table 218-1).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Creating spawning closures for the remaining tributaries in the Kasilof River drainage where spawning occurs would align these tributaries with most flowing waters of the Kenai Peninsula Area which are closed to fishing for rainbow/steelhead trout from May 2–June 10.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 218-1. Steelhead trout counts from weirs located at Crooked and Nikolai creeks, 2004–2009.

Year	Crooked Creek	Nikolai Creek
2004	206	N/A
2005	379	84
2006	612	451
2007	766	630
2008	877	660
2009	584	496

PROPOSAL 219 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would remove the list of rainbow trout stocked lakes from the Kenai River Drainage Area in the codified regulations.

WHAT ARE THE CURRENT REGULATIONS? In the Kenai River drainage area rainbow/steelhead trout:

- 1) May be taken from January 1–December 31, in the lakes and ponds, including Kenai Lake and lakes tributary to Kenai Lake, except Skilak Lake and unstocked lakes; bag and possession limit of two fish, of which only one may be 20 inches or greater in length;
- 2) May be taken from January 1–December 31, in stocked lakes and ponds of the Kenai River and Kenai Lake drainage; bag and possession limit of five fish, of which only one may be 20 inches or greater in length; for the purpose of this subparagraph, “stocked lakes and ponds” means Aurora Lake, Barbara Lake, Cabin Lake, Carter Lake, Cecille Lake, Chugach Estates Lake, Douglas Lake, Elephant Lake, Island Lake, Longmere Lake, Loon Lake, Rainbow Lake, Scout Lake, Sport Lake, Thetis Lake, Tirmore Lake, and Vagt Lake.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would correct the regulation by placing the list of lakes into the proper subsection of the Alaska Administrative Code; it would not change stocking or management of these stocked lakes.

BACKGROUND: The current stocked lakes list is incorrect because these lakes are not within the Kenai River Drainage Area; instead they are within the Kenai Peninsula Area. The department stocks rainbow trout, arctic char, and landlocked king and coho salmon into 28 lakes in the Northern Kenai Peninsula Management Area. Six of these lakes are correctly listed separately, by name, in the Upper section of the Kenai River Drainage Area. The remaining 22 lakes are not part of the Kenai River Drainage area and sport fishing regulations for them are already specified in the general provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula area (Chapter 56).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal which is housekeeping in nature. The current list of stocked lakes in regulation is incorrect since these lakes are not within the Kenai River Drainage Area; instead, they are within the Kenai Peninsula Area.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 220 - 5 AAC 57.123. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Upper section of the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would add Rainbow Lake to the list of Upper Kenai River drainage stocked lakes, permitting a bag and possession limit for rainbow/steelhead trout of five fish, of which only one may be 20 inches or greater in length.

WHAT ARE THE CURRENT REGULATIONS? From January 1–December 31, in stocked lakes of the Kenai Lake drainage, including Jerome, Carter, Vagt, Long, and Meridian lakes, the bag and possession limit for rainbow/steelhead trout is five fish, of which only one may be 20 inches or greater in length. Rainbow Lake is not listed as a stocked lake. In lakes and ponds of the upper section of the Kenai River drainage area that are not stocked, the bag and possession limit is two fish, of which only one may be 20 inches or greater in length.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in completing the list of stocked lakes in the Upper Section of the Kenai River Drainage Area and allow the appropriate regulations for stocked rainbow trout in Rainbow Lake.

BACKGROUND: The department stocks six lakes in the Upper Section of the Kenai River Drainage Area with rainbow trout. Rainbow/steelhead trout fishing regulations for stocked lakes and ponds of the upper section of the Kenai River Drainage are more liberal in comparison to unstocked lakes where more conservative statewide standard regulations apply. Rainbow Lake was first stocked in 1971 and is currently stocked with rainbow trout during even years.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal which is housekeeping in nature. It would add Rainbow Lake (near Kenai Lake) to the list of stocked waters of the Upper Section of the Kenai River Drainage Area. Rainbow Lake was previously omitted from the list.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 221 - 5 AAC 56.120. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area, and 5AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would correct the list of Kenai River Drainage Area and Kenai Peninsula Area king salmon stocked lakes.

WHAT ARE THE CURRENT REGULATIONS? King salmon less than 20 inches in length may be taken from January 1–December 31, in stocked lakes and ponds of the Kenai River and Kenai Lake drainage; bag and possession limit of 10 fish; for the purpose of this subparagraph, “stocked lakes and ponds” means Centennial Lake, Encelewski Lake, Jerome Lake, Johnson Lake, Long Lake, Meridian Lake, Quintin Lake, Rogue Lake, Troop Lake, and Upper Summit Lake.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in correctly naming lakes in regulation that are stocked with landlocked king salmon.

BACKGROUND: The Kenai Peninsula Area list of stocked lakes for king salmon less than 20 inches in length is incorrect. Department assessments of stocked lakes are ongoing and future stockings of landlocked king salmon may occur in 22 of the Kenai Peninsula Area stocked lakes. This proposal will accurately reflect the list of lakes that may be stocked with landlocked king salmon by the department

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal which is housekeeping in nature. The list of Kenai Peninsula Area stocked lakes for king salmon less than 20 inches in length is incorrect. This proposal will accurately reflect the list of lakes that may be stocked with landlocked king salmon by the department.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 222 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area; and 5 AAC 57.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Middle Section of the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would repeal the special sport fishing gear regulations that apply to allowable ice fishing gear used to fish for northern pike in Arc Lake, Cisca Lake, and Scout Lake.

WHAT ARE THE CURRENT REGULATIONS? In Arc Lake, Cisca Lake, and Scout Lake, sport fishing through the ice for northern pike is allowed using five lines, provided that: 1) standard ice fishing gear is used, 2) the fishing gear is closely attended, and 3) all other species of fish caught are released immediately.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in sport fishing through the ice using just two lines as provided by statewide regulations in Arc, Cisca, and Scout lakes.

BACKGROUND: Invasive northern pike were eradicated from both Arc and Scout lakes by the department and restocked with game fish. Extensive assessment survey work conducted by the department at Cisca Lake indicates northern pike are not present. However, a naturally-occurring population of landlocked coho salmon is present.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Invasive northern pike have been eradicated from or confirmed not present in these lakes. It is no longer appropriate to use liberalized methods designed to increase the harvest of northern pike through the ice.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 223 - 5 AAC 57.XXX. Invasive Northern Pike Management Plan; 5 AAC 60.XXX. Invasive Northern Pike Management Plan; and 5 AAC 61.XXX. Invasive Northern Pike Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would provide the department with emergency order authority to address invasive northern pike in the Cook Inlet area.

WHAT ARE THE CURRENT REGULATIONS? No invasive species management plan currently exists in regulation. Sport fishing through the ice for northern pike is allowed using five lines, provided that: 1) standard ice fishing gear is used, 2) the fishing gear is closely attended, and 3) all other species of fish caught are released immediately.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would provide the department with the ability to liberalize, by emergency order, sport fishing methods and means for northern pike in waters upon confirmation of their presence.

BACKGROUND: Northern pike are not native to Cook Inlet. A growing threat to sport fisheries in the Cook Inlet area is the illegal introduction of northern pike into the lakes and streams of the area. This species was illegally introduced sometime during the early 1950s in the Susitna River drainage and in the 1970s into Derk's Lake, a tributary to Soldotna Creek. Soldotna Creek is an open tributary of the Kenai River drainage. Northern pike have colonized nearly all of the Susitna River drainage and spread from Derk's Lake to the remainder of the Soldotna Creek drainage, including East and West Mackey lakes, and Union and Sevena lakes. Northern pike are also present in Stormy Lake, a tributary to the Swanson River, and in a series of landlocked lakes in the Soldotna and Anchorage areas. In addition to these waters confirmed to support northern pike, nearly all waters are at risk.

The risk northern pike pose to area native fish stocks is evident because they may occupy habitats similar to that of rearing salmonids and then prey on juvenile native species. Since northern pike have colonized nearly all of the Susitna River drainage, salmon production has declined significantly in some of its major tributaries, particularly the Alexander Creek drainage. Prior to their introduction, lakes of the Soldotna Creek drainage supported rainbow trout, Dolly Varden, and rearing salmon (primarily coho salmon). When the production of native species in most of these lakes declined, concern arose that northern pike would become established in the mainstem Kenai River. Their presence, therefore, threatens the existence of species that sustain the area's large fisheries.

Fisheries management efforts by the department include protections for fisheries habitats. One of these protection efforts includes the reduction of northern pike in areas where they are not native. Since 2001, four area lakes have been newly-confirmed to support northern pike, with the most recent, Hall and Tiny lakes, being confirmed in August and September 2010, respectively. Northern pike were discovered in Arc Lake (2002) and Scout Lake (2005); both are lakes stocked by the department. Arc and Scout lakes were treated with rotenone, stocking resumed, and the fisheries they supported will now recommence. In the Anchorage area, Cheney

and Sand lakes have been treated with rotenone and restocked. Prior to chemical treatment of these lakes, stocking was discontinued and regulations were established through the Board of Fisheries regulatory process to liberalize methods and means to maximize harvest opportunity to reduce abundance of northern pike. There is no closed season and no bag or possession limit for northern pike in waters of the Kenai Peninsula.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Within Upper Cook Inlet regulations there are lakes listed as containing invasive northern pike. This designation allows each angler to use up to five lines while fishing through the ice. The list of lakes may change annually as new waters are confirmed to contain invasive northern pike and other waters are treated with rotenone to eradicate northern pike. This proposal would support adaptive management of invasive northern pike and provide the department with emergency order authority to liberalize or restrict limits and gear, instead of creating an emergency regulation or submitting an agenda change request during out-of-cycle time periods.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

COMMITTEE F – KENAI AND KASILOF SPORT SALMON FISHING, KENAI RIVER VESSEL RESTRICTIONS (TOTAL PROPOSALS:40)

KENAI RIVER SALMON SPORT FISHERIES: 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244

KENAI RIVER VESSEL RESTRICTIONS: 245, 246, 247, 248, 249, 250, 251, 252, 253

KASILOF RIVER SALMON SPORT FISHERIES: 254, 255, 256, 257, 258, 259, 260, 261, 262, 263

PROPOSAL 224 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Ted Wellman.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the effective dates for fly-fishing-only waters in the Killey River Sanctuary Area from ending on July 31 to ending on July 15.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is fly-fishing-only waters and is closed to fishing for king salmon.

In waters designated as fly-fishing-only waters, sport fishing is permitted only with not more than one unweighted, single-hook, fly with gap between point and shank three-eighths of an inch or less, and weights may be used 18 inches or more ahead of the fly.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would open an approximate 1.75 mile section of the Kenai River, known as the Lower Killey River king salmon sanctuary area, to standard sport fishing gear for an additional 16 days per year. It would also open the area to the use of bait, because bait is allowed in the Kenai River starting July 1. These changes would likely result in an increase in fishing effort in this area accompanied by an unknown, but likely small, increase in the number of resident species and sockeye salmon caught and harvested in this area. It may also lead to an increase in king salmon being incidentally caught.

BACKGROUND: In 1996, the board adopted, at the department’s request, seasonal closures that restricted fishing in the confluence areas of Funny and Killey rivers (Figures 224-1 and 224-2). Information gathered during tagging and radiotelemetry studies conducted by the department and other resource agencies in 1990, 1991, and 2010, indicated that king salmon entering the Kenai River in May and June primarily spawn in tributaries of the 50-mile section of Kenai River open to king salmon fishing, such as Killey River/Benjamin Creek (46–64%) and Funny River (12–21%), as well as other tributaries, such as Russian River, and Slikok, Juneau, Quartz, and Grant creeks (4–7%) (Table 224-1). Furthermore, a much smaller percentage of fish (9–

30%) entering the Kenai River in May and June were thought to spawn in various reaches of the mainstem Kenai River.

In 2008, the effective date of the Killey River seasonal closure was changed to begin January 1, rather than June 25, to better protect holding Killey River spawners and to be consistent with the start date of the other king salmon sanctuaries. All of the king salmon tributary sanctuaries were extended 17 days, from July 15 through July 31. In addition, the Killey River closed area was expanded in size to include the area around the relatively new primary Killey River outlet forming at the “middle” Killey River mouth near “Wally’s Hole.”

Multiple radiotelemetry studies on the Kenai River have found that early-run king salmon can hold in these seasonally-closed confluence areas of the mainstem for some time into July before ascending tributaries to spawn. A radiotelemetry study in 1990 found that by July 15, 91% of radiotagged Killey River/Benjamin Creek spawners (46) had left the Kenai River mainstem holding areas to enter the Killey River to migrate upstream to their spawning areas. In 1991, 98% of radiotagged Killey River spawners (49) had left the mainstem holding areas by July 15, and in 2010, 74% of radiotagged Killey River spawners (50) had left the mainstem by July 15. All radiotagged early-run tributary spawners ascended into these larger tributaries by August 3. The 1990 and 1991 studies also indicated that all king salmon tagged during the early-run period prior to July 1, and were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

As a result of the tagging studies in 1990 and 1991, it was determined that 29 tagged fish from those early runs spawned in the Kenai River mainstem, downstream of Skilak Lake. Of these 29 tagged fish, six used the three seasonal closed areas to spawn (Funny closure=3, Slikok closure=2, Killey closure=1). Spawning of all early-run king salmon is thought to peak in mid to late July, and end by mid to late August.

Social issues surround the Lower Killey River, as well as other seasonally-closed waters. One issue is that the closure extension through July 31 prevents using “standard” sport fishing gear while fishing for other species, such as sockeye salmon and resident species, within the restricted area. Fishing methods and means that are prohibited to prevent unlawful take of king salmon include fishing with a single-hook with gap between point and shank greater than three-eighths inch, and fishing with a bead not attached to a hook. In addition, these waters are closed to fishing from a boat through July 31.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The basis for the seasonally-closed waters is to protect early-run king salmon that hold for some time into July before they enter the tributaries to spawn. In general, the department supports maintaining consistent regulations among all the Kenai River king salmon sanctuaries to aid enforcement and avoid confusion with the public. New king salmon projects started in 2010 will be completed in approximately three years and may provide information to more appropriately modify sanctuary area regulations.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

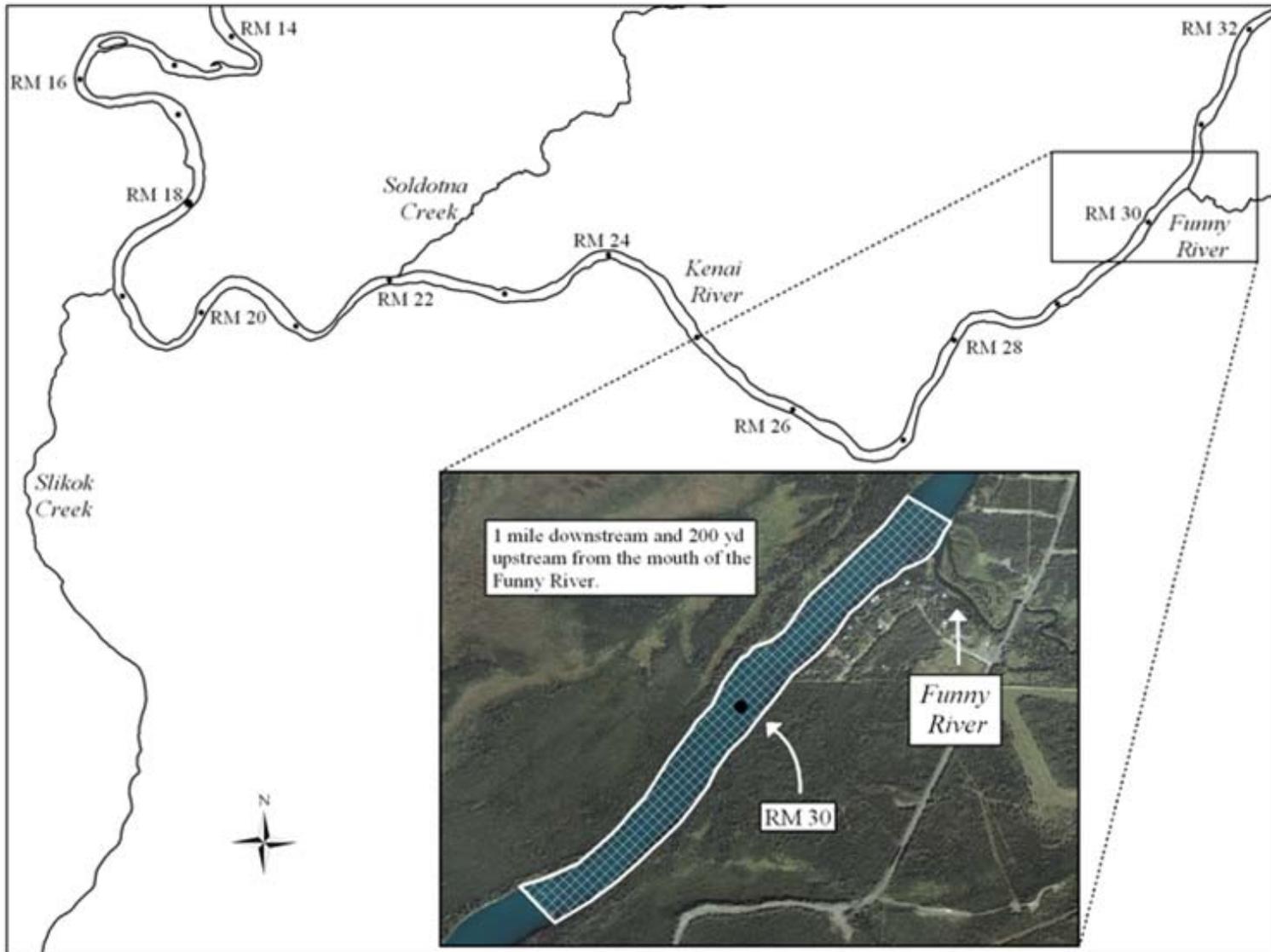


Figure 224-1. Map of the Funny River king salmon sanctuary.

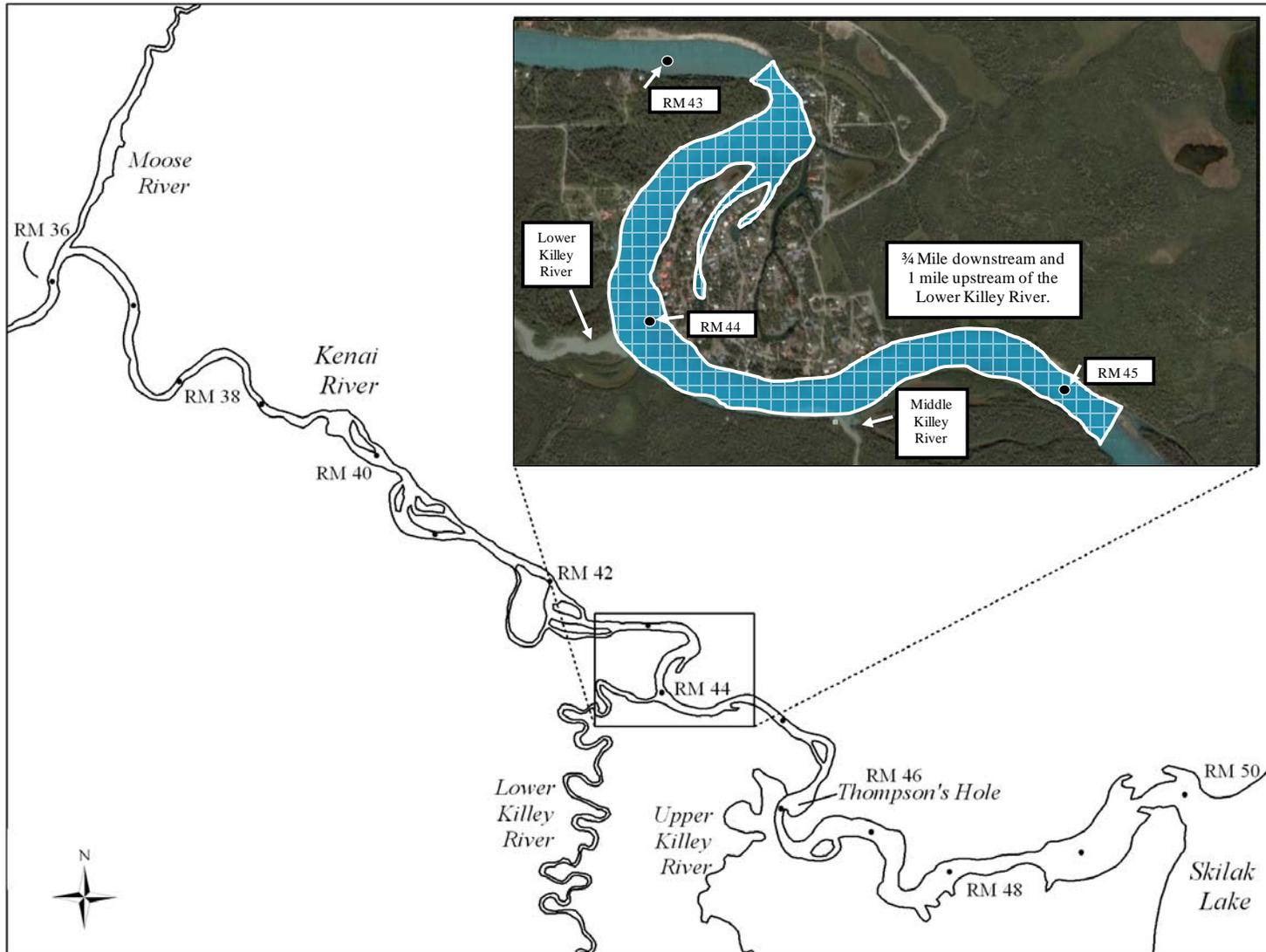


Figure 224-2. Map of the Killey River king salmon sanctuary.

Table 224-1. Distribution of radiotagged early-run Kenai River king salmon from 1990, 1991, and 2010.

Migrant Destinations	1990 ^a		1991 ^b		2010 ^c	
	# of tags	% of tags	# of tags	% of tags	# of tags	% of tags
Slikok C.	1	1%	2	3%	0	0%
Funny R.	19	20%	16	21%	10	12%
Killey R.	39	41%	28	36%	31	36%
Benjamin C.	4	4%	21	27%	19	22%
Russian R.	0	0%	0	0%	1	1%
Juneau C.	1	1%	1	1%	1	1%
Quartz C.	1	1%	2	3%	0	0%
Crescent C.	0	0%	0	0%	1	1%
Daves C.	0	0%	0	0%	1	1%
Grant C.	1	1%	0	0%	1	1%
Kenai R. Mainstem ^d	28	30%	7	9%	21 ^e	24%
Total	94	100%	77	100%	86	100%

^a King salmon were tagged from May 15 to June 30.

^b King salmon were tagged from May 28 to June 29.

^c King salmon were tagged from May 16 to July 5.

^d Includes the mainstem Kenai River, both the lower/middle and the upper, and both Kenai and Skilak lakes.

^e This are preliminary data and are subject to change.

PROPOSAL 225 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Ted Wellman.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the Killey River king salmon sanctuary closure date from July 31 to July 15.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the lower Killey River, is fly-fishing-only waters and is closed to fishing for king salmon.

From January 1–July 31, the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is closed to fishing from boats.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would allow an additional 16 days of king salmon fishing and fishing from boats in a 1.75 river mile section of river. The proposal would increase catch and harvest of early-and late-run Kenai River king salmon by an unknown amount. It would likely result in an increase in fishing effort in this area, accompanied by a small increase in the number of resident species and sockeye salmon caught and harvested in this area.

BACKGROUND: In 1996, the board adopted, at the department’s request, seasonal closures that restricted fishing in the confluence areas of Funny and Killey rivers (Figures 225-1 and 225-2). Information gathered during tagging and radio-telemetry studies conducted by the department and other resource agencies in 1990, 1991, and 2010, indicated that king salmon entering the Kenai River in May and June primarily spawn in tributaries of the 50-mile section of Kenai River open to king salmon fishing, such as Killey River/Benjamin Creek (46–64%) and Funny River (12–21%), as well as other tributaries such as Russian River, Slikok, Juneau, Quartz, and Grant creeks (4–7%) (Table 225-1). Furthermore, a much smaller percentage of fish (9–30%) entering the Kenai River in May and June were thought to spawn in various reaches of the mainstem Kenai River.

In 2008, the effective date of the Killey River seasonal closure was changed to begin January 1 rather than June 25 to better protect holding Killey River spawners and to be consistent with the start date of the other king salmon sanctuaries. All of the king salmon tributary sanctuaries were extended 17 days from July 15 through July 31. In addition, the Killey River closed area was expanded in size to include the area around the relatively new primary Killey River outlet forming at the “middle” Killey River mouth near “Wally’s Hole”.

Multiple radiotelemetry studies on the Kenai River have found that early-run king salmon can hold in these seasonally-closed confluence areas of the mainstem for some time into July before ascending tributaries to spawn. A radiotelemetry study in 1990 found that by July 15, 91% of radiotagged Killey River/Benjamin Creek spawners (46) had left the Kenai River mainstem holding areas to enter the Killey River to migrate upstream to their spawning areas. In 1991, 98% of radiotagged Killey River spawners (49) had left the mainstem holding areas by July 15, and in 2010, 74% of radiotagged Killey River spawners (50) had left the mainstem by July 15 (Table 225-2). All radiotagged early-run tributary spawners ascended into these larger tributaries by August 3. The 1990 and 1991 studies also indicated that all king salmon tagged during the early-run period prior to July 1, and were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

As a result of the tagging studies in 1990 and 1991, it was determined that 29 tagged fish from the early run spawned in the Kenai River mainstem, downstream of Skilak Lake. Of these 29 tagged fish, six used the three seasonal closed areas to spawn (Funny closure=3, Slikok closure=2, Killey closure=1). Spawning of all early-run king salmon is thought to peak in mid to late July, and end by mid to late August.

Social issues surround the Lower Killey River, as well as other seasonally-closed-waters. One issue is that the closure extension through July 31 prevents using “standard” sport fishing gear while fishing for other species, such as sockeye salmon and resident species within the restricted area. Fishing methods and means that are prohibited to prevent unlawful take of king salmon include fishing with a single-hook with gap between point and shank greater than three-eighths inch, and fishing with a bead not attached to a hook. In addition, these waters are closed to fishing from a boat through July 31.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The basis for the seasonally-closed waters is to protect early-run king salmon that hold for some time into July before they enter the tributaries to spawn. In general, the department supports maintaining consistent regulations among all the Kenai River king salmon sanctuaries to aid enforcement and avoid confusion with the public. New king salmon projects started in 2010 will be completed in approximately three years and may provide information to more appropriately modify sanctuary area regulations.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

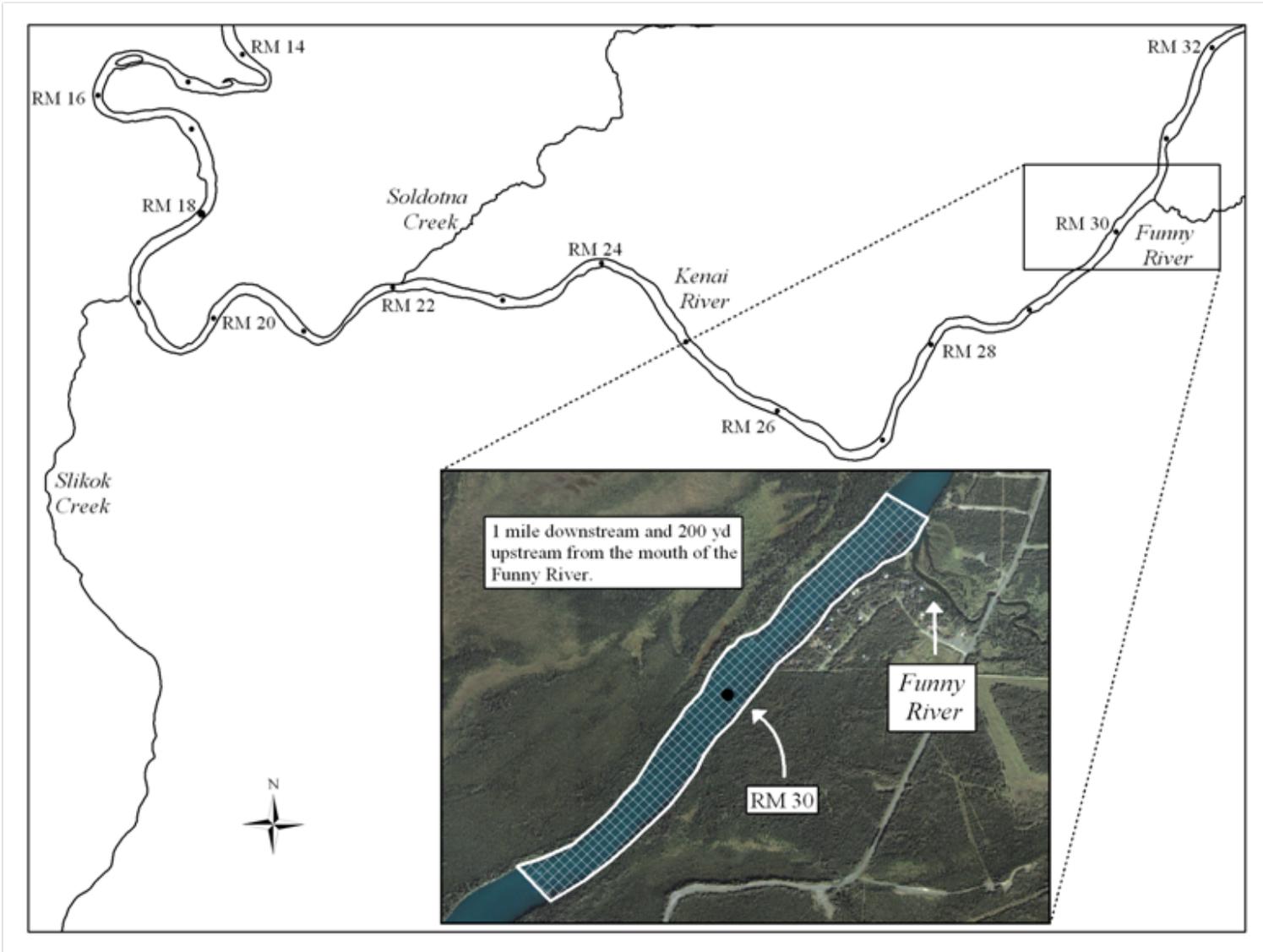


Figure 225-1. Map of the Funny River king salmon sanctuary.

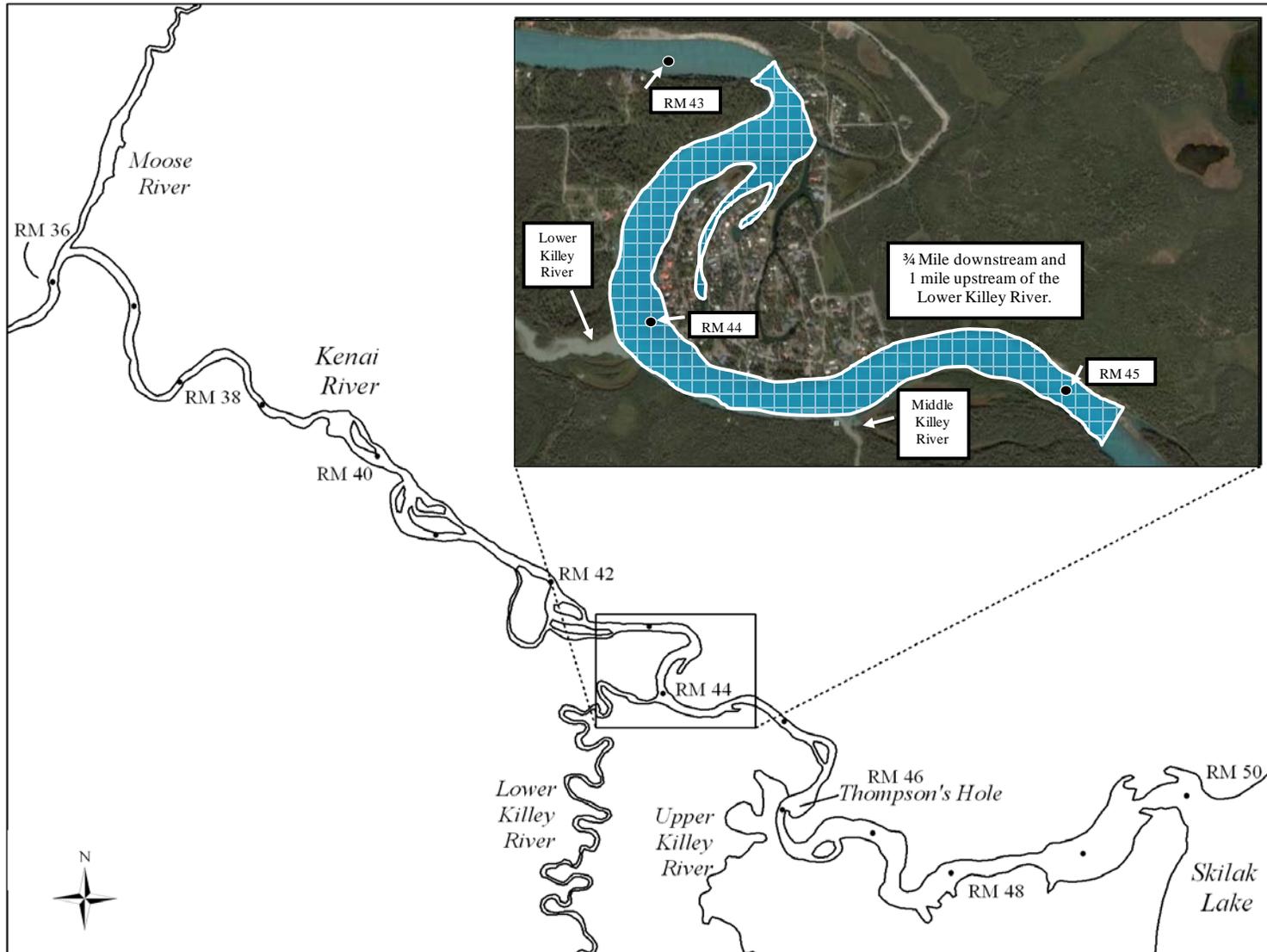


Figure 225-2. Map of the Killey River king salmon sanctuary.

Table 225-1. Distribution of radiotagged early-run Kenai River king salmon from 1990, 1991, and 2010.

Migrant Destinations	1990 ^a		1991 ^b		2010 ^c	
	# of tags	% of tags	# of tags	% of tags	# of tags	% of tags
Slikok C.	1	1%	2	3%	0	0%
Funny R.	19	20%	16	21%	10	12%
Killey R.	39	41%	28	36%	31	36%
Benjamin C.	4	4%	21	27%	19	22%
Russian R.	0	0%	0	0%	1	1%
Juneau C.	1	1%	1	1%	1	1%
Quartz C.	1	1%	2	3%	0	0%
Crescent C.	0	0%	0	0%	1	1%
Daves C.	0	0%	0	0%	1	1%
Grant C.	1	1%	0	0%	1	1%
Kenai R. Mainstem ^d	28	30%	7	9%	21 ^e	24%
Total	94	100%	77	100%	86	100%

^a King salmon were tagged from May 15 to June 30.

^b King salmon were tagged from May 28 to June 29.

^c King salmon were tagged from May 16 to July 5.

^d Includes the mainstem Kenai River, both the lower/middle and the upper, and both Kenai and Skilak lakes.

^e This are preliminary data and are subject to change.

Table 225-2. Entry timing for radiotagged Killey River king salmon into the Killey River, 2010.

Date	Frequency	Cumulative Frequency	Cumulative %
23-Jun	4	4	8%
1-Jul	2	6	12%
3-Jul	1	7	14%
4-Jul	3	10	20%
5-Jul	7	17	34%
6-Jul	3	20	40%
7-Jul	5	25	50%
9-Jul	1	26	52%
10-Jul	5	31	62%
11-Jul	3	34	68%
12-Jul	1	35	70%
13-Jul	2	37	74%
15-Jul	3	40	80%
16-Jul	2	42	84%
17-Jul	3	45	90%
18-Jul	2	47	94%
22-Jul	1	48	96%
30-Jul	1	49	98%
3-Aug	1	50	100%

PROPOSAL 226 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Kenai River Keys Property Owners Association.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the Killey River king salmon sanctuary closure date to June 25–July 14.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is fly-fishing-only waters and is closed to fishing for king salmon.

From January 1–July 31, the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is closed to fishing from boats.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would allow, in essence, an additional 60 days of king salmon fishing, fishing from boats, and the use of standard sport fishing gear and bait during May, June, and July in a 1.75 river mile section of river. The proposal would increase catch and harvest of early- and late-run Kenai River king salmon by an unknown amount. It would likely result in an increase in fishing effort in this area, accompanied by a small increase in the number of resident species and sockeye salmon caught and harvested in this area.

BACKGROUND: In 1996, the board adopted, at the department’s request, seasonal closures that restricted fishing in the confluence areas of Funny and Killey rivers (Figure 226-1). Information gathered during tagging and radiotelemetry studies conducted by the department and other resource agencies in 1990, 1991, and 2010, indicated that king salmon entering the Kenai River in May and June primarily spawn in tributaries of the 50-mile section of Kenai River open to king salmon fishing, such as Killey River/Benjamin Creek (46–64%) and Funny River (12–21%), as well as other tributaries, such as Russian River, and Slikok, Juneau, Quartz, and Grant creeks (4–7%) (Table 226-1). Furthermore, a much smaller percentage of fish (9–30%) entering the Kenai River in May and June were thought to spawn in various reaches of the mainstem Kenai River.

In 2008, the effective date of the Killey River seasonal closure was changed to begin January 1 rather than June 25 to better protect holding Killey River spawners and to be consistent with the start date of the other king salmon sanctuaries. All of the king salmon tributary sanctuaries were extended 17 days from July 15 through July 31. In addition, the Killey River closed area was expanded in size to include the area around the relatively new primary Killey River outlet forming at the “middle” Killey River mouth near “Wally’s Hole.” The basis for the seasonally-

closed waters is to protect early-run king salmon that hold for some time into July before they enter the tributaries to spawn.

Multiple radiotelemetry studies on the Kenai River have found that early-run king salmon can hold in these seasonally-closed confluence areas of the mainstem for some time into July before ascending tributaries to spawn. A radiotelemetry study in 1990 found that by July 15, 91% of radiotagged Killey River/Benjamin Creek spawners (46) had left the Kenai River mainstem holding areas to enter the Killey River to migrate upstream to their spawning areas. In 1991, 98% of radiotagged Killey River spawners (49) had left the mainstem holding areas by July 15, and in 2010, 74% of radiotagged Killey River spawners (50) had left the mainstem by July 15. (Table 226-2). All radio-tagged early-run tributary spawners ascended into these larger tributaries by August 3. The 1990 and 1991 studies also indicated that all king salmon tagged during the early-run period prior to July 1, which were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

As a result of the tagging studies in 1990 and 1991, it was determined that 29 tagged fish from the early run spawned in the Kenai River mainstem, downstream of Skilak Lake. Of these 29 tagged fish, six used the three seasonal closed areas to spawn (Funny closure=3, Slikok closure=2, Killey closure=1). Spawning of all early-run king salmon is thought to peak in mid to late July, and end by mid to late August.

Social issues surround the Lower Killey River, as well as other seasonally-closed waters. One issue is that the closure extension through July 31 prevents using “standard” sport fishing gear while fishing for other species, such as sockeye salmon and resident species within the restricted area. Fishing methods and means that are prohibited to prevent unlawful take of king salmon include fishing with a single-hook with gap between point and shank greater than three-eighths inch, and fishing with a bead not attached to a hook. In addition, these waters are closed to fishing from a boat through July 31.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Data from radiotelemetry studies indicate Killey River spawning king salmon begin to arrive in the Killey River sanctuary in early June (Table 226-3). The board adopted this sanctuary to protect tributary spawning fish holding in the Kenai River near the Killey River outlets; hence, changing the starting date to June 25 would open the sanctuary area to fishing at a time when it is known to contain numbers of holding tributary spawning fish. In general, the department supports maintaining consistent regulations among all the Kenai River king salmon sanctuaries to aid enforcement and avoid confusion with the public. New king salmon projects started in 2010 will be completed in approximately three years and may provide information to more appropriately modify sanctuary area regulations.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

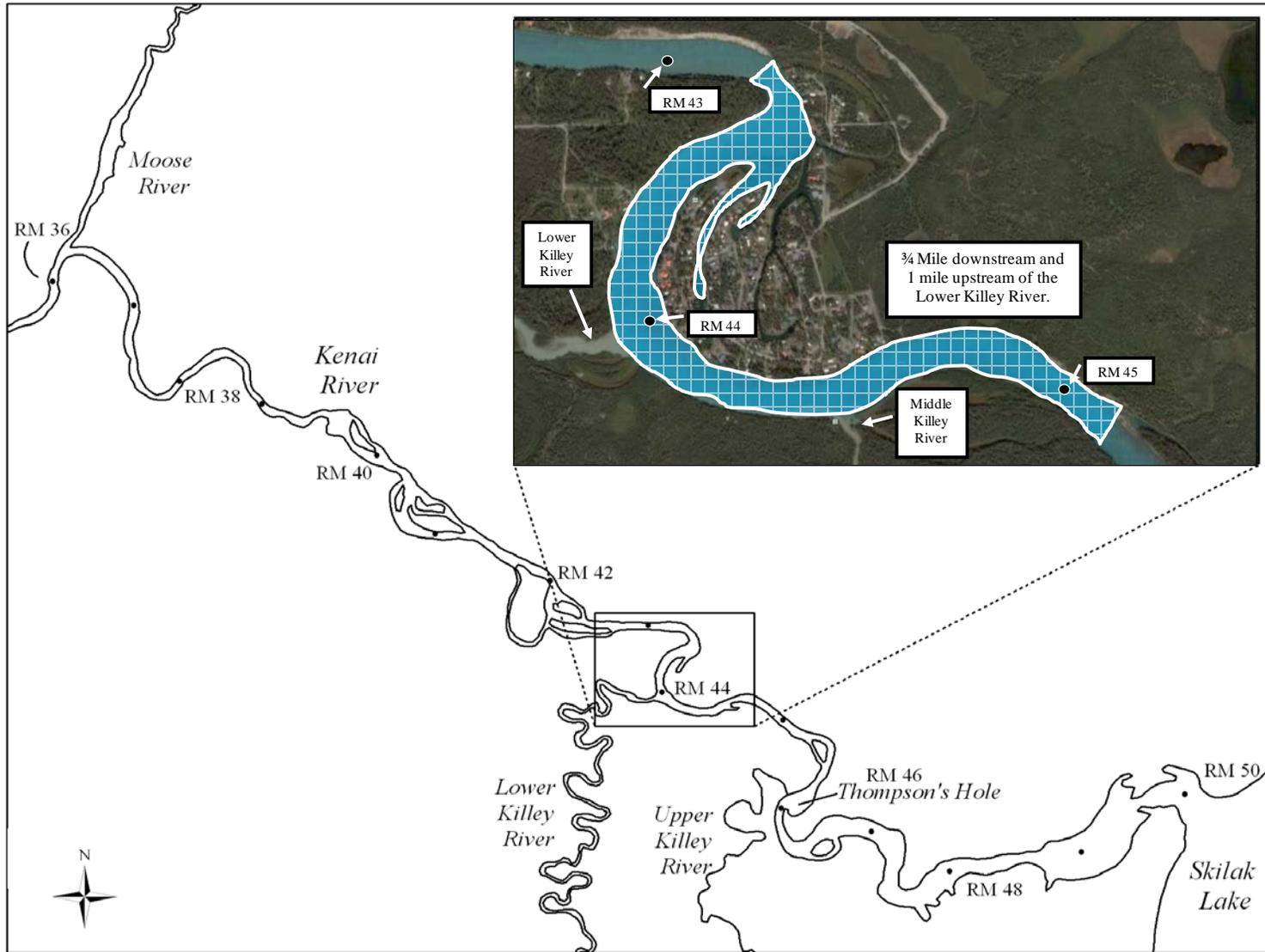


Figure 226-1. Map of the Killey River king salmon sanctuary.

Table 226-1. Distribution of radiotagged early-run Kenai River king salmon from 1990, 1991, and 2010.

Migrant Destinations	1990 ^a		1991 ^b		2010 ^c	
	# of tags	% of tags	# of tags	% of tags	# of tags	% of tags
Slikok C.	1	1%	2	3%	0	0%
Funny R.	19	20%	16	21%	10	12%
Killey R.	39	41%	28	36%	31	36%
Benjamin C.	4	4%	21	27%	19	22%
Russian R.	0	0%	0	0%	1	1%
Juneau C.	1	1%	1	1%	1	1%
Quartz C.	1	1%	2	3%	0	0%
Crescent C.	0	0%	0	0%	1	1%
Daves C.	0	0%	0	0%	1	1%
Grant C.	1	1%	0	0%	1	1%
Kenai R. Mainstem ^d	28	30%	7	9%	21 ^e	24%
Total	94	100%	77	100%	86	100%

^a King salmon were tagged from May 15 to June 30.

^b King salmon were tagged from May 28 to June 29.

^c King salmon were tagged from May 16 to July 5.

^d Includes the mainstem Kenai River, both the lower/middle and the upper, and both Kenai and Skilak lakes.

^e This are preliminary data and are subject to change.

Table 226-2. Entry timing for radiotagged Killey River king salmon into the Killey River, 2010.

Date	Frequency	Cumulative Frequency	Cumulative %
23-Jun	4	4	8%
1-Jul	2	6	12%
3-Jul	1	7	14%
4-Jul	3	10	20%
5-Jul	7	17	34%
6-Jul	3	20	40%
7-Jul	5	25	50%
9-Jul	1	26	52%
10-Jul	5	31	62%
11-Jul	3	34	68%
12-Jul	1	35	70%
13-Jul	2	37	74%
15-Jul	3	40	80%
16-Jul	2	42	84%
17-Jul	3	45	90%
18-Jul	2	47	94%
22-Jul	1	48	96%
30-Jul	1	49	98%
3-Aug	1	50	100%

Table 226-3. Entry timing for radiotagged Killey River king salmon into the Killey River sanctuary area, 2010.

Date	Frequency	Cumulative Frequency	Cumulative %
12-Jun	1	1	2%
16-Jun	1	2	4%
19-Jun	1	3	6%
20-Jun	1	4	8%
22-Jun	3	7	14%
23-Jun	1	8	16%
24-Jun	3	11	22%
25-Jun	1	12	24%
26-Jun	1	13	26%
27-Jun	4	17	34%
28-Jun	7	24	48%
29-Jun	4	28	56%
30-Jun	6	34	68%
2-Jul	2	36	72%
3-Jul	1	37	74%
4-Jul	2	39	78%
5-Jul	1	40	80%
6-Jul	1	41	82%
7-Jul	1	42	84%
8-Jul	1	43	86%
9-Jul	2	45	90%
10-Jul	2	47	94%
12-Jul	2	49	98%
13-Jul	1	50	100%

PROPOSAL 227 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Steve Irvine, Dots Kenai River Fish Camp.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the Killey River king salmon sanctuary area by moving the lower marker upstream approximately 400 yards, to allow fishing in what is known as “Hole #3”.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is fly-fishing-only waters and is closed to fishing for king salmon.

From January 1–July 31, the Kenai River, from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the Lower Killey River, is closed to fishing from boats.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would open an additional one-quarter mile section of the Kenai River to king salmon fishing and fishing from boats. The proposal would increase catch and harvest of early- and late-run Kenai River king salmon by an unknown amount. It would likely increase fishing effort in this area, accompanied by a small increase in the number of resident species and sockeye salmon caught and harvested in this area.

BACKGROUND: In 1996, the board adopted, at the department’s request, seasonal closures that restricted fishing in the confluence areas of Funny and Killey rivers. In 2008, the Killey River closed area was expanded in size to include the area around the relatively new primary Killey River outlet forming at the “middle” Killey River mouth near “Wally’s Hole”. The basis for the seasonally-closed waters is to protect early-run king salmon that hold for some time into July before they enter the tributaries to spawn. Data from radiotelemetry studies suggest Killey River/Benjamin Creek spawning king salmon tend to hold in an area referred to as “Hole #3” (Figure 227-1).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The board adopted this sanctuary to protect tributary spawning fish holding in the Kenai River near the Killey River outlets; hence, opening a portion of the sanctuary to king salmon fishing in a time period when it is known to contain large numbers of holding tributary spawning fish would be counter to the intent of the regulation.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

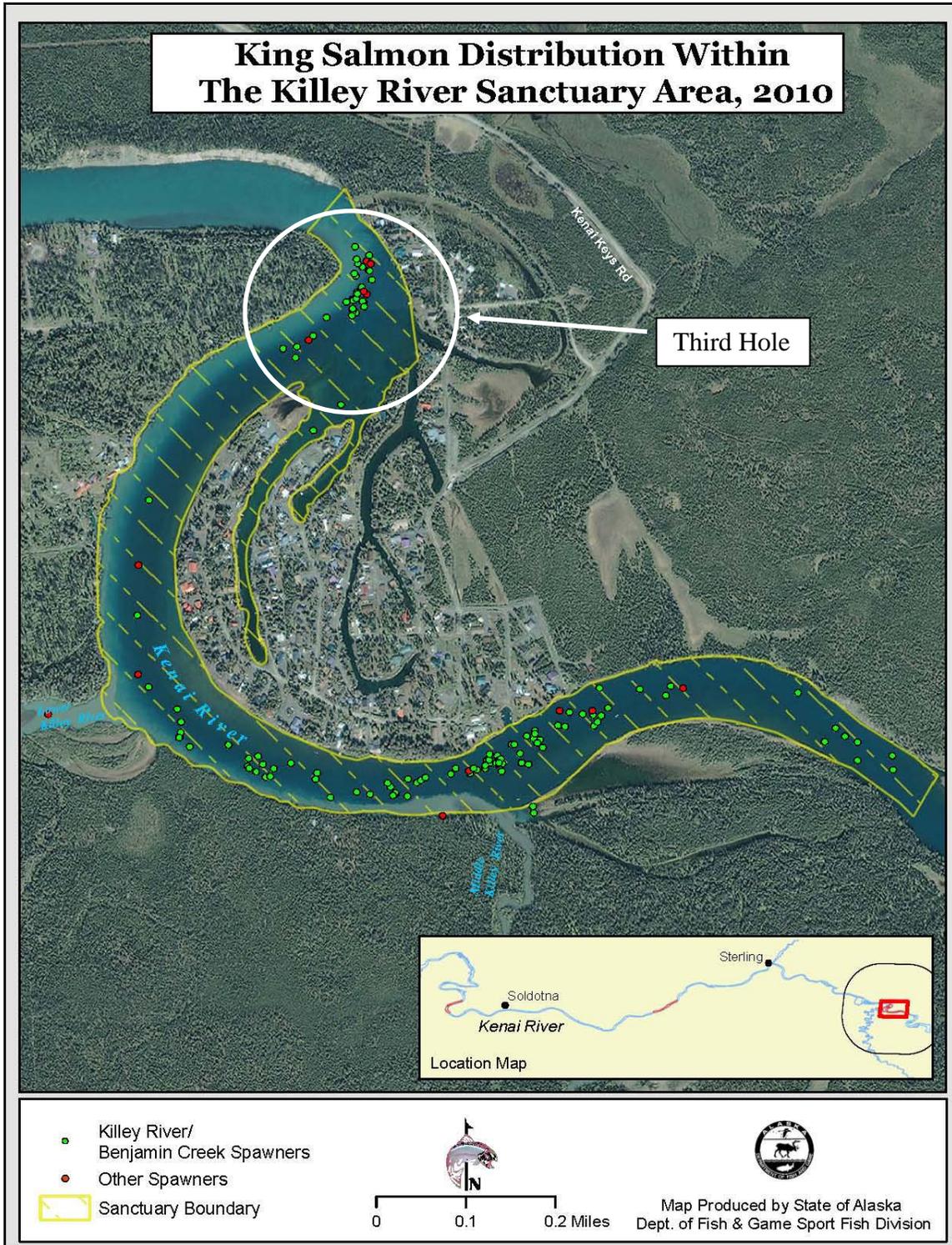


Figure 227-1. Map of the Killey River king salmon sanctuary, with locations of radiotagged king salmon detected in 2010.

PROPOSAL 228 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: James K. Johnson.

WHAT WOULD THE PROPOSAL DO? This proposal would repeal the seasonal restriction that prohibits fishing from a boat at the confluence of the Moose River.

WHAT ARE THE CURRENT REGULATIONS? From May 15 until the end of king salmon season, or July 31, whichever is later, a person may not sport fish from a boat in that portion of the Kenai River within a 100-yard radius of the mouth of the Moose River, and the Moose River upstream to the upstream edge of the Sterling Highway Bridge.

From May 15 until August 15, that portion of the Kenai River within a 100-yard radius of the mouth of the Moose River, and the Moose River upstream to the upstream edge of the Sterling Highway Bridge, is fly-fishing-only waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would open a 200-yard section of river to fishing from boats during king salmon season. The area would remain fly-fishing-only waters. The proposal would likely increase catch and harvest of early- and late-run Kenai River king salmon by an unknown amount. This proposal may increase congestion near the Izaak Walton boat launch.

BACKGROUND: The Moose River seasonal boat closure has been in place since 1983 (Figure 228-1). This area is a low velocity slack water area at the confluence of the Moose and Kenai rivers where salmon of all species are known to “hold” before continuing upstream migration. At this location, there is a state campground and boat-launch facility, Izaak Walton State Recreation Site that provides public access and that is a popular location for anglers to fish from shore. It is one of only three areas on the Kenai River where fishing from boats during king salmon season is prohibited; however, fishing for king salmon is allowed from shore.

DEPARTMENT COMMENTS: The department is **OPPOSED** to opening this area to fishing from boats where holding salmon, particularly king salmon, may be vulnerable to fishing pressure from boats.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.



Figure 228-1. Map of Moose River seasonal boat closure area.

PROPOSAL 229 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the lower Section of the Kenai River Drainage Area.

PROPOSED BY: Kenai Area Fisherman's Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the Slikok Creek king salmon sanctuary area from 300 yards to one mile downstream of the mouth, and from 100 yards to 0.25 miles upstream of the mouth of Slikok Creek.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from department markers about 300 yards downstream of the mouth of Slikok Creek upstream to department markers located approximately 100 yards upstream from the mouth of Slikok Creek is designated fly-fishing-only water, closed to sport fishing from a boat, and closed to the taking of king salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in an additional mile of river that would be closed to fishing for king salmon, fishing from boats, and that would require use of fly-fishing-only gear by bank anglers. The proposal would likely reduce catch and harvest of king salmon in the proposed area presently open to king salmon fishing by an unknown amount, but may not affect overall harvest of king salmon due to anglers moving to open areas. This proposal is not likely to reduce fishing effort; therefore, crowding would be increased in remaining open areas. The effect on Slikok Creek king salmon is unknown because there is no information on whether or not these fish stage in the proposed area.

BACKGROUND: In 1992, the board adopted the seasonal closed-water regulations that restricted fishing in the confluence area of Slikok Creek (Figure 229-1). In 2008, the effective date of the seasonally closed-water regulations, including Slikok Creek, was extended an additional 17 days to include July 15–31. This tributary sanctuary, as well as the Killey River and Funny River sanctuaries, provides refuge for both early-run king salmon that spawn in tributaries and those that spawn in the mainstem of the Kenai River. Early-run king salmon are managed to achieve a spawning escapement within the optimum escapement goal of 5,300 to 9,000 early-run king salmon. Achievement of this escapement objective requires information on the number of early-run king salmon entering the river, the ability to project the total inriver run, and an estimate of harvest and final spawning escapement. The numbers of fish entering each tributary are not used for inseason management of tributary spawning king salmon. Management of these fish is addressed through achievement of the Kenai River early-run king salmon escapement goal, regulatory sport fishing closures of selected mainstem Kenai River areas and tributaries to king salmon fishing, bait and gear restrictions, restrictive bag and annual limits, and harvest slot limits.

Radiotelemetry studies indicated all radiotagged early-run tributary spawners ascended into larger tributaries (Funny and Killey rivers) by July 21, while all radiotagged Slikok Creek spawners ascended into Slikok Creek by July 29. Studies also indicated that all king salmon

tagged during the early-run period prior to July 1, which were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

A weir has been operated in the Funny River about two miles upstream of the confluence of the Kenai and Funny rivers from 2006 to present, and at Slikok Creek 0.4 miles upstream of the Kenai River from 2008–2010. During these periods, the total escapement of king salmon to pass through the Funny River weir ranged from 2,779 to 677 fish, while escapement into Slikok Creek ranged from 70 to 28 fish (Tables 229-1 and 229-2).

Foot surveys in Slikok Creek were initiated in 1990 due to concern about beaver dams being migratory barriers to free passage of anadromous fish to spawning areas (Table 229-3). Marked hatchery-stocked king salmon that originated from a department stocking program at Crooked Creek, a tributary of the nearby Kasilof River, were detected in Slikok Creek during these foot surveys. Subsequent surveys indicated presence of hatchery-stocked early-run king salmon of Crooked Creek origin in Slikok Creek. Due to the number of fish straying into the Kenai River drainage, the department reduced stocking levels into Crooked Creek by 50%, from 210,000 smolt to 105,000 smolt, beginning in 2000.

The annual run of king salmon to Slikok Creek has been assessed by a foot survey count in 1982, 1990–2004, and 2006, and by weir counts in 2008–2010. Peak foot survey index counts of king salmon have ranged from 40 fish to 313 fish, while weir counts were 68 fish (44 males, 24 females) in 2008, 70 fish (54 males, 16 females) in 2009, and 28 fish (12 males, 16 females) in 2010. The Slikok Creek weir was first installed in 2008 as part of a road culvert replacement fish passage assessment project. The focus of this project was to assess juvenile and adult fish passage before and after replacement of a perched culvert located approximately one mile above the Slikok Creek-Kenai River confluence. The culvert was replaced in 2007 because it was determined to be below fish passage standards, thereby negatively impacting fish production. Preliminary results from the study indicate that the new culvert has significantly improved upstream and downstream passage of juvenile fish, and increased the quantity of available habitat.

King salmon escapement information collected at the Russian River weir over a 40-year period indicates king salmon escapements fluctuate from as low as 12 fish to as high as 638 fish (Table 229-4). Currently, Russian River king salmon escapements are relatively stable after an 8-year period (1990–1997) of low escapements that ranged from 15 to 76 fish.

Of the 249 radiotagged early-run king salmon in 2010, none spawned in Slikok Creek. Without any radiotagged Slikok king salmon, we were unable to identify any preferred holding locations in 2010. However, locations were determined for other radiotagged king salmon within the current Slikok Creek sanctuary, as well as the proposed sanctuary (Figure 229-2). Throughout the season, multiple tracking runs identified a preferred holding location for tagged king salmon near the mouth of Slikok Creek, while other identified locations were more scattered throughout the proposed sanctuary area. Four Slikok Creek king salmon were radiotagged in telemetry studies done in 1990 and 1991. Prior to entering Slikok Creek, these king salmon were primarily detected near river mile 19.0, which is near the mouth of Slikok Creek. Two of the fish were

occasionally detected holding both upstream and downstream of the mouth, ranging anywhere from river mile 17.0 to river mile 25.0.

Additional information about the number of king salmon entering Slikok Creek, run timing of tributary spawning fish, and seasonal inriver distribution of tributary spawning fish will be collected through department assessments of the Kenai River king salmon population that began in 2010. The new projects will be completed in approximately three years and may provide information to evaluate the effectiveness of existing sanctuary areas and to more appropriately modify sanctuary area regulations.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department recognizes that weir counts of king salmon into Slikok Creek are lower than some numbers previously recorded by foot survey index counts. Data collected throughout the drainage over time indicate: 1) the number of king salmon in the escapements into various tributaries exhibit wide fluctuations, 2) Slikok Creek is a minor component to the total Kenai River early run of king salmon, and 3) as the total king salmon run size increases, the escapements into various tributaries typically increase.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

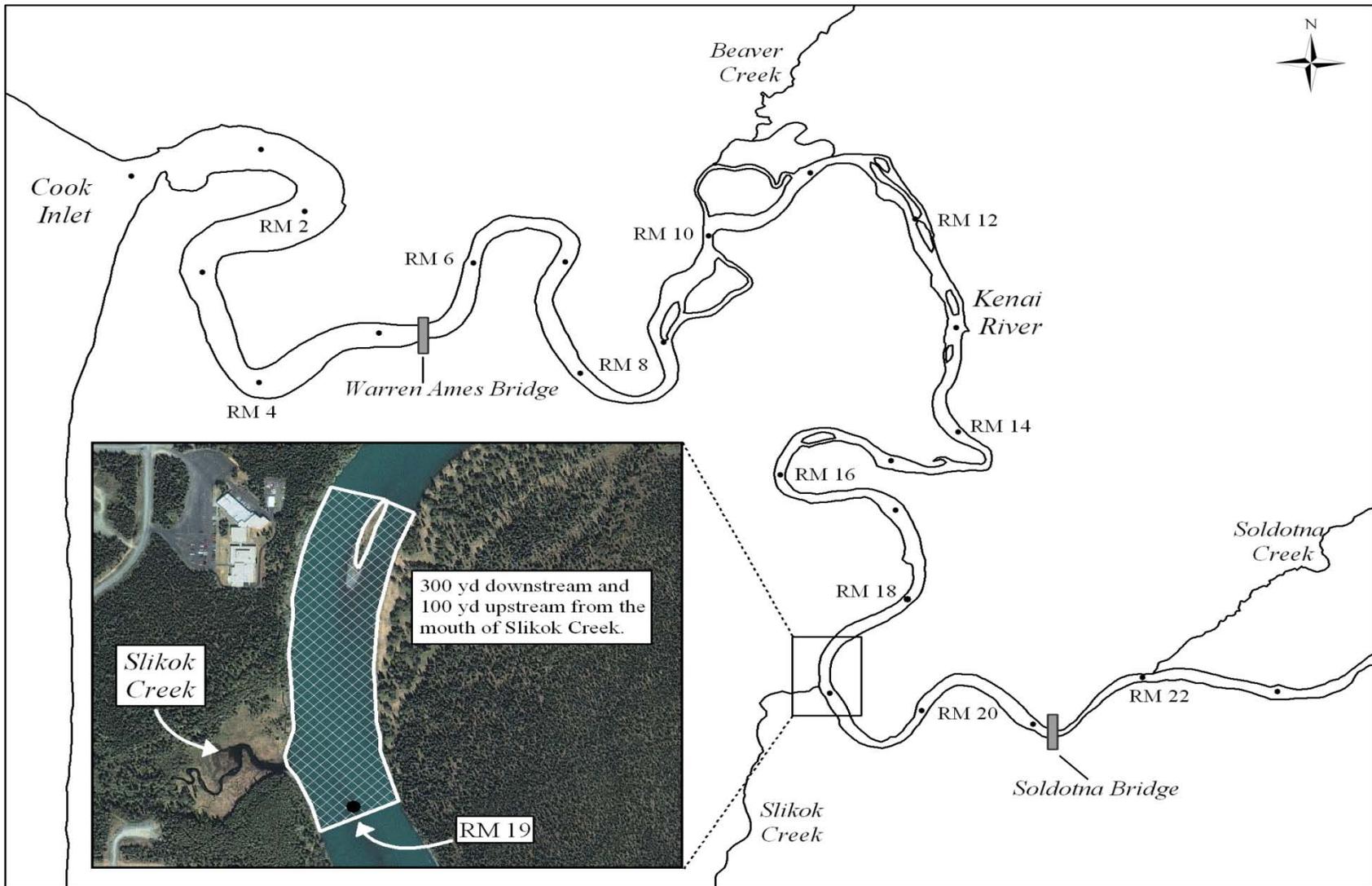


Figure 229-1. Map of the Slikok Creek king salmon sanctuary.

Table 229-1. Funny River king salmon escapement estimated by weir by the USFWS, 2006–2010.

Date	2006			2007			2008			2009			2010			Average Cumulative Proportion
	Daily	Cumulative Cum	Proportion													
5/23				0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/24				0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/25				1	1	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/26				0	1	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/27				0	1	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/28				3	4	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/29				0	4	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/30				0	4	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0.00
5/31				0	4	0.00	0	0	0.00	0	0	0.00	1	1	0.00	0.00
6/1	1	1	0.00	0	4	0.00	0	0	0.00	0	0	0.00	0	1	0.00	0.00
6/2	0	1	0.00	0	4	0.00	0	0	0.00	0	0	0.00	0	1	0.00	0.00
6/3	1	2	0.00	1	5	0.00	1	1	0.00	0	0	0.00	0	1	0.00	0.00
6/4	2	4	0.00	1	6	0.00	0	1	0.00	0	0	0.00	0	1	0.00	0.00
6/5	3	7	0.00	4	10	0.00	0	1	0.00	0	0	0.00	0	1	0.00	0.00
6/6	0	7	0.00	2	12	0.01	0	1	0.00	0	0	0.00	0	1	0.00	0.00
6/7	0	7	0.00	2	14	0.01	0	1	0.00	0	0	0.00	0	1	0.00	0.00
6/8	0	7	0.00	17	31	0.01	1	2	0.00	1	1	0.00	0	1	0.00	0.00
6/9	0	7	0.00	6	37	0.02	0	2	0.00	12	13	0.01	0	1	0.00	0.01
6/10	0	7	0.00	8	45	0.02	0	2	0.00	2	15	0.01	0	1	0.00	0.01
6/11	2	9	0.00	64	109	0.05	0	2	0.00	4	19	0.02	0	1	0.00	0.02
6/12	11	20	0.01	53	162	0.08	0	2	0.00	14	33	0.03	0	1	0.00	0.02
6/13	55	75	0.03	44	206	0.10	0	2	0.00	1	34	0.03	0	1	0.00	0.03
6/14	295	370	0.13	46	252	0.12	0	2	0.00	2	36	0.03	2	3	0.00	0.06
6/15	68	438	0.16	32	284	0.14	2	4	0.00	0	36	0.03	0	3	0.00	0.07
6/16	296	734	0.26	72	356	0.17	4	8	0.01	7	43	0.04	1	4	0.00	0.10
6/17	82	816	0.29	114	470	0.23	2	10	0.01	0	43	0.04	3	7	0.01	0.11
6/18	27	843	0.30	26	496	0.24	21	31	0.02	1	44	0.04	1	8	0.01	0.12
6/19	29	872	0.31	19	515	0.25	8	39	0.03	4	48	0.04	3	11	0.01	0.13
6/20	45	917	0.33	83	598	0.29	14	53	0.04	0	48	0.04	2	13	0.01	0.14
6/21	17	934	0.34	76	674	0.32	11	64	0.05	2	50	0.04	0	13	0.01	0.15
6/22	118	1,052	0.38	77	751	0.36	1	65	0.05	2	52	0.05	14	27	0.02	0.17
6/23	216	1,268	0.46	9	760	0.37	0	65	0.05	1	53	0.05	265	292	0.25	0.23
6/24	42	1,310	0.47	2	762	0.37	0	65	0.05	6	59	0.05	119	411	0.35	0.26
6/25	24	1,334	0.48	1	763	0.37	13	78	0.06	1	60	0.05	80	491	0.42	0.28
6/26	6	1,340	0.48	2	765	0.37	1	79	0.06	11	71	0.06	9	500	0.42	0.28
6/27	27	1,367	0.49	1	766	0.37	2	81	0.07	9	80	0.07	12	512	0.43	0.29
6/28	10	1,377	0.50	35	801	0.39	5	86	0.07	91	171	0.15	9	521	0.44	0.31
6/29	23	1,400	0.50	78	879	0.42	5	91	0.07	118	289	0.26	18	539	0.46	0.34
6/30	127	1,527	0.55	71	950	0.46	0	91	0.07	98	387	0.35	15	554	0.47	0.38
7/1	93	1,620	0.58	112	1,062	0.51	3	94	0.08	80	467	0.42	8	562	0.48	0.41
7/2	71	1,691	0.61	27	1,089	0.52	27	121	0.10	22	489	0.44	15	577	0.49	0.43
7/3	104	1,795	0.65	6	1,095	0.53	46	167	0.13	47	536	0.48	12	589	0.50	0.46
7/4	155	1,950	0.70	29	1,124	0.54	30	197	0.16	46	582	0.52	3	592	0.50	0.49
7/5	39	1,989	0.72	71	1,195	0.58	29	226	0.18	52	634	0.57	4	596	0.51	0.51

-continued-

Table 229-1. Pg. 2 of 2.

Date	2006			2007			2008			2009			2010			Average Cumulative Proportion
	Daily	Cum	Cumulative Proportion													
7/6	26	2,015	0.73	106	1,301	0.63	38	264	0.21	92	726	0.65	79	675	0.57	0.56
7/7	8	2,023	0.73	43	1,344	0.65	42	306	0.25	11	737	0.66	86	761	0.64	0.59
7/8	25	2,048	0.74	7	1,351	0.65	3	309	0.25	3	740	0.66	5	766	0.65	0.59
7/9	83	2,131	0.77	32	1,383	0.67	16	325	0.26	38	778	0.70	37	803	0.68	0.61
7/10	31	2,162	0.78	28	1,411	0.68	77	402	0.32	9	787	0.71	93	896	0.76	0.65
7/11	90	2,252	0.81	0	1,411	0.68	56	458	0.37	27	814	0.73	22	918	0.78	0.67
7/12	30	2,282	0.82	0	1,411	0.68	190	648	0.52	17	831	0.75	47	965	0.82	0.72
7/13	11	2,293	0.83	49	1,460	0.70	114	762	0.61	45	876	0.79	25	990	0.84	0.75
7/14	30	2,323	0.84	26	1,486	0.72	50	812	0.65	71	947	0.85	73	1,063	0.90	0.79
7/15	67	2,390	0.86	59	1,545	0.74	80	892	0.72	3	950	0.85	13	1,076	0.91	0.82
7/16	33	2,423	0.87	8	1,553	0.75	28	920	0.74	15	965	0.87	5	1,081	0.92	0.83
7/17	16	2,439	0.88	49	1,602	0.77	75	995	0.80	31	996	0.89	10	1,091	0.92	0.85
7/18	45	2,484	0.89	92	1,694	0.82	79	1,074	0.86	23	1,019	0.91	20	1,111	0.94	0.89
7/19	7	2,491	0.90	101	1,795	0.87	35	1,109	0.89	13	1,032	0.93	10	1,121	0.95	0.91
7/20	12	2,503	0.90	89	1,884	0.91	26	1,135	0.91	4	1,036	0.93	4	1,125	0.95	0.92
7/21	24	2,527	0.91	48	1,932	0.93	5	1,140	0.91	14	1,050	0.94	14	1,139	0.97	0.93
7/22	14	2,541	0.91	19	1,951	0.94	5	1,145	0.92	1	1,051	0.94	4	1,143	0.97	0.94
7/23	32	2,573	0.93	16	1,967	0.95	5	1,150	0.92	3	1,054	0.95	4	1,147	0.97	0.94
7/24	21	2,594	0.93	10	1,977	0.95	7	1,157	0.93	8	1,062	0.95	0	1,147	0.97	0.95
7/25	11	2,605	0.94	5	1,982	0.96	15	1,172	0.94	4	1,066	0.96	7	1,154	0.98	0.95
7/26	15	2,620	0.94	11	1,993	0.96	18	1,190	0.96	3	1,069	0.96	2	1,156	0.98	0.96
7/27	24	2,644	0.95	19	2,012	0.97	12	1,202	0.96	6	1,075	0.96	6	1,162	0.98	0.97
7/28	27	2,671	0.96	11	2,023	0.97	0	1,202	0.96	7	1,082	0.97	3	1,165	0.99	0.97
7/29	17	2,688	0.97	11	2,034	0.98	10	1,212	0.97	1	1,083	0.97	3	1,168	0.99	0.98
7/30	12	2,700	0.97	23	2,057	0.99	16	1,228	0.99	2	1,085	0.97	1	1,169	0.99	0.98
7/31	10	2,710	0.98	5	2,062	0.99	7	1,235	0.99	1	1,086	0.97	0	1,169	0.99	0.99
8/1	9	2,719	0.98	4	2,066	1.00	3	1,238	0.99	2	1,088	0.98	6	1,175	1.00	0.99
8/2	11	2,730	0.98	1	2,067	1.00	4	1,242	1.00	2	1,090	0.98	3	1,178	1.00	0.99
8/3	7	2,737	0.98	3	2,070	1.00	2	1,244	1.00	4	1,094	0.98	1	1,179	1.00	0.99
8/4	6	2,743	0.99	5	2,075	1.00	2	1,246	1.00	6	1,100	0.99	1	1,180	1.00	0.99
8/5	5	2,748	0.99	0	2,075	1.00	0	1,246	1.00	2	1,102	0.99	0	1,180	1.00	1.00
8/6	7	2,755	0.99	1	2,075	1.00	1	1,246	1.00	1	1,103	0.99	0	1,180	1.00	1.00
8/7	3	2,758	0.99	1	2,075	1.00	1	1,246	1.00	4	1,107	0.99	1	1,180	1.00	1.00
8/8	3	2,761	0.99	1	2,075	1.00	1	1,246	1.00	1	1,108	0.99	1	1,180	1.00	1.00
8/9	2	2,763	0.99	1	2,075	1.00	1	1,246	1.00	0	1,108	0.99	1	1,180	1.00	1.00
8/10	2	2,765	0.99	1	2,075	1.00	1	1,246	1.00	1	1,109	1.00	1	1,180	1.00	1.00
8/11	3	2,768	1.00	1	2,075	1.00	1	1,246	1.00	3	1,112	1.00	1	1,180	1.00	1.00
8/12	3	2,771	1.00	1	2,075	1.00	1	1,246	1.00	1	1,113	1.00	1	1,180	1.00	1.00
8/13	2	2,773	1.00	1	2,075	1.00	1	1,246	1.00	0	1,113	1.00	1	1,180	1.00	1.00
8/14	0	2,773	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
8/15	3	2,776	1.00	1	2,075	1.00	1	1,246	1.00	0	1,114	1.00	1	1,180	1.00	1.00
8/16	1	2,777	1.00	1	2,075	1.00	1	1,246	1.00	0	1,114	1.00	1	1,180	1.00	1.00
8/17	0	2,777	1.00	1	2,075	1.00	1	1,246	1.00	0	1,114	1.00	1	1,180	1.00	1.00
8/18	0	2,777	1.00	1	2,075	1.00	1	1,246	1.00	0	1,114	1.00	1	1,180	1.00	1.00
8/19	0	2,777	1.00	1	2,075	1.00	1	1,246	1.00	0	1,114	1.00	1	1,180	1.00	1.00
8/20	1	2,778	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
8/21	0	2,778	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
8/22	0	2,778	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
8/23	0	2,778	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
8/24	1	2,779	1.00	1	2,075	1.00	1	1,246	1.00	1	1,114	1.00	1	1,180	1.00	1.00
Total	2,779			2,075			1,246			1,114			1,180			

Table 229-2. Slikok Creek king salmon escapement estimated by weir, 2008–2010.

Date	2008 ^a			2009 ^b			2010 ^c		
	Daily	Cum	Proportion	Daily	Cum	Proportion	Daily	Cum	Proportion
7/1				0	0	0.00	0	0	0.00
7/2	0	0	0.00	0	0	0.00	0	0	0.00
7/3	0	0	0.00	0	0	0.00	0	0	0.00
7/4	0	0	0.00	0	0	0.00	0	0	0.00
7/5	0	0	0.00	0	0	0.00	0	0	0.00
7/6	0	0	0.00	0	0	0.00	0	0	0.00
7/7	0	0	0.00	0	0	0.00	0	0	0.00
7/8	0	0	0.00	0	0	0.00	0	0	0.00
7/9	0	0	0.00	0	0	0.00	0	0	0.00
7/10	0	0	0.00	0	0	0.00	0	0	0.00
7/11	0	0	0.00	0	0	0.00	0	0	0.00
7/12	0	0	0.00	0	0	0.00	0	0	0.00
7/13	0	0	0.00	0	0	0.00	0	0	0.00
7/14	0	0	0.00	1	1	0.01	0	0	0.00
7/15	0	0	0.00	0	1	0.01	1	1	0.04
7/16	0	0	0.00	0	1	0.01	0	1	0.04
7/17	0	0	0.00	0	1	0.01	0	1	0.04
7/18	2	2	0.03	0	1	0.01	0	1	0.04
7/19	0	2	0.03	0	1	0.01	2	3	0.11
7/20	6	8	0.14	6	7	0.10	0	3	0.11
7/21	6	14	0.24	16	23	0.33	1	4	0.14
7/22	0	14	0.24	0	23	0.33	7	11	0.39
7/23	10	24	0.41	13	36	0.51	0	11	0.39
7/24	8	32	0.54	18	54	0.77	0	11	0.39
7/25	6	38	0.64	0	54	0.77	1	12	0.43
7/26	4	42	0.71	2	56	0.80	5	17	0.61
7/27	0	42	0.71	3	59	0.84	7	24	0.86
7/28	1	43	0.73	2	61	0.87	2	26	0.93
7/29	2	45	0.76	2	63	0.90	2	28	1.00
7/30	0	45	0.76	1	64	0.91	0	28	1.00
7/31	1	46	0.78	2	66	0.94	0	28	1.00
8/1	13	59	1.00	0	66	0.94	0	28	1.00
8/2	0	59	1.00	0	66	0.94	0	28	1.00
8/3	0	59	1.00	1	67	0.96	0	28	1.00
8/4	0	59	1.00	2	69	0.99	0	28	1.00
8/5	0	59	1.00	0	69	0.99	0	28	1.00
8/6	0	59	1.00	0	69	0.99	0	28	1.00
8/7	0	59	1.00	0	69	0.99	0	28	1.00
8/8	0	59	1.00	0	69	0.99	0	28	1.00
8/9	0	59	1.00	0	69	0.99	0	28	1.00
8/10	0	59	1.00	1	70	1.00	0	28	1.00
Total	59			70			28		

^a Weir operated from 7/2 to 9/24.

^b Weir operated from 6/5 to 10/2.

^c Weir operated from 6/2 to 8/10.

Table 229-3. Slikok Creek king salmon foot surveys, 1990–2004.

Year	Date	King Salmon			Number Observed w/ Adipose -Fin Clips	Creek Sections	Number of Beaver Dams Observed
		Dead	Live	Total			
1990	8/3	207	8	215	ND	1,2,3,4	none mentioned
1991	7/16	16	80	96	ND	1,2,3,4	3
1991	8/9	157	3	160	ND	1,2,3,4	4
1992	8/4	151	5	156	ND	1,2,3,4	4
1993	8/6	299	8	307	ND	1,2,3,4	none mentioned
1994	8/3	255	40	295	ND	1,2,3,4	none mentioned
1995	8/7	ND	ND	ND	ND	ND	none mentioned
1995	8/8	101	1	102	ND	1,2,3,4	none mentioned
1996	8/6	87	1	88	ND	1,2,3,4	2
1997	7/16	148	165	313	9	1,2,3,4	3
1998	8/7	56	5	61	4	1,2,3,4	multiple
1999	7/23	64	116	180	see below	1,2,3,4	4
1999	7/30	29	43	72	see below	1,2,3,4	4
1999	8/11	6	3	9	5 ^b	1,2,3	4
2000	7/19	8	98	106	see below	L, M, U	1
2000	7/26	13	100	113	see below	L, M, U	1
2000	8/2	19	10	29	1 ^b	L, M, U	1
2001	7/20	12	83	95	see below	L, M, U	none mentioned
2001	7/27	27	37	64	see below	L, M, U	none mentioned
2001	8/3	31	9	40	3 ^b	L, M, U	none mentioned
2002	7/19	11	25	36	see below	L, M, U	none mentioned
2002	7/26	21	50	71	see below	L, M, U	none mentioned
2002	8/2	35	26	61	4 ^b	L, M, U	none mentioned
2003	7/18	4	49	53	see below	L, M, U	none mentioned
2003	7/25	20	95	115	see below	L, M, U	none mentioned
2003	8/1	33	39	72	15 ^b	L, M, U	none mentioned
2004	7/22	13	140	153	see below	L, M, U	none mentioned
2004	7/30	22	65	87	see below	L, M, U	none mentioned
2004	8/6	28	42	70	2 ^b	L, M, U	none mentioned

^a sections described below:

SECTIONS	
1	Kenai River to College Loop Rd. culverts
2	College Loop Rd. culverts to K-Beach Rd. culverts
3	K-Beach Rd. culverts to Silver Barn
4	Silver Barn to Jefferson Rd.
5	Jefferson Rd. to Sterling Highway
L	Kenai River to College Loop Rd. culverts
M	College Loop Rd. culverts to K-Beach Rd. culverts
U	K-Beach Rd. culverts to Jefferson Rd.

^b cumulative number of adipose fin-clipped king salmon observed opportunistically during the year.

Table 229-4. Russian River king salmon escapement estimated by weir, 1969–2010.

Year	King salmon
1969	119
1970	240
1971	22
1972	172
1973	245
1974	134
1975	105
1976	145
1977	41
1978	253
1979	279
1980	186
1981	30
1982	68
1983	52
1984	270
1985	189
1986	52
1987	12
1988	117
1989	177
1990	34
1991	16
1992	15
1993	76
1994	69
1995	41
1996	47
1997	40
1998	144
1999	171
2000	40
2001	68
2002	155
2003	638
2004	394
2005	132
2006	37
2007	87
2008	110
2009	227
2010	164
Mean	134

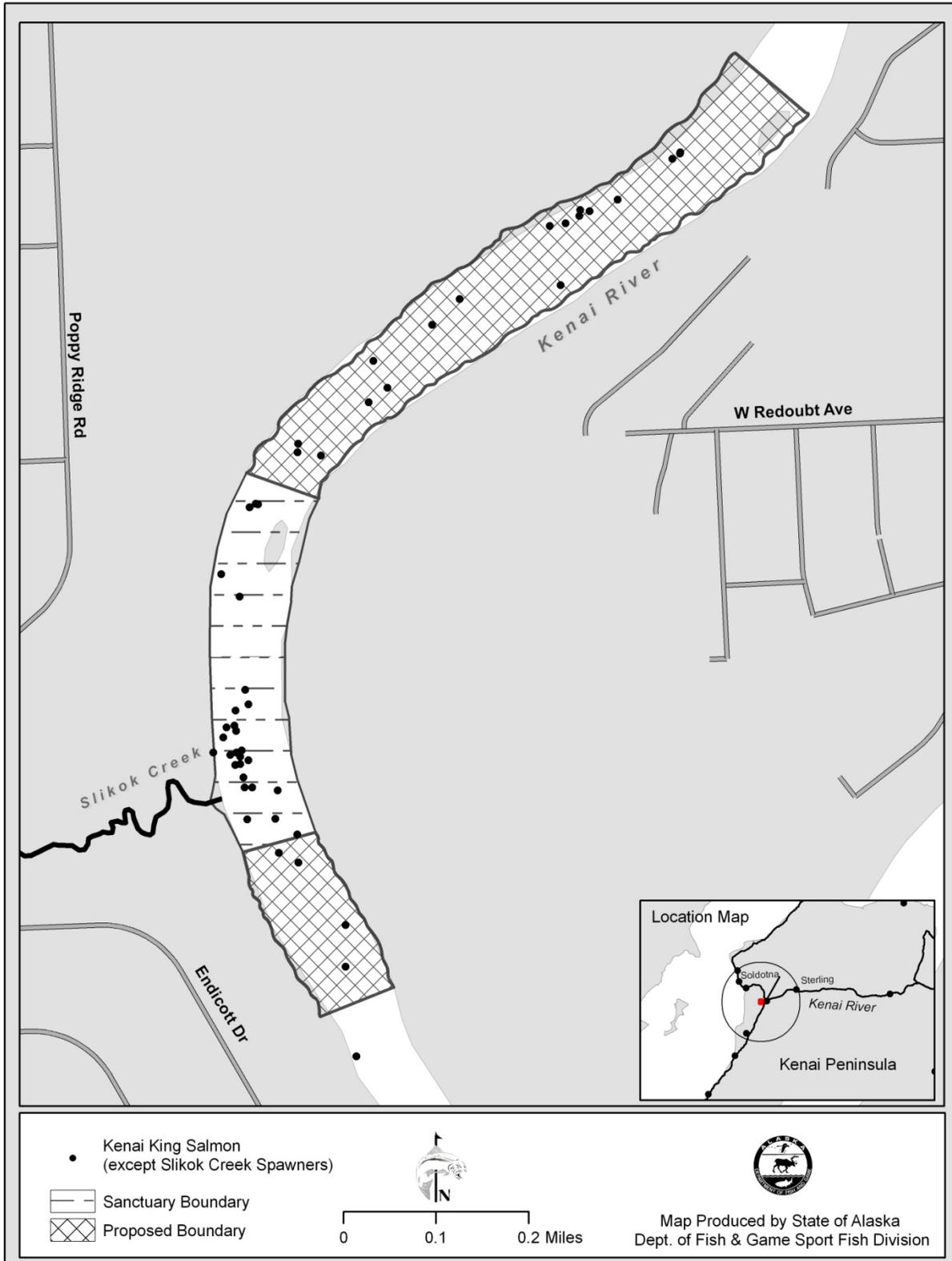


Figure 229-2. Map of the Slikok Creek king salmon sanctuary, proposed sanctuary, with locations of radiotagged king salmon detected in 2010.

PROPOSAL 230 - 5 AAC 57.160. Kenai River and Kasilof River Early-run King Salmon Management Plan.

PROPOSED BY: Kenai River Sportfishing Association

WHAT WOULD THE PROPOSAL DO? This proposal would undertake a comprehensive review and revision of the management plan based on new information published in an updated 2010 stock assessment for Kenai River early-run king salmon. The review would include consideration of the following alternatives:

- Continuation, modification, or elimination of the slot limit based on an assessment of benefits and unintended effects.
- Regulatory alternatives for reducing fishery selectivity against small fish which coincides with an increasing percentage of small fish in the run (for instance, by increasing harvest rates by allowing continued fishing after retention of one additional fish less than 28 inches).
- Adoption of other measures in order to avoid consistently exceeding escapement goals while improving fishery opportunity and predictability (e.g., opening the season with bait rather than by inseason emergency order, allowing multiple hooks, definition of inseason triggers for catch-and-release or closure as necessary).

WHAT ARE THE CURRENT REGULATIONS? *Kenai River and Kasilof River Early-run King Salmon Management Plan (5 AAC 57.160):*

(a) The purpose of this management plan is to ensure an adequate escapement of early-run king salmon into the Kenai and Kasilof rivers, to conserve the unique large size early-run king salmon in the Kenai River, and to provide the department with management guidelines.

(b) The department shall manage the Kenai River early-run king salmon sport and guided sport fisheries to achieve the optimal escapement goal, to provide reasonable harvest opportunities over the entire run, and to ensure the age and size composition of the harvest closely approximates the age and size composition of the run.

(c) The department shall manage the Kasilof River early-run king salmon sport and guided sport fisheries to achieve the sustainable escapement goal, to provide reasonable harvest opportunities over the entire run while ensuring adequate escapement of naturally-produced king salmon, and to minimize the effects of conservation actions for the Kenai River on the Kasilof River.

(d) In the Kenai River,

(1) the seasons, bag, possession, and size limits, and other special provisions for king salmon are set out in out in 5 AAC 57.120 – 5 AAC 57.123 and in (4) of this subsection;

(2) if the spawning escapement is projected to be less than the lower the end of the optimal escapement goal, the commissioner shall, by emergency order, restrict as necessary

the taking of king salmon in the sport and guided sport fisheries in the Kenai River to achieve the optimal escapement goal using one of the following methods:

(A) prohibit the retention of king salmon less than 55 inches in length, except king salmon less than 20 inches in length, downstream from the outlet of Skilak Lake through June 30, and require that upstream from the Soldotna Bridge to the outlet of Skilak Lake and in the Moose River from its confluence with the Kenai River upstream to the northernmost edge of the Sterling Highway Bridge, from July 1 through July 14, only one unbaited, single-hook, artificial lure may be used and only king salmon less than

(i) 46 inches in length and 55 inches or greater in length may be retained; or

(ii) 20 inches in length and 55 inches or greater in length may be retained; or

(B) close the sport and guided sport fisheries to the taking of king salmon in the Kenai River

(i) downstream from the outlet of Skilak Lake through June 30; and

(ii) from July 1 through July 14, upstream from the Soldotna Bridge to the outlet of Skilak Lake and in the Moose River from its confluence with the Kenai River upstream to the northernmost edge of the Sterling Highway Bridge;

(3) if the spawning escapement is projected to fall within the optimal escapement goal, the commissioner shall, by emergency order, liberalize the sport fishery downstream from the outlet of Skilak Lake, by allowing the use of bait if the department projects that the total harvest under a liberalized sport fishery will not reduce the spawning escapement below the optimal escapement goal; only king salmon less than 46 inches in length or 55 inches or greater in length may be retained;

(4) a person may not possess, transport, or export from this state, a king salmon 55 inches or greater in length taken from the Kenai River from January 1 through July 31, unless the fish has been sealed by an authorized representative of the department within three days after the taking; the person taking the fish must sign the sealing certificate at the time of sealing; the seal must remain on the fish until the preservation or taxidermy process has commenced; a person may not falsify any information required on the sealing certificate; in this paragraph,

(A) "sealing" means the placement of an official marker or locking tag (seal) by an authorized representative of the department on a fish and may include

(i) collecting and recording biological information concerning the conditions under which the fish was taken;

(ii) measuring the specimen submitted for sealing; and

(iii) retaining specific portions of the fish for biological information, including scales, fin rays, and vertebrae;

(B) "sealing certificate" means a form used by the department for recording information when sealing a fish.

(e) In the Kasilof River, the seasons, bag, possession, and size limits, and other special provisions for king salmon are set out in 5 AAC 56.120(a) and 5 AAC 56.122(8) .

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal has no regulatory changes that would affect Kenai River early-run king salmon. However, the effects stemming from such a review, including specific regulatory actions, would depend on the outcome of the review process.

BACKGROUND: In 1988, the board adopted the management plan for early-run Kenai River king salmon. This plan, amended many times since, established escapement goal levels expressed as a range, and identified the possible inseason management measures that could be implemented at given escapement levels projected from data collected by department assessment projects. Presently, early-run king salmon are managed to achieve a spawning escapement within the optimum escapement goal of 5,300 to 9,000 early-run king salmon. Achievement of this escapement objective requires information on the number of early-run king salmon entering the river by sonar, the ability to project the total inriver run using mean run-time models, an estimate of harvest from a creel survey, and a final spawning escapement.

In 2002, experimental imaging sonar called DIDSON (dual-frequency identification sonar) was tested in the Kenai River. After several years of development and testing, the DIDSON was deployed on both banks of the river for the entire 2010 season. Results indicate the DIDSON technology can provide improved estimates of abundance. Additional information indicates the present estimates of king salmon passages used for inseason management can be biased high and relatively imprecise. More time will be required to develop new escapement goals based on DIDSON estimates before the new assessment technology can be used for inseason management.

While the sonar program is in transition, the department is considering formalizing several indices collected during the king salmon runs that provide information about king salmon run strength. These indices could be used as references to trigger the existing management plan action points that would allow the department to meet criteria presently outlined in the *Kenai River and Kasilof River Early-run King Salmon Management Plan*. The department suggests maintaining the management plan until the transition to the DIDSON sonar and escapement revisions are completed.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department is supportive of reviewing management plans during regular cycle board meetings. Specific aspects of this proposed review and data associated with each aspect are found in most of the following proposals for this committee grouping.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 231 - 5 AAC 57.160. Kenai River and Kasilof River Early-run King Salmon Management Plan.

PROPOSED BY: Mark Glassmaker.

WHAT WOULD THE PROPOSAL DO? This proposal would change the Kenai River early-run king salmon biological escapement goal (BEG) from 4,000–9,000 to 7,200–14,500 fish, and/or the optimal escapement goal (OEG) from 5,300–9,000 to 7,200–14,500 fish.

WHAT ARE THE CURRENT REGULATIONS? The current BEG for early-run Kenai River king salmon is 4,000–9,000 fish. The current OEG for early-run Kenai River king salmon is 5,300–9,000 fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in an increase in the number of king salmon required to achieve escapement.

BACKGROUND: From 1999 through 2004, the BEG range for Kenai River early-run king salmon was 7,200–14,400 fish. In 2005, the department established a new BEG of 4,000–9,000 king salmon, and the board established an OEG of 5,300–9,000 fish. Department staff is recommending to the directors of Commercial Fisheries and Sport Fish changing early- and late-run Kenai River king salmon BEGs to SEGs based on the amount of uncertainty associated with the escapement estimates.

In 2002, experimental imaging sonar called DIDSON (dual-frequency identification sonar) was tested in the Kenai River. After several years of development and testing, the DIDSON was deployed on both banks of the river for the entire 2010 season. Results indicate the DIDSON imaging sonar can provide improved estimates of abundance. Additional information indicates the present estimates of king salmon passages used for inseason management can be biased high and relatively imprecise. More time will be required to develop new escapement goals based on DIDSON estimates before the new assessment technology can be used for inseason management.

While the sonar program is in transition, the department is considering formalizing several indices collected during the king salmon runs that provide information about king salmon run strength. These indices could be used as references to trigger management plan action points that allow the department to meet criteria presently outlined in the *Kenai River and Kasilof River Early-run King Salmon Management Plan*. The department suggests maintaining the management plan until the transition to the DIDSON sonar and escapement revisions are completed.

DEPARTMENT COMMENTS: The department recommends **NO ACTION** on this proposal as it relates to the BEG. Under the *Policy for Management of Sustainable Salmon Fisheries*, the department, not the board, has the responsibility of establishing biological and sustainable escapement goals. The department is **NEUTRAL** on this proposal as it relates to the OEG. The board may establish or modify an optimal escapement goal, if deemed appropriate, which considers biological and allocative factors and which may differ from the BEG or SEG.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 232 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would allow use of bait on May 1 or June 1 in the Kenai River early-run king salmon fishery.

WHAT ARE THE CURRENT REGULATIONS? The use of bait while sport fishing in the mainstem of the Kenai River from its mouth upstream to the outlet of Skilak Lake is prohibited from January 1 through June 30, unless superseded by emergency order. If the spawning escapement is projected to fall within the optimal escapement goal, the commissioner shall, by emergency order, liberalize the sport fishery downstream from the outlet of Skilak Lake by allowing the use of bait if the department projects that the total harvest under a liberalized sport fishery will not reduce the spawning escapement below the optimal escapement goal; only king salmon less than 46 inches in length or 55 inches or greater in length may be retained

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase angler effort, harvest, and exploitation of early-run king salmon and may increase the potential for inseason restrictions or closure of the fishery.

BACKGROUND: Management plans for the Kenai River king salmon fishery have been conservatively structured to constrain the ability of the angling public to harvest early-run stocks at sustainable levels while still providing for fishing opportunity. Bait has traditionally been used to increase the harvest of king salmon. Allowing or restricting the use of bait is utilized as a management tool to increase or decrease harvest levels to meet established escapement goals. Prior to the 2002 board meeting, the *Kenai River Early-run King Salmon Management Plan* stipulated that bait would be allowed if the upper end of the BEG (7,200–14,400 fish) would be exceeded. A slot limit regulation was enacted in 2002 and revised in 2003 in response to a declining number of ocean-age-5 king salmon in the early run. The fishery still began without bait until the upper end of the BEG was projected to be exceeded.

In 2005, the board established an OEG of 5,300–9,000 fish, and in 2008, the board modified the *Kenai River and Kasilof River Early-run King Salmon Management Plan* to allow the department to liberalize the sport fishery by allowing the use of bait if the department projects that the total harvest under a liberalized sport fishery will not reduce the spawning escapement below the OEG. Since 2005, the early-run king salmon fishery has been liberalized five times (2005 to 2008 and 2010), allowing bait from the mouth of the Kenai River upstream to the confluence of the Moose and Kenai rivers. The dates when bait was liberalized during those years occurred on June 18, 10, 12, 17 and 19, respectively.

In 2002, experimental imaging sonar called DIDSON (dual-frequency identification sonar) was tested in the Kenai River. After several years of development and testing, the DIDSON was deployed on both banks of the river for the entire 2010 season. Results indicate the DIDSON technology can provide improved estimates of abundance. Additional information indicates the

present target strength estimates of king salmon passages used for inseason management can be biased high and relatively imprecise. More time will be required to develop escapement goals and inseason management advice based on DIDSON estimates before the new assessment technology can be used for inseason management.

While the sonar program is in transition, the department is considering formalizing several indices collected during the king salmon runs that provide information about king salmon run strength. These indices could be used as references to trigger management plan action points that allow the department to meet criteria presently outlined in the *Kenai River and Kasilof River Early-run King Salmon Management Plan*. The department suggests maintaining the management plan until the transition to the DIDSON sonar and escapement revisions are completed.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The early-run king salmon fishery is generally a small run in an area that has a large sport fishing potential. During periods of below average run strength of king salmon, such as those observed in the Kenai River and throughout much of Southcentral Alaska from 2008–2010, it is prudent to prohibit bait in the fishery until run strength can be determined.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSALS 233 and 234 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Andy Szczesny (Proposal 233).
Mel Erickson (Proposal 234).

WHAT WOULD THESE PROPOSALS DO? These proposals would repeal the slot limit for Kenai River early-run king salmon.

WHAT ARE THE CURRENT REGULATIONS? In waters of the Kenai River open to king salmon sport fishing, early-run regulations allow for the harvest of 10 king salmon less than 20 inches per day, and harvest of one king salmon per day 20 inches or greater in length and less than 46 inches or 55 inches or greater in length. Any king salmon caught that is 46 inches or longer, but less than 55 inches, must be released unharmed. The nonretention slot limit is in effect from January 1 through June 30 in the Kenai River from the mouth upstream to the Soldotna Bridge and from January 1 through July 14 for those waters of the Kenai River from the Soldotna Bridge upstream to the outlet of Skilak Lake.

Late-run regulations are in effect from July 1–31 below the Soldotna Bridge, and from July 15–31 upstream of the Soldotna bridge; bag and possession limit of one king salmon per day 20 inches or greater in length.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? These proposals would increase the harvest and overall exploitation of king salmon during the early run. Anglers would be allowed to harvest ocean-age-5 and larger-sized ocean-age-4 fish currently protected by the slot limit. It may result in increased fishing effort by drawing those anglers who are discouraged from participating in the fishery due to the slot limit.

BACKGROUND: Prior to 2003, there was no slot limit in the Kenai River king salmon sport fishery; anglers were permitted to harvest king salmon regardless of the total length of the fish. However, the department, along with the public, recognized a decline in larger, older-aged king salmon returning to the Kenai River during the early run. Although the exact cause for the decline in older king salmon during the early run is not understood, the selective harvest or exploitation of larger, ocean-age-5 fish was the only practical factor that could be directly influenced by fishery managers. Therefore, at the department's request, the board adopted a slot limit harvest restriction in 2002 of 40 to 55 inches. This restriction almost completely eliminated the harvest potential of ocean-age-5 fish, allowed the retention of rare record-sized fish, and allowed harvest of younger, smaller fish.

In 2003, the board adjusted the slot limit to 44 to 55 inches based on a department-recommended slot limit of 45 to 55 inches to protect the larger, ocean-age-5 older king salmon returning to the Kenai River during the early run. This slot limit allowed approximately 73% of the returning early-run stocks to be available for harvest. Within this slot limit, most (87%) of the ocean-age-5 fish were protected, as were about 40% of the ocean-age-4 fish in the run.

In 2008, the board adjusted the slot limit again to 46 to 55 inches, allowing approximately 79% of the returning early-run stocks to be available for harvest. Within this slot limit, 72% of the ocean-age-5 fish are protected, as are about 26% of the ocean-age-4 fish in the run (Figure 233-1). Also within this slot limit, 56% of ocean-age-5 females are protected and 97% of ocean-age-5 males are protected, while 13% of ocean-age-4 females are protected and 61% of ocean-age-4 males are protected (Figure 233-2).

From 1986–1994, the early run included an average 1,103 ocean-age-5 king salmon, which comprised about 6.1% of the run (Table 233-1; Figure 233-3). During 1995–2002, the average decreased to 335 ocean-age-5 king salmon, which comprised 2.2% of the run. From 2003–2009, the average increased to 472 ocean-age-5 king salmon, which comprised about 2.7% of the run. In 2010, however, only 61 fish (0.5%) of the early-run return were estimated to be ocean-age-5 king salmon, the lowest estimate of ocean-age-5 early-run king salmon the department has on record.

Harvest selectivity prior to the slot limit being enacted favored harvesting older larger king salmon. From 2003–2007, harvest selectivity shifted to favor ocean-age-3 king salmon and very few ocean-age-5 king salmon were harvested (Figure 233-4). Since 2008, when the slot limit was adjusted to 46–55 inches, selectivity for ocean-age-3 kings decreased, while selectivity for ocean-age-2 and ocean-age-4 king salmon increased. During 2003–2006, an onsite creel survey of the inriver sport fishery downstream of the Soldotna Bridge did not detect a harvest of any ocean-age-5 king salmon. Estimates of the 2007 harvest by age class of early-run king salmon indicate that approximately 0.9% (32 fish) of the sport harvest were ocean-age-5 king salmon. From 2008–2010, ocean-age-5 king salmon were detected by sampling the sport harvest in just one year, 2008. Estimates of the 2008 harvest by age class of early-run king salmon indicate that approximately 11 fish (0.3%) were ocean-age-5 king salmon.

DEPARTMENT COMMENTS: The department **OPPOSES** these proposals. Although it is unclear whether or not the slot limit will increase the production of ocean-age-5 king salmon, the slot limit regulation has succeeded in nearly eliminating the sport harvest of these fish. In addition, the slot limit, along with several factors, including prohibition of bait during the start of the run and a two king salmon annual limit, has resulted in sustainable exploitation rates of early-run king salmon over a period of low king salmon production or below average early-run stock abundance.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

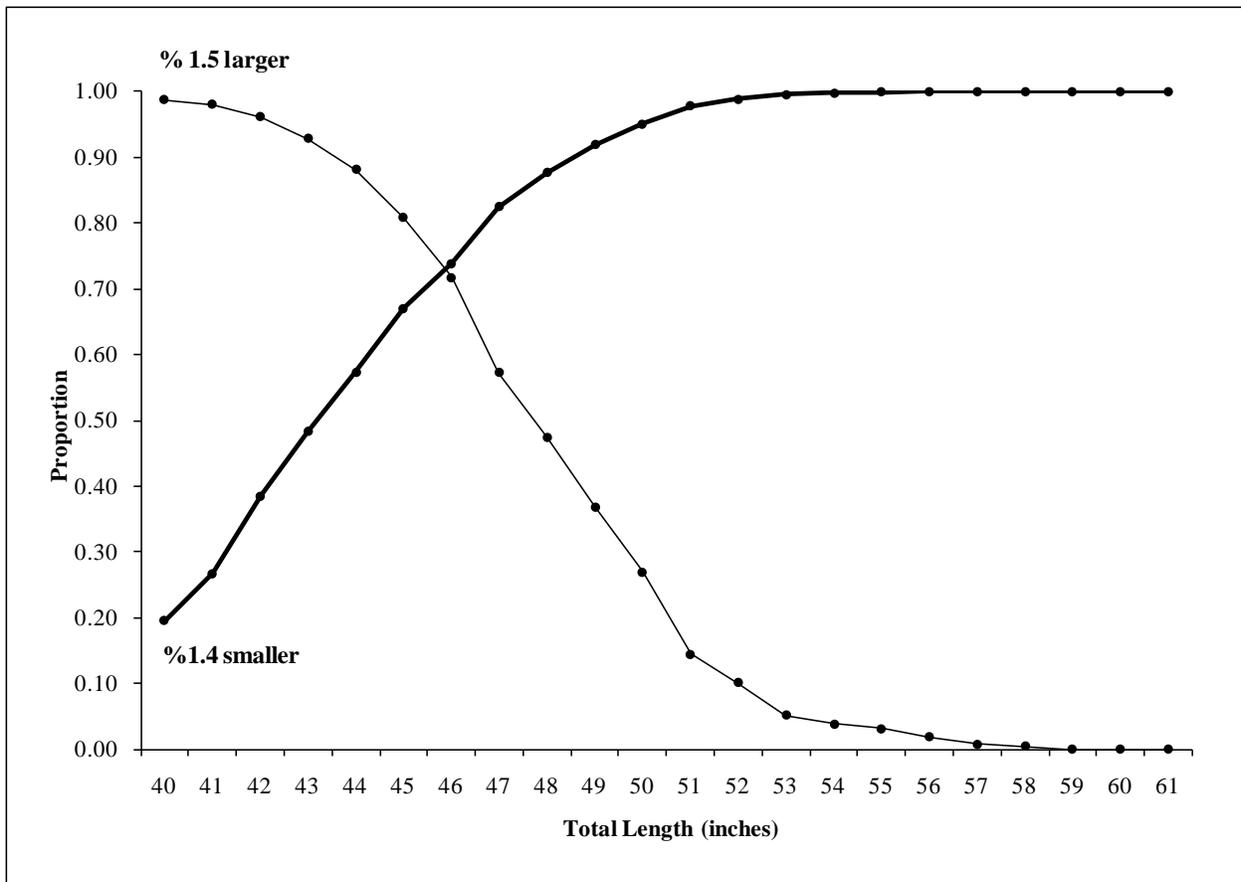


Figure 233-1. Cumulative proportion of early-run Kenai River king salmon aged 1.4 that are smaller (solid line), and those aged 1.5 that are larger (dotted line), than each 1 inch increment between 40 and 60 inches in total length.

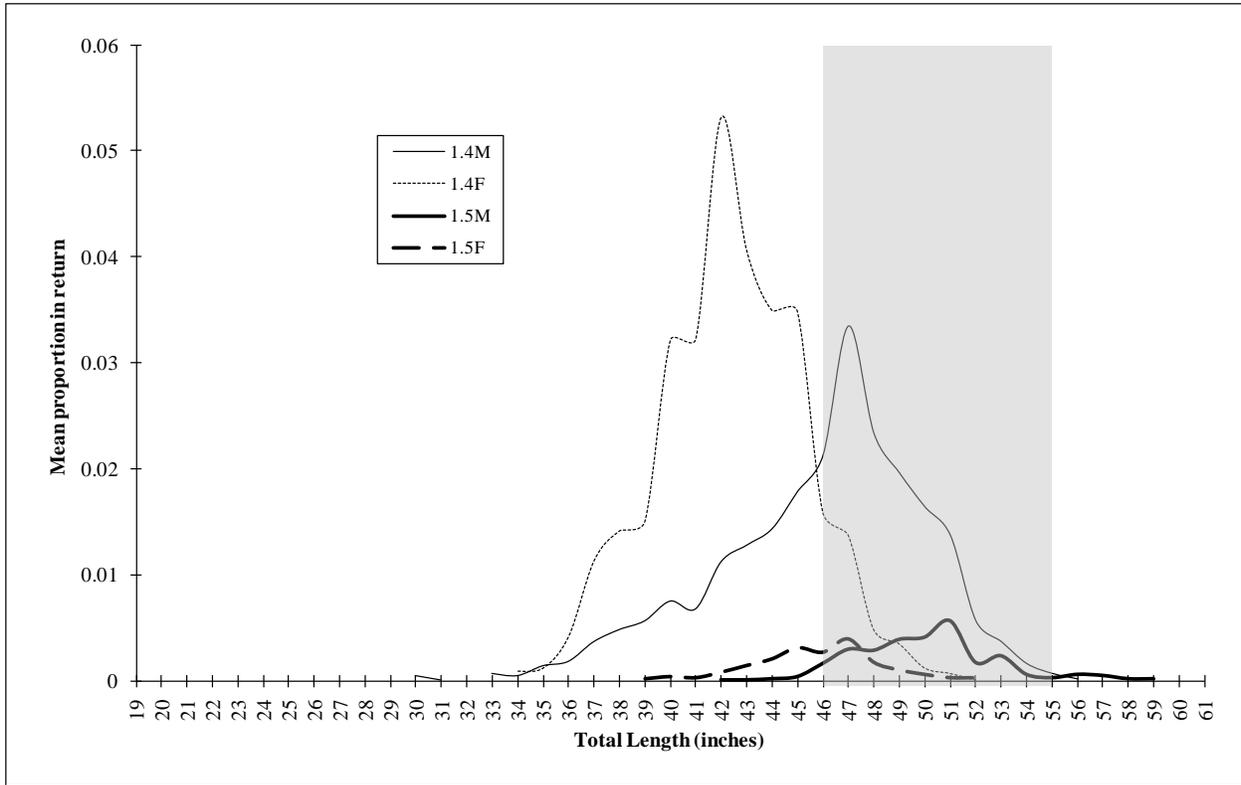


Figure 233-2. Age-length-sex frequency relationships for Kenai River early-run king salmon compared to the current slot limit indicated by the gray area, 1986–2010.

Table 233-1. Percentage of total return by age class for Kenai River early-run king salmon, 1986–2010.

Year	Age Class			
	1.2	1.3	1.4	1.5
1986	15.5	42.0	34.5	7.8
1987	1.5	38.4	57.3	2.2
1988	1.8	15.8	71.3	10.7
1989	4.1	15.5	71.0	9.4
1990	7.2	26.6	59.8	6.4
1991	7.3	22.4	65.1	5.2
1992	8.1	28.5	58.1	5.3
1993	4.0	28.0	63.2	3.6
1994	3.5	20.0	70.7	4.2
1995	4.9	20.4	69.8	4.4
1996	7.9	28.7	61.3	2.1
1997	4.2	34.8	59.9	1.1
1998	18.9	36.8	41.1	3.2
1999	8.0	53.7	37.7	0.3
2000	8.4	43.4	46.5	0.6
2001	16.2	27.8	53.0	2.0
2002	15.7	37.3	39.5	3.6
2003	31.4	19.8	46.8	1.0
2004	14.8	33.3	46.4	4.3
2005	12.4	30.2	52.8	3.5
2006	30.6	19.4	45.1	3.7
2007	26.3	27.7	43.2	2.8
2008	13.7	42.1	42.3	1.8
2009	14.8	24.2	56.3	1.6
2010	25.1	47.5	20.0	0.5
Average (1986–1994)	5.9	26.4	61.2	6.1
Average (1995–2002)	10.5	35.4	51.1	2.2
Average (2003–2009)	20.6	28.1	47.6	2.7

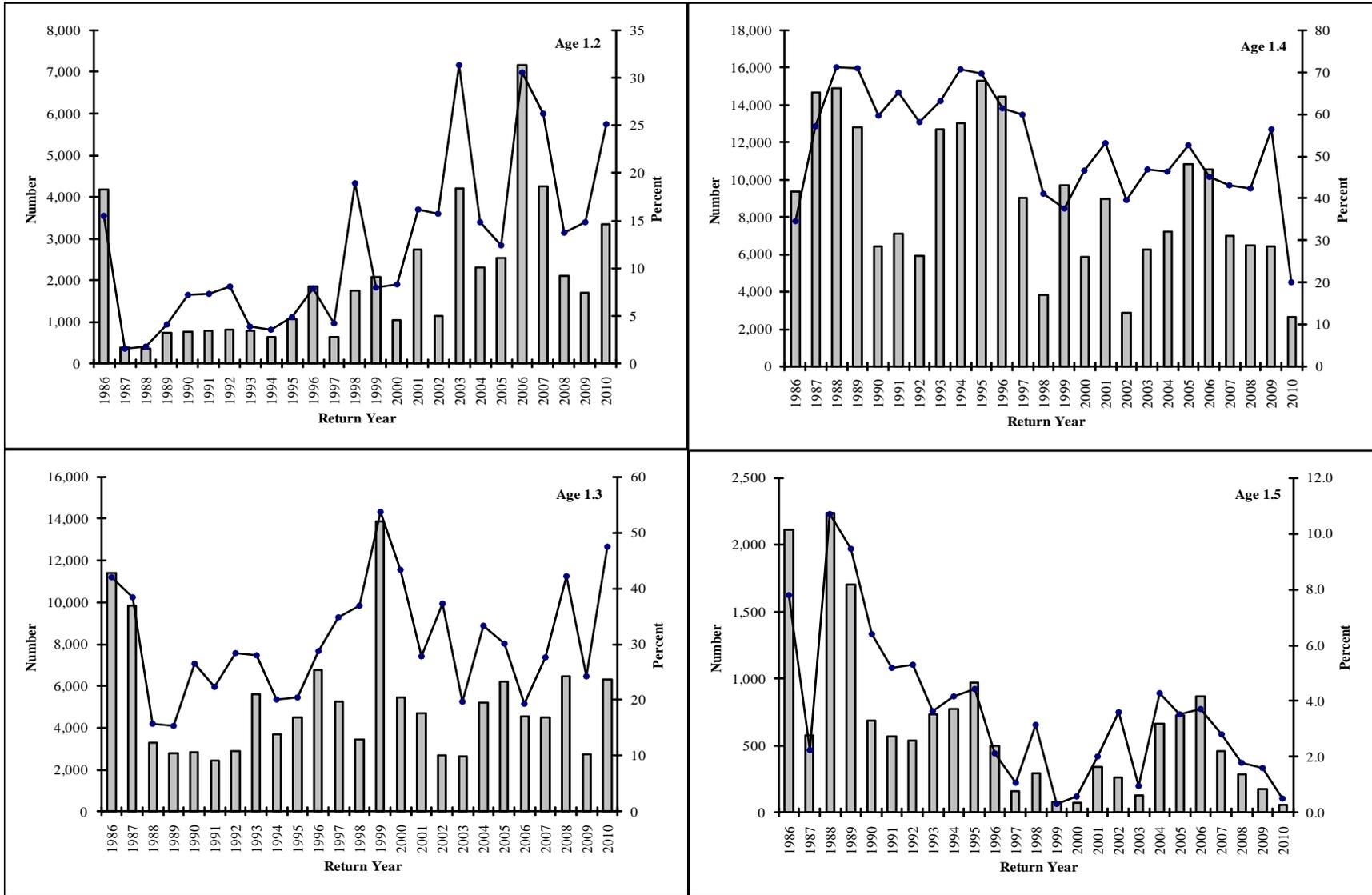


Figure 233-3. Number (gray bars) and percentage (lines) of early-run Kenai River king salmon aged 1.2, 1.3, 1.4, and 1.5 in the total return, 1986–2010.

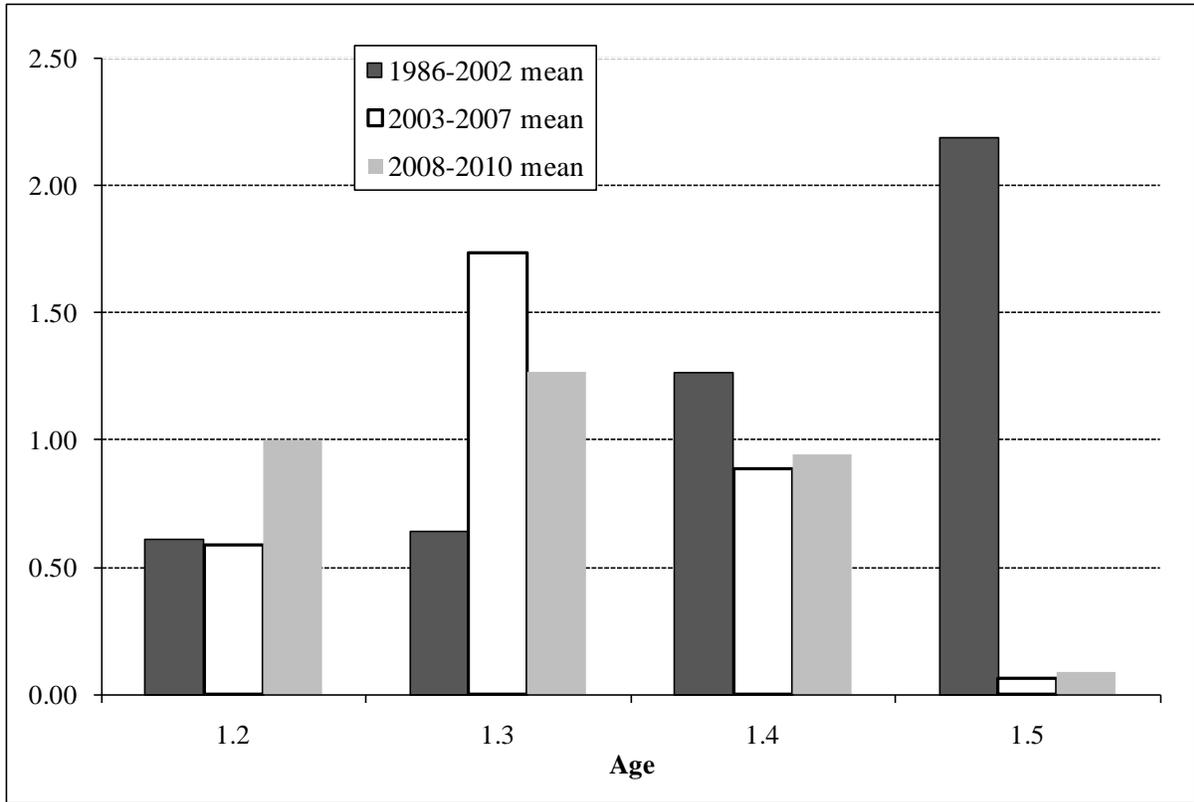


Figure 233-4. Relative harvest selectivity by age for early-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

PROPOSAL 235 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Greg Brush.

WHAT WOULD THE PROPOSAL DO? This proposal would extend the slot limit through the month of July for all waters of the Kenai River open to king salmon fishing downstream of the outlet of Skilak Lake.

WHAT ARE THE CURRENT REGULATIONS? In waters of the Kenai River open to king salmon sport fishing, early-run regulations allow for the harvest of 10 king salmon less than 20 inches per day, and harvest of one king salmon per day 20 inches or greater in length and less than 46 inches or 55 inches or greater in length. Any king salmon caught that is 46 inches or longer, but less than 55 inches, must be released unharmed. The nonretention slot limit is in effect from January 1 through June 30 in the Kenai River from the mouth upstream to the Soldotna Bridge, and from January 1 through July 14 for those waters of the Kenai River from the Soldotna Bridge upstream to the outlet of Skilak Lake.

Late-run regulations are in effect from July 1–31 below the Soldotna Bridge, and from July 15–31 upstream of the Soldotna Bridge; bag and possession limit of one king salmon per day 20 inches or greater in length.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would decrease the harvest and exploitation of large early- and late-run king salmon in the Kenai River from the mouth upstream to Skilak Lake by an undetermined, but likely significant, amount.

BACKGROUND: Prior to 2003, there was no slot limit in the Kenai River king salmon sport fishery; anglers were permitted to harvest king salmon regardless of the total length of the fish. However, the department, along with the public, recognized a decline in larger, older-aged king salmon returning to the Kenai River during the early run. Although the exact cause for the decline in older king salmon during the early run is not understood, the selective harvest or exploitation of larger ocean-age-5 fish was the only practical factor that could be directly influenced by fishery managers. Therefore, at the department's request, the board adopted a slot limit harvest restriction in 2002 of 40 to 55 inches. This restriction almost completely eliminated the harvest potential on ocean-age-5 fish, allowed the retention of rare record-sized fish, and allowed harvest of younger, smaller fish.

In 2003, the board adjusted the slot limit to 44 to 55 inches based on a department-recommended slot limit of 45 to 55 inches to protect the larger, older king salmon returning to the Kenai River during the early run as a precautionary response to the decline in ocean-age-5 fish in the age composition of the escapements within the returning early-run stock. This slot limit allowed approximately 73% of the returning early-run stocks to be available for harvest. Within this slot limit, most (87%) of the ocean-age-5 fish were protected, while at the same time protecting about 40% of the ocean-age-4 fish in the run.

In 2008, the board adjusted the slot limit again to 46 to 55 inches, allowing approximately 79% of the returning early-run stocks to be available for harvest. Within this slot limit, 72% of the ocean-age-5 fish are protected, while at the same time protecting about 26% of the ocean-age-4 fish in the run (Figure 235-1). The board also extended the effective date of the seasonally-closed water regulations an additional 17 days to include July 15–31.

Radiotelemetry studies have indicated all radiotagged early-run tributary spawners ascended into larger tributaries (Funny and Killey rivers) by August 3, while all radiotagged Slikok Creek spawners ascended into Slikok Creek by July 29. Studies also indicated that all king salmon tagged during the early-run period prior to July 1, which were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

A decline in ocean-age-5 king salmon returning to the Kenai River during the late run is not, at present, a biological concern for the department. Data from the sport fishery and the inriver netting program indicate that the age-class and size composition of the late-run return and escapement is relatively stable and within the bounds experienced during the past 19 years. From 1986–1994, the late run included an average 3,437 ocean-age-5 king salmon, which comprised about 6.0% of the run (Table 235-1; Figure 235-2). During 1995–2002, the average decreased to 1,553 ocean-age-5 king salmon, which comprised 2.9% of the run. From 2003–2009, the average increased to 2,449 ocean-age-5 king salmon, which comprised about 4.4% of the run. In 2010, 3,364 fish (5.5%) of the late-run return were estimated to be ocean-age-5 king salmon. Sport harvest selectivity of late-run king salmon favors older, larger king salmon. However, gear used in the commercial harvest of late-run king salmon tends to select smaller, younger fish due to the mesh size used in the fishery. Together, the combined harvest of user groups tends to be in proportion to the return of late-run king salmon each year (Figure 235-2).

The average total proportion of ocean-age-4 king salmon returning to the Kenai River during the late run has varied considerably over the 25 years since first estimated in 1986 (Tables 235-1 and 235-2; Figure 235-2). Overall data from department sampling programs over the past two decades indicate that the relative abundance of younger, smaller fish in the run has increased and the relative abundance of older, larger fish in the run has decreased.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The objective of the current slot limit regulation is to prevent the harvest of ocean-age-5 early-run king salmon. A decline in ocean-age-5 king salmon returning to the Kenai River during the late run is not, at present, a biological concern for the department. The current date of the slot limit regulation is based upon migratory timing of early run tributary spawning king salmon and provides adequate protection for this segment of the population. Sanctuary areas at the confluence of lower river tributaries provide additional protection through the end of the king salmon season on July 31. On average, approximately 34% of the late-run stock is comprised of fish 46 inches or greater in total length.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

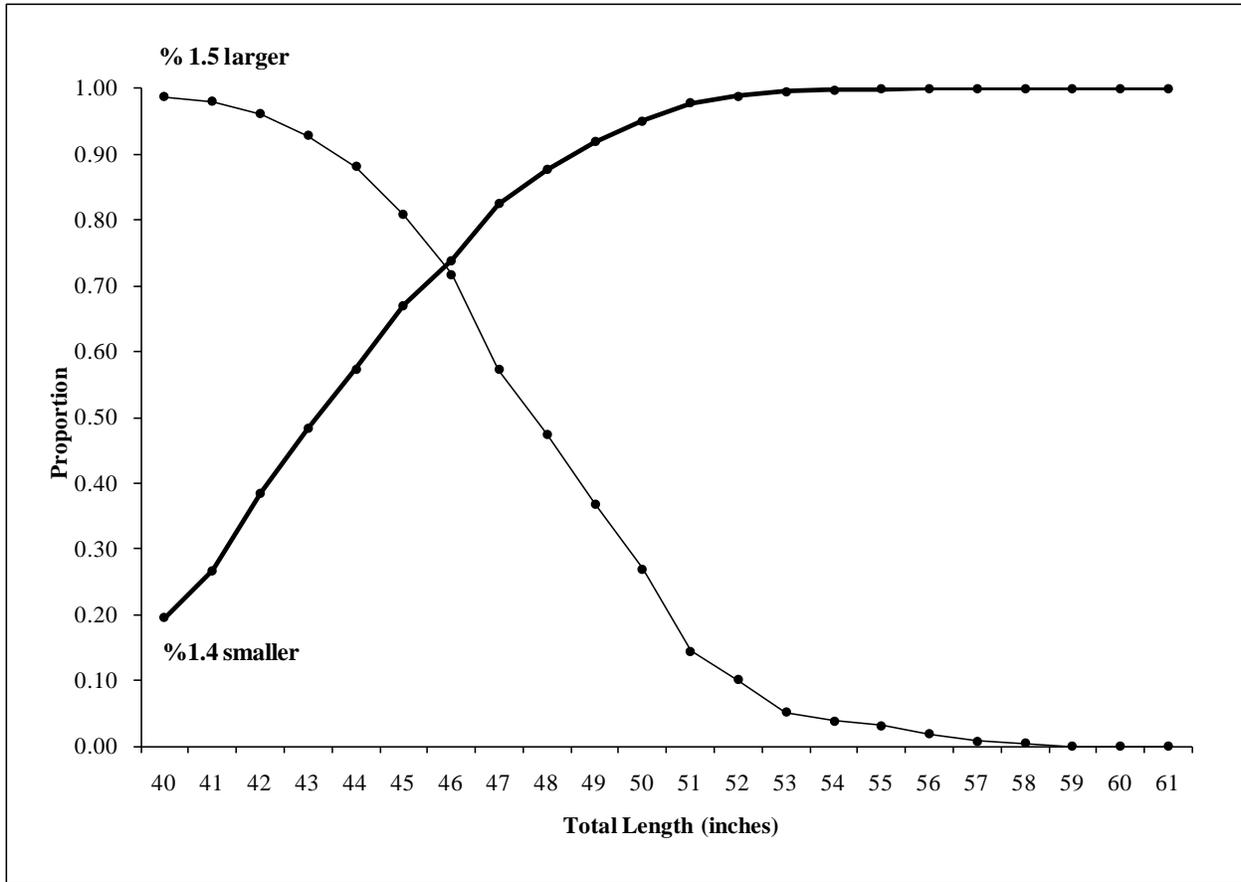


Figure 235-1. Cumulative proportion of early-run Kenai River king salmon aged 1.4 that are smaller (solid line), and those aged 1.5 that are larger (dotted line), than each 1 inch increment between 40 and 60 inches in total length.

Table 235-1. Percentage of total return by age class for Kenai River late-run king salmon, 1986–2010.

Year	Age Class				
	1.1	1.2	1.3	1.4	1.5
1986	0.3	15.1	42.0	38.4	4.2
1987	0.8	5.7	29.4	63.0	1.1
1988	0.7	3.3	6.1	75.9	13.8
1989	0.4	11.3	14.6	62.2	11.5
1990	0.2	14.3	16.5	64.3	4.7
1991	0.1	9.7	18.0	66.3	6.0
1992	0.7	8.7	19.0	68.6	2.9
1993	0.6	8.9	15.2	69.8	5.4
1994	1.0	7.3	12.0	75.2	4.5
1995	0.7	22.4	23.2	47.9	5.7
1996	1.2	10.2	34.2	53.3	1.1
1997	1.9	6.4	23.9	66.3	1.5
1998	1.6	16.0	15.0	64.4	3.0
1999	0.6	14.8	22.2	58.1	4.3
2000	0.9	4.6	32.0	60.1	2.4
2001	2.1	16.7	18.1	60.7	2.4
2002	3.8	19.6	22.1	51.8	2.8
2003	2.0	35.7	20.9	40.6	0.8
2004	2.3	16.7	30.1	49.6	1.2
2005	1.0	13.6	19.1	63.1	3.2
2006	3.6	27.1	15.8	45.6	8.0
2007	1.2	25.5	27.3	39.4	6.7
2008	3.4	9.5	22.2	58.4	6.6
2009	3.3	33.9	11.8	47.7	3.4
2010	5.7	20.6	34.3	33.8	5.5
Average (1986–1994)	0.5	9.4	19.2	64.9	6.0
Average (1995–2002)	1.6	13.8	23.8	57.8	2.9
Average (2003–2009)	2.4	23.1	21.0	49.2	4.3

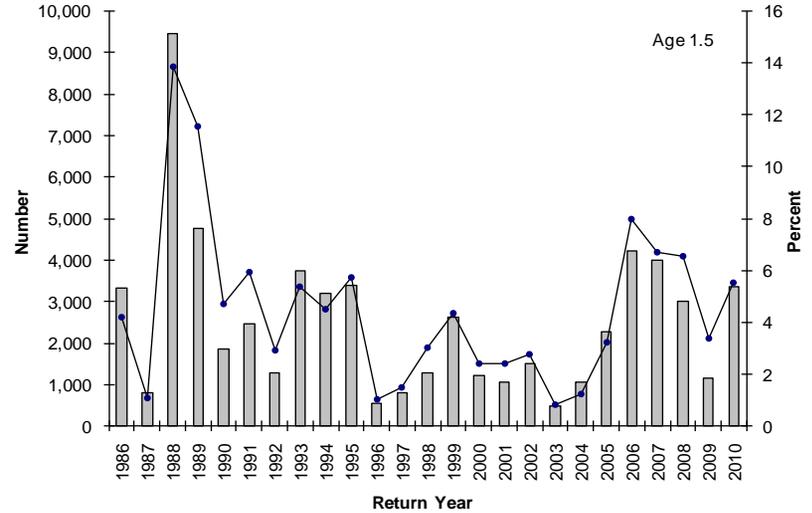
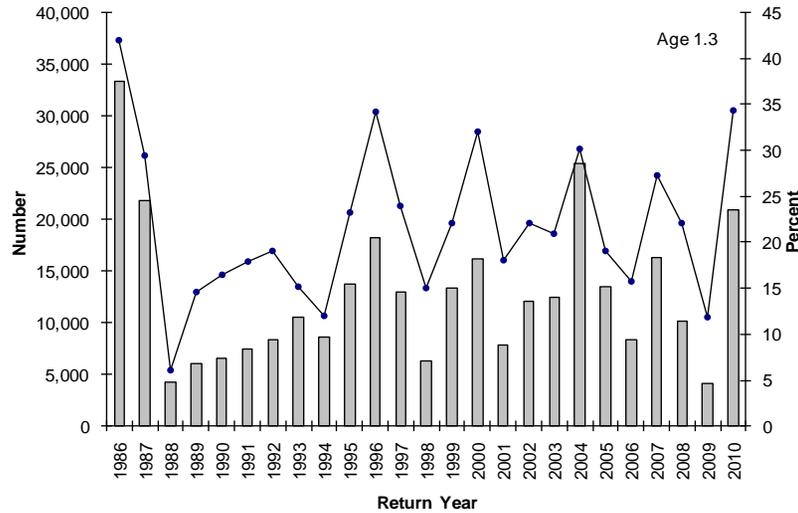
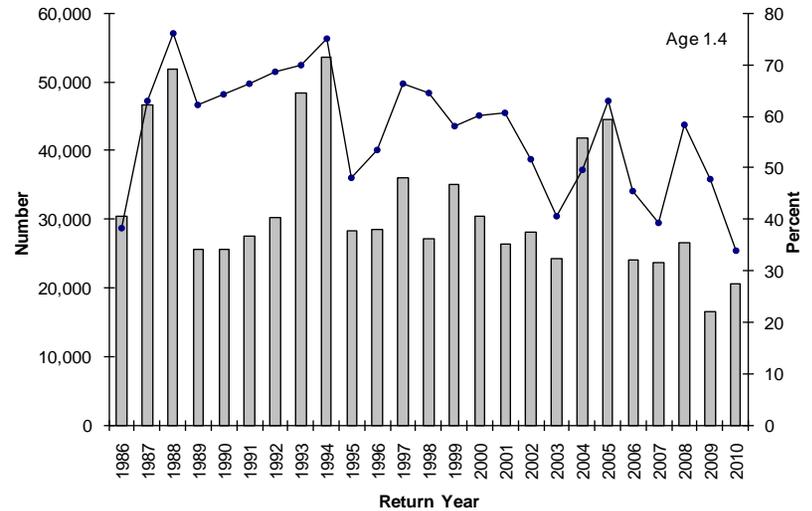
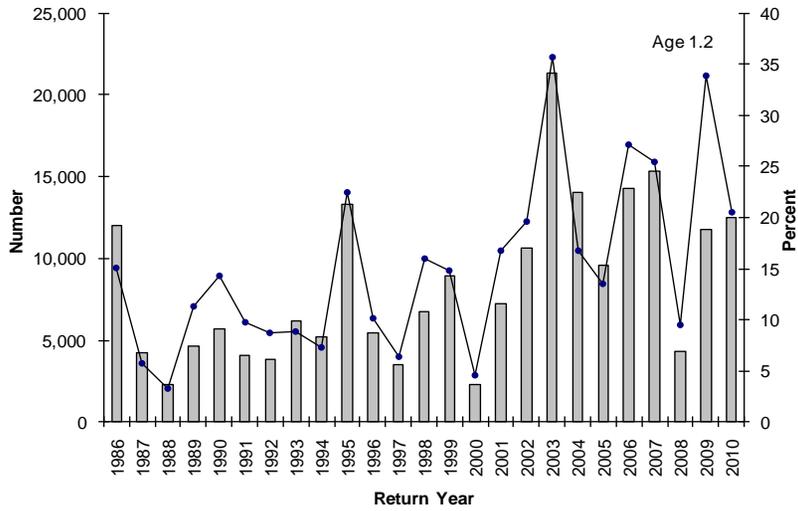


Figure 235-2. Number (gray bars) and percentage (lines) of late-run Kenai River king salmon aged 1.2, 1.3, 1.4, and 1.5 in the total return, 1986–2010.

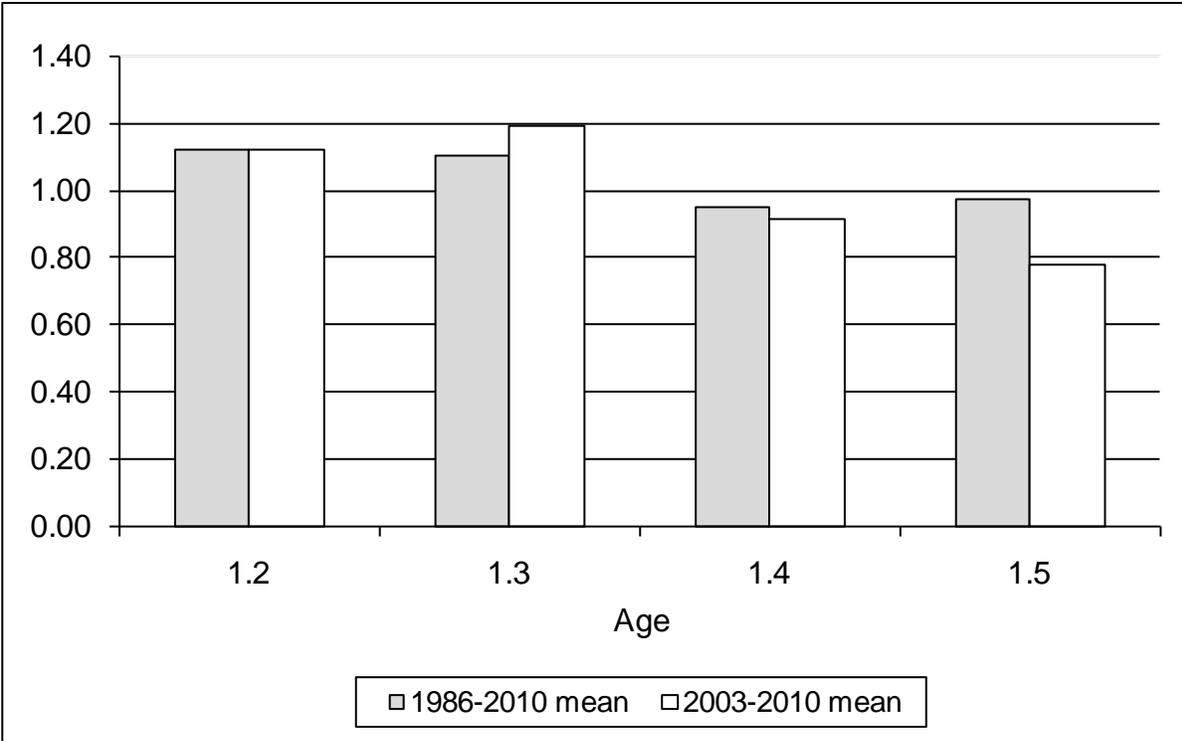


Figure 235-3. Relative harvest selectivity by age for late-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

PROPOSAL 236 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Nate Anderson.

WHAT WOULD THE PROPOSAL DO? This proposal would establish new bag and annual limits for king salmon on the Kenai River. Anglers would be allowed to retain one fish 20–30 inches in length per day and be allowed to continue to fish. There would be an annual limit of two king salmon for this size class, but these fish would not count against the Cook Inlet annual limit of five king salmon 20 inches or longer.

For fish greater than 30 inches in length, the proposal would maintain the current slot limit (46 to 55 inches) during the early run (January 1–June 30), with an annual limit of only one king salmon over 30 inches during this time.

For the same size class during the late run (July 1–31), there would be an annual limit of one king salmon over 30 inches. The proposal would also designate a slot limit for 21 days in the late run, under which king salmon between 46 to 55 inches must be released. The remaining 10 days in July would be open to harvest any king salmon over 30 inches.

WHAT ARE THE CURRENT REGULATIONS? In waters of the Kenai River open to king salmon sport fishing, from January 1 to July 31, regulations allow for the harvest of 10 king salmon less than 20 inches per day.

During the early run (January 1–June 30), regulations allow for the harvest of one king salmon per day 20 inches or greater in length and less than 46 inches or 55 inches or greater in length. Any king salmon caught between 20–28 inches may be retained and does not have to be recorded on the back of one’s license and does not count towards the annual limit of two from the Kenai River or the annual limit of five from Cook Inlet; however, anglers must stop fishing for the day. Any king salmon caught that is 46 inches or longer, but less than 55 inches, must be released unharmed. The nonretention slot limit is in effect from January 1 through June 30 in the Kenai River from the mouth upstream to the Soldotna Bridge, and from January 1 through July 14 for those waters of the Kenai River from the Soldotna Bridge upstream to the outlet of Skilak Lake.

Late-run regulations are in effect from July 1–31 below the Soldotna Bridge, and from July 15–31 upstream of the Soldotna Bridge. The bag and possession limit is one king salmon per day 20 inches or greater in length.

There is an annual limit of two king salmon 20 inches or greater in length from the Kenai River (except for king salmon less than 28 inches harvested before July 1). King salmon 20 inches or greater in length must be recorded on the back of the angler’s fishing license. Any king salmon harvested in the Kenai River that is 55 inches or larger must be sealed by an authorized representative of the department within three days after harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase exploitation during both runs by an unknown amount. Increased harvests would raise the likelihood of inseason restrictions.

BACKGROUND: Prior to 1999, no more than five king salmon 16 inches or greater in length could be harvested from Cook Inlet fresh and salt waters annually, of which no more than two could be taken from the Kenai River. Harvested king salmon 16 inches or greater in length had to be recorded on the back of an angler's fishing license. Harvest and recording requirements were changed by the board at its 1999 Upper Cook Inlet meeting to apply to king salmon 20 inches or more in length in all Cook Inlet waters.

In 2008, the board adopted a proposal that would allow the harvest of early-run Kenai River king salmon between the lengths of 20 and 28 inches to not count towards an angler's annual limit of two on the Kenai River and five in Cook Inlet fresh waters from January 1–June 30. The bag limit, however, was kept at one king salmon over 20 inches.

Nearly all king salmon less than 28 inches in length are age 1.1 or 1.2 king salmon. Most age 1.1 king salmon are 20 inches or less in total length, while age 1.2 fish range from approximately 22 to 34 inches in length (Tables 236-1 and 236-2; Figures 236-1 and 236-2). Harvest selectivity of early-run king salmon prior to the slot limit being enacted favored harvesting older larger king salmon, whereas since the slot limit in 2003, harvest selectivity has shifted to favor harvesting smaller and younger king salmon (Figure 236-3). Sport harvest selectivity of late-run king salmon favors older, larger king salmon. However, gear used in the commercial harvest of late-run king salmon tends to select smaller, younger fish due to the mesh size used in the fishery. Together, the combined harvest of user groups tends to be in proportion to the return of late-run king salmon each year (Figure 236-4).

Significant changes to the management of the early-run Kenai River king salmon fishery include: 1) implementation of the 44–55 inch slot limit in 2003, 2) establishment of an OEG of 5,300–9,000 king salmon in 2005, 3) modification of the slot limit to 46–55 inches in 2008, 4) allowing bait when the goal of 5,300–9,000 fish can be projected in 2008, and 5) excluding king salmon between 20–28 inches from counting towards the annual limit of two king salmon 20 inches or greater in length from the Kenai River in 2008.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Harvest opportunity for ocean-age-1 “jack” king salmon was increased by the board 11 years ago and was also increased for early-run fish between 20–28 inches in 2008. The department recognizes that the number of younger, smaller king salmon in the runs during some years is larger than other years. However, increasing harvest on late-run king salmon, increases the likelihood of inseason restrictions when runs are below average. In addition, there are enforcement concerns with the complex requirements of this proposal as the public may have difficulty understanding and abiding by all the elements suggested.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 236-1. Age composition of early-run Kenai River king salmon and percentage less than or equal to total length in inches in the run, 1986–2010.

Total length (inches)	Age Class			
	1.2	1.3	1.4	1.5
19	0.1%	0.0%	0.0%	0.0%
20	0.4%	0.0%	0.0%	0.0%
21	0.5%	0.0%	0.0%	0.0%
22	1.2%	0.0%	0.0%	0.0%
23	2.6%	0.0%	0.0%	0.0%
24	4.0%	0.0%	0.0%	0.0%
25	6.4%	0.0%	0.0%	0.0%
26	11.1%	0.0%	0.0%	0.0%
27	19.0%	0.1%	0.0%	0.0%
28	33.1%	0.4%	0.0%	0.0%
29	55.3%	1.1%	0.0%	0.0%
30	75.5%	2.3%	0.1%	0.0%
31	91.1%	4.4%	0.1%	0.0%
32	96.9%	8.0%	0.1%	0.0%
33	98.8%	15.4%	0.3%	0.0%
34	99.6%	24.6%	0.5%	0.0%
35	99.6%	37.3%	1.0%	0.0%
36	99.7%	51.0%	2.1%	0.0%
37	99.8%	66.0%	4.8%	0.0%
38	99.8%	78.6%	8.1%	0.0%
39	99.9%	86.0%	11.9%	0.4%
40	100.0%	91.7%	19.1%	1.3%
41	100.0%	95.2%	26.3%	1.9%
42	100.0%	97.8%	38.2%	3.8%
43	100.0%	98.9%	48.1%	7.1%
44	100.0%	99.3%	57.2%	11.8%
45	100.0%	99.6%	66.9%	19.0%
46	100.0%	99.7%	73.8%	28.0%
47	100.0%	99.8%	82.5%	42.5%
48	100.0%	99.9%	87.7%	52.1%
49	100.0%	99.9%	91.9%	62.6%
50	100.0%	100.0%	95.1%	72.9%
51	100.0%	100.0%	97.8%	85.3%
52	100.0%	100.0%	98.8%	89.5%
53	100.0%	100.0%	99.5%	94.9%
54	100.0%	100.0%	99.8%	96.2%
55	100.0%	100.0%	99.9%	96.8%
56	100.0%	100.0%	100.0%	98.1%
57	100.0%	100.0%	100.0%	99.1%
58	100.0%	100.0%	100.0%	99.6%
59	100.0%	100.0%	100.0%	100.0%
60	100.0%	100.0%	100.0%	100.0%
61	100.0%	100.0%	100.0%	100.0%

Table 236-2. Age composition of late-run Kenai River king salmon, and percentage less than or equal to the total length in inches in the run, 1986–2010.

Total length	Age			
	1.2	1.3	1.4	1.5
13	0.0%	0.0%	0.0%	0.0%
14	0.0%	0.0%	0.0%	0.0%
15	0.0%	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.0%	0.0%	0.0%
18	0.1%	0.0%	0.0%	0.0%
19	0.2%	0.0%	0.0%	0.0%
20	0.6%	0.0%	0.0%	0.0%
21	0.9%	0.0%	0.0%	0.0%
22	1.9%	0.0%	0.0%	0.0%
23	3.3%	0.0%	0.0%	0.0%
24	6.0%	0.0%	0.0%	0.0%
25	10.6%	0.0%	0.0%	0.0%
26	16.0%	0.0%	0.0%	0.0%
27	24.1%	0.1%	0.0%	0.0%
28	35.2%	0.1%	0.0%	0.0%
29	51.4%	0.5%	0.0%	0.0%
30	65.8%	1.2%	0.0%	0.0%
31	82.2%	2.7%	0.0%	0.0%
32	92.1%	6.2%	0.0%	0.0%
33	97.6%	13.5%	0.1%	0.0%
34	98.8%	20.2%	0.1%	0.0%
35	99.6%	28.6%	0.2%	0.0%
36	99.8%	35.9%	0.4%	0.0%
37	99.9%	44.0%	0.9%	0.1%
38	99.9%	52.7%	1.9%	0.1%
39	100.0%	60.2%	3.2%	0.3%
40	100.0%	71.7%	6.2%	0.4%
41	100.0%	80.5%	10.8%	0.6%
42	100.0%	88.9%	19.2%	1.8%
43	100.0%	93.0%	28.4%	2.6%
44	100.0%	96.0%	38.2%	6.3%
45	100.0%	98.2%	51.3%	11.2%
46	100.0%	98.8%	61.4%	19.9%
47	100.0%	99.4%	72.5%	30.6%
48	100.0%	99.5%	79.8%	40.0%
49	100.0%	99.6%	86.7%	51.4%
50	100.0%	99.8%	91.3%	63.9%
51	100.0%	99.9%	95.8%	79.4%
52	100.0%	99.9%	97.8%	84.8%
53	100.0%	100.0%	99.1%	92.7%
54	100.0%	100.0%	99.7%	96.1%
55	100.0%	100.0%	99.9%	98.3%
56	100.0%	100.0%	100.0%	99.6%
57	100.0%	100.0%	100.0%	99.9%
58	100.0%	100.0%	100.0%	100.0%
59	100.0%	100.0%	100.0%	100.0%

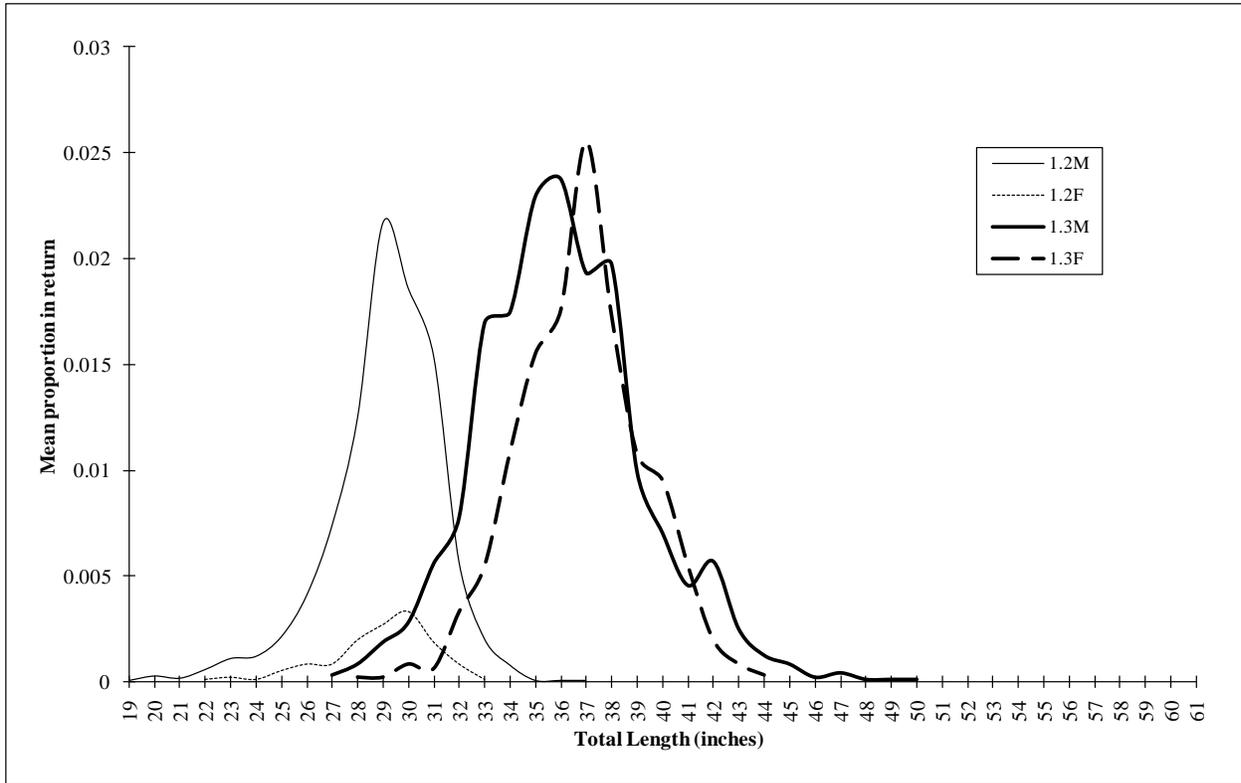


Figure 236-1. Age-length-sex frequency relationships for Kenai River early-run king salmon, 1986–2010.

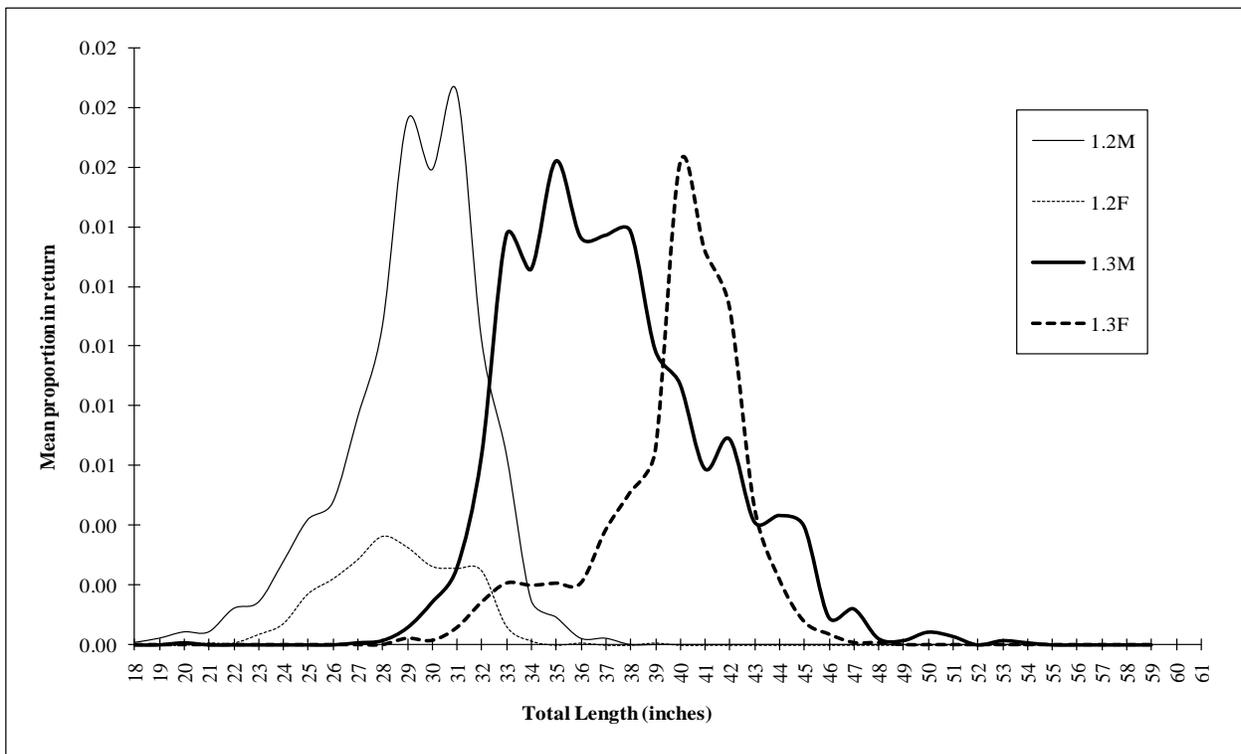


Figure 236-2. Age-length-sex frequency relationships for Kenai River late-run king salmon, 1986–2010.

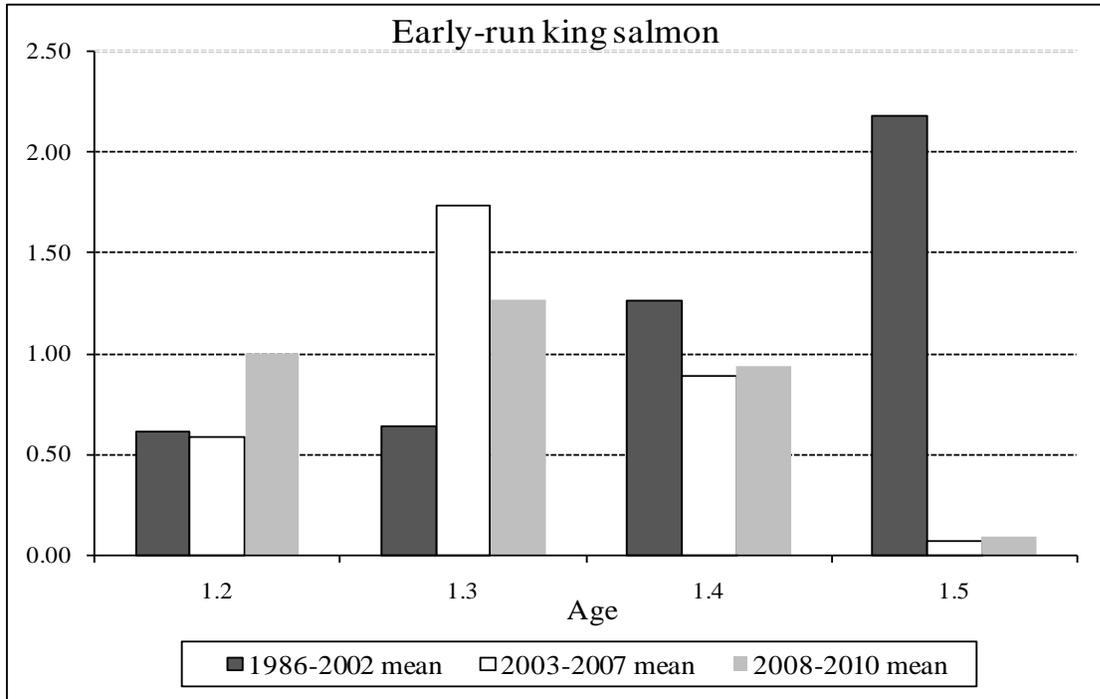


Figure 236-3. Relative harvest selectivity by age for early-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

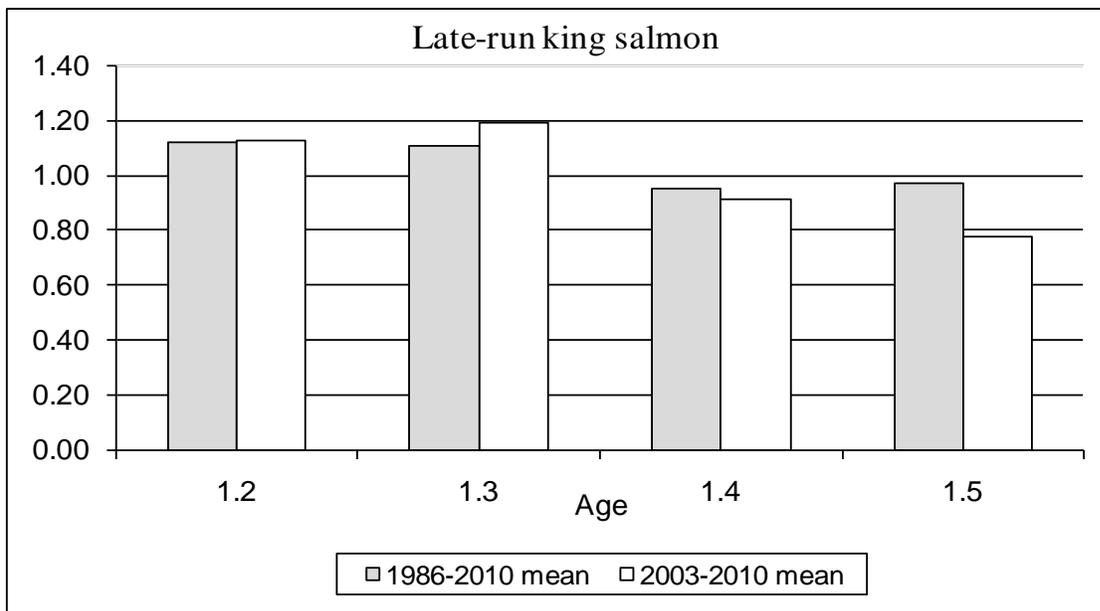


Figure 236-4. Relative harvest selectivity by age for late-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

PROPOSAL 237 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area; and 5 AAC 57.124. Harvest record required; annual limits for the Kenai River Drainage Area.

PROPOSED BY: Kenai River Sportfishing Association.

WHAT WOULD THE PROPOSAL DO? This proposal would increase size and bag limits for jack king salmon in the late run on the Kenai River such that the allowable limits for late-run king salmon in the Kenai River are one fish per day between 20 and 28 inches in length, and one per day greater than 28 inches in length. If a fish greater than 28 inches is retained then anglers must stop fishing for the remainder of the day, but fishing may continue after harvesting a king salmon less than 28 inches in length. This proposal would also amend the annual limit of two Kenai River king salmon such that only fish over 28 inches in length are included.

WHAT ARE THE CURRENT REGULATIONS? In waters of the Kenai River open to king salmon sport fishing, from January 1 to July 31, regulations allow for the harvest of 10 king salmon less than 20 inches per day.

During the early run (January 1–June 30), regulations allow for the harvest of one king salmon per day 20 inches or greater in length and less than 46 inches or 55 inches or greater in length. Any king salmon caught between 20–28 inches may be retained and does not have to be recorded on the back of one’s license and does not count towards the annual limit of two from the Kenai River or the annual limit of five from Cook Inlet; however, anglers must stop fishing for the day. Any king salmon caught that is 46 inches or longer, but less than 55 inches, must be released unharmed. The nonretention slot limit is in effect from January 1 through June 30 in the Kenai River from the mouth upstream to the Soldotna Bridge, and from January 1 through July 14 for those waters of the Kenai River from the Soldotna Bridge upstream to the outlet of Skilak Lake.

Late-run regulations are in effect from July 1–31 below the Soldotna Bridge, and from July 15–31 upstream of the Soldotna Bridge. The bag and possession limit is one king salmon per day 20 inches or greater in length.

There is an annual limit of two king salmon 20 inches or greater in length from the Kenai River (except for king salmon less than 28 inches harvested before July 1). King salmon 20 inches or greater in length must be recorded on the back of the angler’s fishing license. Any king salmon harvested in the Kenai River that is 55 inches or larger must be sealed by an authorized representative of the department within three days after harvest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase harvest opportunity and the exploitation of Kenai River king salmon by an unknown amount. Increased harvests would raise the likelihood of inseason restrictions.

BACKGROUND: Prior to 1999, no more than five king salmon 16 inches or greater in length could be harvested from Cook Inlet fresh and salt waters annually, of which no more than two could be taken from the Kenai River. Harvested king salmon 16 inches or greater in length had to be recorded on the back of an angler’s fishing license. Harvest and recording requirements

were changed by the board at its 1999 UCI meeting to apply to king salmon 20 inches or more in length in all Cook Inlet waters.

In 2008, the board adopted a proposal that would allow the harvest of early-run Kenai River king salmon between the lengths of 20 and 28 inches to not count towards an angler's annual limit of two on the Kenai River and five in Cook Inlet fresh waters from January 1–June 30. The bag limit, however, was kept at one king salmon over 20 inches.

Nearly all king salmon less than 28 inches in length are age 1.1 or 1.2 king salmon. Most age 1.1 king salmon are 20 inches or less in total length, while age 1.2 fish range from approximately 22 to 34 inches in length (Tables 237-1 and 237-2; Figures 237-1 and 237-2). Harvest selectivity of early-run king salmon prior to the slot limit being enacted favored harvesting older larger king salmon, whereas since the slot limit in 2003, harvest selectivity has shifted to favor harvesting smaller and younger king salmon (Figure 237-3). Sport harvest selectivity of late-run king salmon favors older, larger king salmon. However, gear used in the commercial harvest of late-run king salmon tends to select smaller, younger fish due to the mesh size used in the fishery. Together, the combined harvest of user groups tends to be in proportion to the return of late-run king salmon each year (Figure 237-4).

Significant changes to the management of the early-run Kenai River king salmon fishery include: 1) implementation of the 44–55 inch slot limit in 2003, 2) establishment of an OEG of 5,300–9,000 king salmon in 2005, 3) modification of the slot limit to 46–55 inches in 2008, 4) allowing bait when the goal of 5,300–9,000 fish can be projected in 2008, and 5) excluding king salmon between 20–28 inches from counting towards the annual limit of two king salmon 20 inches or greater in length from the Kenai River in 2008.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Harvest opportunity for ocean-age-1 “jack” king salmon was increased by the board 11 years ago and was also increased for early-run fish between 20 and 28 inches in 2008. The department recognizes that the number of younger, smaller king salmon in the runs during some years is larger than those of the past. However, with increased harvest on king salmon, the likelihood of inseason restrictions will increase when runs are below average.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 237-1. Age composition of early-run Kenai River king salmon, and percentage less than or equal to total length in inches in the run, 1986–2010.

Total length (inches)	Age Class			
	1.2	1.3	1.4	1.5
19	0.1%	0.0%	0.0%	0.0%
20	0.4%	0.0%	0.0%	0.0%
21	0.5%	0.0%	0.0%	0.0%
22	1.2%	0.0%	0.0%	0.0%
23	2.6%	0.0%	0.0%	0.0%
24	4.0%	0.0%	0.0%	0.0%
25	6.4%	0.0%	0.0%	0.0%
26	11.1%	0.0%	0.0%	0.0%
27	19.0%	0.1%	0.0%	0.0%
28	33.1%	0.4%	0.0%	0.0%
29	55.3%	1.1%	0.0%	0.0%
30	75.5%	2.3%	0.1%	0.0%
31	91.1%	4.4%	0.1%	0.0%
32	96.9%	8.0%	0.1%	0.0%
33	98.8%	15.4%	0.3%	0.0%
34	99.6%	24.6%	0.5%	0.0%
35	99.6%	37.3%	1.0%	0.0%
36	99.7%	51.0%	2.1%	0.0%
37	99.8%	66.0%	4.8%	0.0%
38	99.8%	78.6%	8.1%	0.0%
39	99.9%	86.0%	11.9%	0.4%
40	100.0%	91.7%	19.1%	1.3%
41	100.0%	95.2%	26.3%	1.9%
42	100.0%	97.8%	38.2%	3.8%
43	100.0%	98.9%	48.1%	7.1%
44	100.0%	99.3%	57.2%	11.8%
45	100.0%	99.6%	66.9%	19.0%
46	100.0%	99.7%	73.8%	28.0%
47	100.0%	99.8%	82.5%	42.5%
48	100.0%	99.9%	87.7%	52.1%
49	100.0%	99.9%	91.9%	62.6%
50	100.0%	100.0%	95.1%	72.9%
51	100.0%	100.0%	97.8%	85.3%
52	100.0%	100.0%	98.8%	89.5%
53	100.0%	100.0%	99.5%	94.9%
54	100.0%	100.0%	99.8%	96.2%
55	100.0%	100.0%	99.9%	96.8%
56	100.0%	100.0%	100.0%	98.1%
57	100.0%	100.0%	100.0%	99.1%
58	100.0%	100.0%	100.0%	99.6%
59	100.0%	100.0%	100.0%	100.0%
60	100.0%	100.0%	100.0%	100.0%
61	100.0%	100.0%	100.0%	100.0%

Table 237-2. Age composition of late-run Kenai River king salmon, and percentage less than or equal to the total length in inches in the run, 1986–2010.

Total length	Age			
	1.2	1.3	1.4	1.5
13	0.0%	0.0%	0.0%	0.0%
14	0.0%	0.0%	0.0%	0.0%
15	0.0%	0.0%	0.0%	0.0%
16	0.0%	0.0%	0.0%	0.0%
17	0.0%	0.0%	0.0%	0.0%
18	0.1%	0.0%	0.0%	0.0%
19	0.2%	0.0%	0.0%	0.0%
20	0.6%	0.0%	0.0%	0.0%
21	0.9%	0.0%	0.0%	0.0%
22	1.9%	0.0%	0.0%	0.0%
23	3.3%	0.0%	0.0%	0.0%
24	6.0%	0.0%	0.0%	0.0%
25	10.6%	0.0%	0.0%	0.0%
26	16.0%	0.0%	0.0%	0.0%
27	24.1%	0.1%	0.0%	0.0%
28	35.2%	0.1%	0.0%	0.0%
29	51.4%	0.5%	0.0%	0.0%
30	65.8%	1.2%	0.0%	0.0%
31	82.2%	2.7%	0.0%	0.0%
32	92.1%	6.2%	0.0%	0.0%
33	97.6%	13.5%	0.1%	0.0%
34	98.8%	20.2%	0.1%	0.0%
35	99.6%	28.6%	0.2%	0.0%
36	99.8%	35.9%	0.4%	0.0%
37	99.9%	44.0%	0.9%	0.1%
38	99.9%	52.7%	1.9%	0.1%
39	100.0%	60.2%	3.2%	0.3%
40	100.0%	71.7%	6.2%	0.4%
41	100.0%	80.5%	10.8%	0.6%
42	100.0%	88.9%	19.2%	1.8%
43	100.0%	93.0%	28.4%	2.6%
44	100.0%	96.0%	38.2%	6.3%
45	100.0%	98.2%	51.3%	11.2%
46	100.0%	98.8%	61.4%	19.9%
47	100.0%	99.4%	72.5%	30.6%
48	100.0%	99.5%	79.8%	40.0%
49	100.0%	99.6%	86.7%	51.4%
50	100.0%	99.8%	91.3%	63.9%
51	100.0%	99.9%	95.8%	79.4%
52	100.0%	99.9%	97.8%	84.8%
53	100.0%	100.0%	99.1%	92.7%
54	100.0%	100.0%	99.7%	96.1%
55	100.0%	100.0%	99.9%	98.3%
56	100.0%	100.0%	100.0%	99.6%
57	100.0%	100.0%	100.0%	99.9%
58	100.0%	100.0%	100.0%	100.0%
59	100.0%	100.0%	100.0%	100.0%

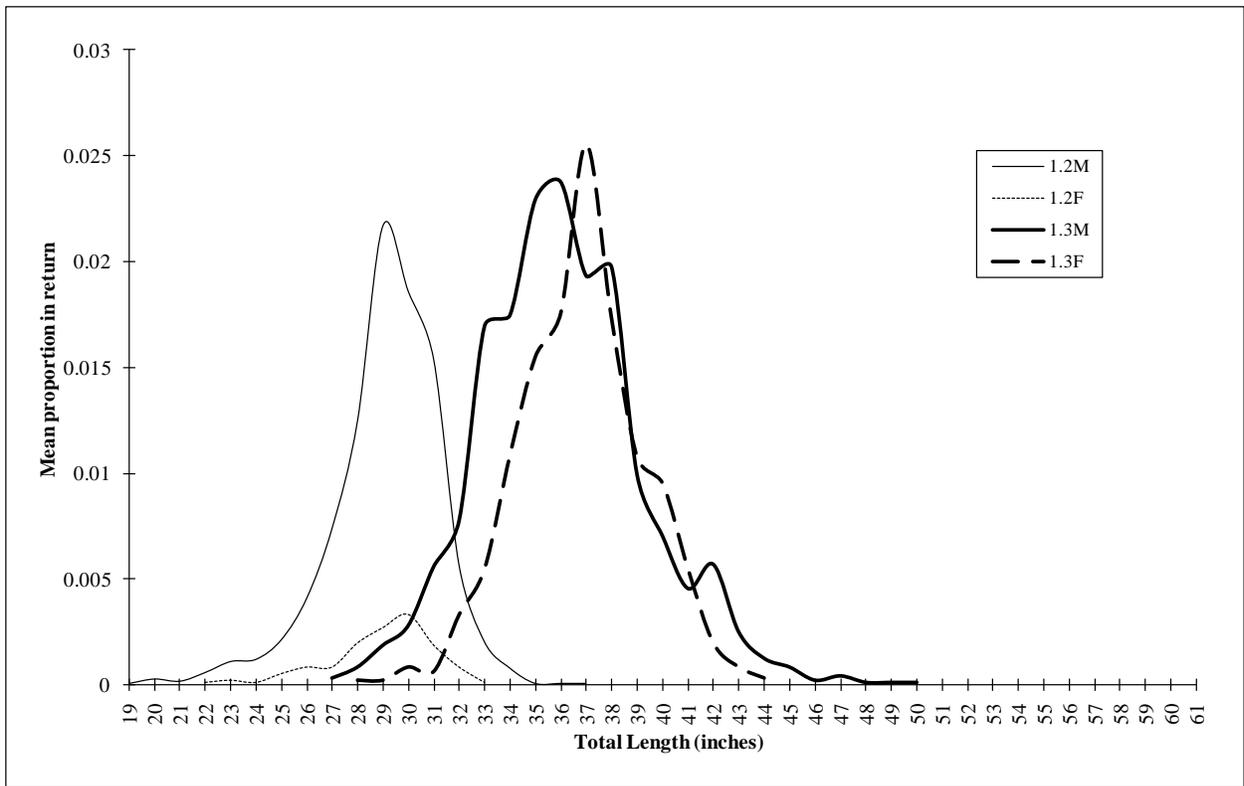


Figure 237-1. Age-length-sex frequency relationships for Kenai River early-run king salmon, 1986–2010.

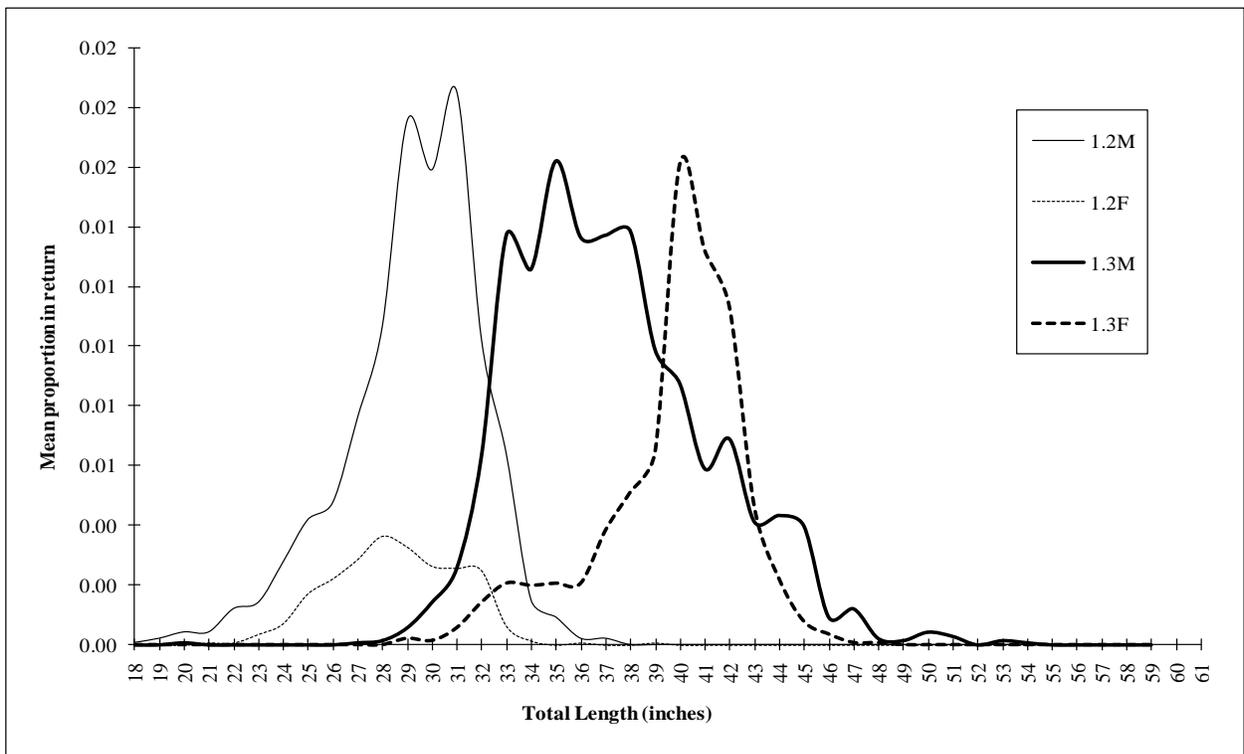


Figure 237-2. Age-length-sex frequency relationships for Kenai River late-run king salmon, 1986–2010.

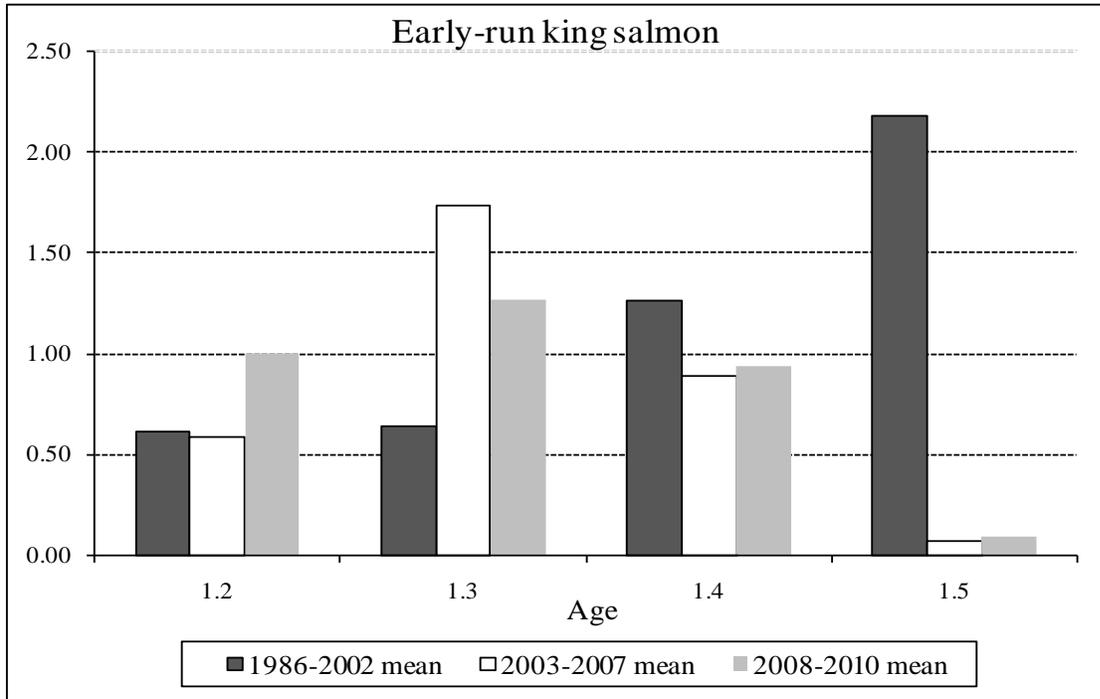


Figure 237-3. Relative harvest selectivity by age for early-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

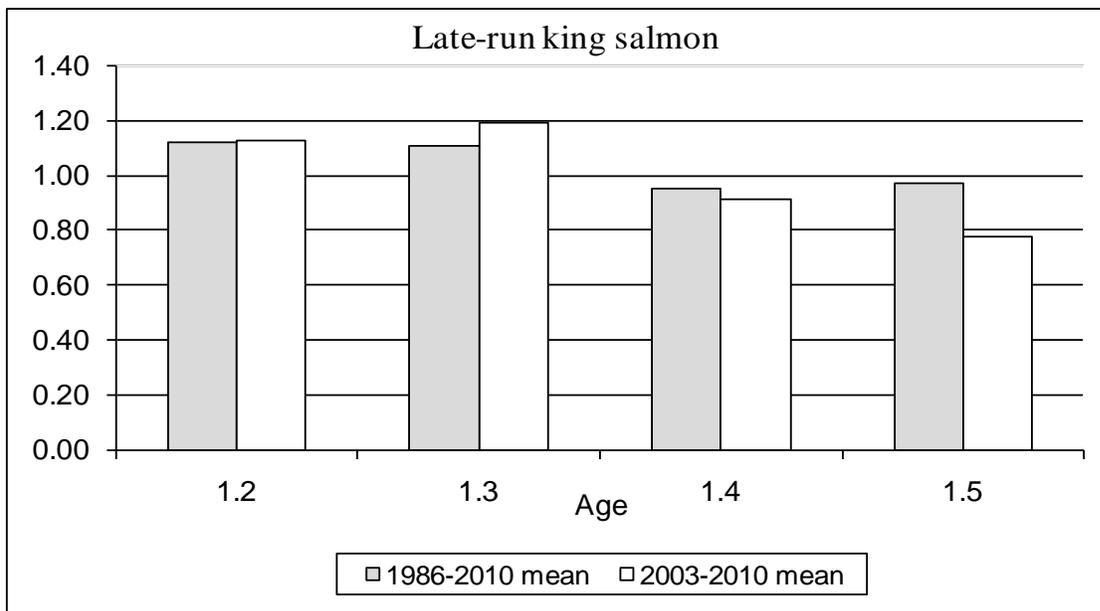


Figure 237-4. Relative harvest selectivity by age for late-run Kenai River king salmon, pre- (1986–2002) and post-implementation (2003–2010) of the slot limit. Selectivity estimates less than 1 equate to no selectivity for that age class, 1 equates to no selectivity or neutral for that age class, and values greater than 1 equate to selectivity for that age class.

PROPOSAL 238 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of at least two single hooks or treble hooks for Kenai River king salmon in May, June, and July.

WHAT ARE THE CURRENT REGULATIONS? In the Kenai River, from the mouth upstream to Skilak Lake, from January 1 to June 30, only one unbaited single-hook, artificial lure may be used.

In the Kenai River, from the mouth upstream to Skilak Lake, from July 1 to July 31, only one single hook may be used and bait is allowed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase catch rates, total harvest, and exploitation of Kenai River king salmon by an unknown amount. It would increase the rate of foul-hooked king salmon, make it more difficult to release king salmon that fall within the slot limit, and increase the likelihood of catch-and-release mortality. Increased harvests would raise the likelihood of inseason restrictions.

BACKGROUND: In 1999, the board revised both the management plans for both early and late-run Kenai River king salmon. The revisions outlined that both fisheries are limited to the use of one single-hook, artificial lure in the early run and one single hook in the late run. These provisions to restrict to single hooks were adopted to decrease angler efficiency and thereby reduce the likelihood of inseason restrictions to the recreational fishery, as well as facilitate the ability to release king salmon. Prior to 1999, multiple hooks and/or bait were provisions allowed for both runs.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The current methods and means allow for sustainable fisheries in both runs and the use of one single-hook lure facilitates the release of king salmon during the slot limit period.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 239 - 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area.

PROPOSED BY: James K. Johnson.

WHAT WOULD THE PROPOSAL DO? This proposal would allow anglers to continue fishing after king or coho salmon bag limits are met on the Kenai River.

WHAT ARE THE CURRENT REGULATIONS? A person, after taking and retaining a king salmon 20 inches or greater in length from the Kenai River, may not sport fish from a boat in the Kenai River downstream from Skilak Lake for any species of fish on that same day.

A person, after taking and retaining a bag limit of coho salmon 16 inches or greater in length from the Kenai River, may continue to sport fish only upstream from the Soldotna Bridge to department regulatory markers at the outlet of Skilak Lake.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase catch rates/harvest and exploitation of Kenai River king salmon and coho salmon by an unknown amount. Increased king salmon exploitation would raise the likelihood of inseason restrictions.

BACKGROUND: The requirement prohibiting a person from fishing once the bag limit of king salmon has been retained provides harvest opportunity to a greater number of anglers participating in the fully allocated king salmon fisheries. Department studies indicate a high mortality rate (up to 69%) to coho salmon after release back to the water in estuarine or lower river areas in proximity to the ocean.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. There is no regulation prohibiting anglers from the practice of catch-and-release fishing for Kenai River king and coho salmon prior to retention of a bag limit for either species. Allowing anglers to continue fishing would likely increase the incidence of “party” fishing violations of the daily bag limit. The department is opposed to regulations that will increase the exploitation of coho salmon at this time.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 240 - 5 AAC 56.120. General provisions for the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Steve Vanek.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit anglers who are going to release salmon or trout from taking them out of the water.

WHAT ARE THE CURRENT REGULATIONS? There are no regulations for the Kenai River that prohibit removing from the water Dolly Varden, rainbow/steelhead trout, and salmon, other than king salmon, that are intended to be released.

In Anchor and Ninilchik rivers, as well as Deep and Stariski creeks, rainbow/steelhead trout may not be removed from the water.

In fresh waters of Cook Inlet, if one intends to release a king salmon 20 inches or longer, it may not be removed from the water.

A king salmon 20 inches or longer removed from the water must be retained, and becomes a part of the bag limit of the person originally hooking it.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Prohibiting anglers from removing resident species like rainbow/steelhead trout and Dolly Varden, as well as all salmon, from the water may reduce mortality of fish intended to be released by an unknown, but likely small, amount.

BACKGROUND: Fishing for rainbow trout and Dolly Varden in the Kenai River is very popular. Historically, regulations governing the harvest of rainbow trout in the Kenai River drainage were liberal and became progressively conservative and complex as the rainbow trout fishery grew in popularity. Excepting sport fishing regulations for stocked lakes, where bag limits and methods and means are liberal, Kenai Peninsula regulations for resident species are conservative. For example, wild Kenai River rainbow trout and Dolly Varden are conservatively managed. The bag limit is one per day/one in possession, with maximum size limits of 16 inches in waters above Skilak Lake and 18 inches in waters below Skilak Lake. In addition, seasonal spawning closures, gear type, and bait restrictions compliment reduced harvest opportunity to ensure sustainable fisheries.

The department does not have an estimate of the catch-and-release mortality rate for the rainbow trout or Dolly Varden in the Kenai River fisheries. The department does know that catch estimates of rainbow trout in the Upper and Middle Kenai River are high in relation to the numbers of rainbow trout thought to inhabit these river sections. Research to estimate the abundance of rainbow trout in a portion of the Upper Kenai River was undertaken during the mid 1980s, 1995, 2001, and in 2009, and in the Middle Kenai River during 1987 and 1999 (Tables 240-1 and 240-2). Research findings show that the abundance of rainbow trout in both areas increased over time. In the Upper River, the population estimate increased from 2,250 rainbow trout in 1986 to 6,364 rainbow trout in 2001, while in the Middle River, the population was

estimated to be 1,750 rainbow trout in 1986 and increased to 7,882 rainbow trout by 1999. The 2009 estimate of rainbow trout in the Upper Kenai dropped slightly to 5,083 rainbow trout. These data point-out that the catch rate for the population is high; in other words, most individual rainbow trout are caught and released numerous times over a life span.

Estimates of the catch-and-release mortality of rainbow trout available through the fisheries literature vary considerably. Factors such as gear type, water temperature, fish size, fighting time, and handling techniques influence the mortality rate. Overall, the literature points to the fact that fishing with bait for rainbow trout is not commensurate with conservative management objectives. Furthermore, regulations that control hook size and type are not considered to be major factors that contribute to achieving conservative management objectives because the efficacy of these regulations can be difficult to measure. The current management objectives for rainbow trout and Dolly Varden fisheries of the Kenai River are

1. To provide the opportunity for angler participation at a level that can be supported by the fisheries resource and associated habitat.
2. To ensure, through appropriate management and research programs, that the rainbow trout and Dolly Varden populations do not decline below levels necessary to ensure sustained yield.

Based upon the increases in population size of rainbow trout, as well as high catch rates of both rainbow trout and Dolly Varden, the management objectives for these fisheries are being met (Tables 240-3 and 240-4).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the social aspects of this proposal but **OPPOSES** it as a conservation measure. Presently there is no concern for the sustainability of these species. Proper catch-and-release handling that includes removing small fish from the water prior to release may largely be a philosophical argument since there is evidence to suggest that it does not cause increased mortality when done properly. The photograph of a large rainbow trout, Dolly Varden, or a salmon is the goal for many anglers who practice catch and release. Data reflect that catch of resident species in the Kenai River is high in relation to their abundance, indicating that many survive multiple captures.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 240-1. Number of rainbow trout greater than 300 mm fork-length in the upper Kenai River, Sportsman's Landing to Jim's Landing, 1986–1987, 1995, 2001, and 2009.

Year	Abundance	SE
1986	2,520	363
1987	3,472	482
1995	5,598	735
2001 ^a	6,364 ^a	606 ^a
2009 ^b	5,083 ^b	908 ^b

^a 2001 data reanalyzed using program MARK.

Estimate differs slightly from published estimate.

^b 2009 data is preliminary.

Table 240-2. Number of rainbow trout greater than 200 mm fork-length in the middle Kenai River, Naptowne Rapids to Skilak Lake outlet, 1987 and 1999.

Year	Abundance	SE
1987	1,750	453
1999	7,833	1,276

Table 240-3. Kenai River rainbow trout, catch and harvest, by river section, 1984–2009.

Year	Cook Inlet to Soldotna			Soldotna Bridge to Moose			Moose River to Skilak			Skilak Inlet to Kenai Lake			Kenai River Reach Not Specified ^a			Kenai River Total		
	Bridge		%	River		%	Outlet		%	Catch ^b	Harvest ^c	%	Catch	Harvest	%	Catch ^b	Harvest	%
	Catch ^b	Harvest		Catch ^b	Harvest		Catch ^b	Harvest										
1984 ^d	3,464	766	22.1	2,911	644	22.1	5,112	1,130	22.1	4,200	928	22.1	ND	ND	ND	15,687	3,468	22.1
1985 ^d	3,398	880	25.9	2,653	850	32.0	5,410	1,500	27.7	3,520	710	20.2	ND	0	ND	14,981	3,940	26.3
1986	2,570	623	24.2	2,380	168	7.1	1,750	901	51.5	2,020	733	36.3	ND	ND	ND	8,720	2,425	27.8
1987	2,220	522	23.5	3,450	670	19.4	6,430	629	9.8	3,870	364	9.4	ND	ND	ND	15,970	2,185	13.7
1988	2,780	295	10.6	1,560	216	13.8	5,880	1,063	18.1	7,580	559	7.4	ND	0	ND	17,800	2,133	12.0
1989	2,020	481	23.8	2,230	354	15.9	6,470	829	12.8	6,870	253	3.7	ND	10	ND	17,590	1,927	11.0
1990	2,624	510	19.4	3,571	943	26.4	5,366	937	17.5	11,995	1,145	9.5	0	0	0.0	23,556	3,535	15.0
1991	3,672	516	14.1	3,844	1,123	29.2	7,930	940	11.9	18,108	740	4.1	31	10	32.3	33,585	3,329	9.9
1992	4,448	427	9.6	3,879	411	10.6	15,127	736	4.9	28,702	403	1.4	ND	ND	ND	52,156	1,977	3.8
1993	6,190	1,149	18.6	5,556	580	10.4	12,651	653	5.2	37,755	192	0.5	0	0	0.0	62,152	2,574	4.1
1994	3,796	506	13.3	3,980	364	9.1	10,968	543	5.0	35,089	163	0.5	ND	ND	ND	53,833	1,576	2.9
1995	4,516	620	13.7	4,087	440	10.8	13,072	780	6.0	33,475	310	0.9	ND	ND	ND	55,150	2,150	3.9
1996	5,513	304	5.5	4,777	646	13.5	8,650	373	4.3	45,471	237	0.5	ND	ND	ND	64,411	1,560	2.4
1997	7,411	739	10.0	6,641	539	8.1	20,047	632	3.2	61,053	0	0.0	ND	ND	ND	95,152	1,910	2.0
1998	5,502	608	11.1	5,380	670	12.5	12,158	737	6.1	42,224	0	0.0	ND	ND	ND	65,264	2,015	3.1
1999	11,415	1,516	13.3	8,325	695	8.3	32,050	1,573	4.9	50,189	0	0.0	ND	ND	ND	101,979	3,784	3.7
2000	16,477	1,292	7.8	9,428	1,083	11.5	18,990	1,084	5.7	78,836	0	0.0	ND	ND	ND	123,731	3,459	2.8
2001	11,216	987	8.8	7,473	868	11.6	22,392	567	2.5	51,130	0	0.0	ND	ND	ND	92,211	2,422	2.6
2002	12,641	995	7.9	8,157	944	11.6	19,355	864	4.5	71,753	0	0.0	2,269	216	9.5	114,175	3,019	2.6
2003	12,844	1,026	8.0	10,913	700	6.4	41,204	372	0.9	54,552	0	0.0	3,536	180	5.1	123,049	2,278	1.9
2004	15,080	1,452	9.6	13,310	978	7.3	34,026	831	2.4	91,443	0	0.0	5,651	50	0.9	159,510	3,311	2.1
2005	14,119	953	6.7	11,585	647	5.6	34,675	607	1.8	57,936	267	0.5	7,949	43	0.5	126,264	2,517	2.0
2006	13,168	588	4.5	13,683	1,109	8.1	33,222	472	1.4	67,741	289	0.4	4,005	41	1.0	131,819	2,499	1.9
2007	11,829	542	4.6	18,832	769	4.1	52,701	684	1.3	90,757	661	0.7	4,851	10	0.2	178,970	2,666	1.5
2008	26,385	696	2.6	20,943	794	3.8	47,956	772	1.6	103,095	941	0.9	4,496	11	0.2	202,875	3,214	1.6
2009	11,502	625	5.4	16,165	543	3.4	67,940	828	1.2	102,745	399	0.4	3,280	59	1.8	201,632	2,454	1.2
Avg. (2005–2009)	15,400	680	4.8	16,240	770	5.0	47,300	670	1.5	84,450	510	0.6	4,920	30	0.8	168,310	2,670	1.6
Avg. (2000–2009)	14,530	920	6.6	13,050	840	7.3	37,250	710	2.3	77,000	260	0.3	4,500	80	1.9	145,420	2,780	2.0
Avg. (1984–2009)	8,340	750	12.5	7,530	680	12.4	20,830	810	9.0	44,700	360	4.6	ND	ND	ND	82,780	2,630	7.1

Source: Statewide Harvest Surveys (SWHS, Mills 1982-1994; Howe et al. 1995, 1996, 2001 a-d; Walker et al. 2003; Jennings et al. 2007, *In prep.*; Jennings et al. 2004; 2006 a-b; G.B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage; personal communication). ND = no data collected.

^a Adopted by SWHS in 2002.

^b Catch estimates from 1984-1989 are unpublished estimates from the SWHS database (M.J. Mills, Sport Fish Biometrician, ADF&G, Anchorage; personal communication).

^c Retention of rainbow trout was prohibited from 1997 through 2004.

^d In 1984 and 1985, catch estimates were mistakenly reported as harvest in Mills (1985-1986). Corrected harvest numbers are presented here.

Table 240-4. Kenai River Dolly Varden, catch and harvest, by river section, 1984–2009.

Year	Cook Inlet to Soldotna Bridge			Soldotna Bridge to Moose River			Moose River to Skilak Outlet			Skilak Inlet to Kenai Lake			Kenai River Reach Not Specified ^a			Kenai River Total		
	Catch	Harvest	%	Catch	Harvest	%	Catch	Harvest	%	Catch	Harvest	%	Catch	Harvest	%	Catch	Harvest	%
			Harvest			Harvest			Harvest			Harvest			Harvest			Harvest
1984 ^b	ND	7,506	ND	ND	1,966	ND	ND	11,211	ND	ND	10,724	ND	ND	ND	ND	ND	31,407	ND
1985 ^b	ND	7,560	ND	ND	3,277	ND	ND	8,930	ND	ND	6,468	ND	ND	52	ND	ND	26,287	ND
1986	ND	1,249	ND	ND	771	ND	ND	1,928	ND	ND	1,827	ND	ND	ND	ND	ND	5,775	ND
1987	ND	2,429	ND	ND	1,671	ND	ND	2,139	ND	ND	1,391	ND	ND	ND	ND	ND	7,630	ND
1988	ND	3,531	ND	ND	1,266	ND	ND	3,527	ND	ND	2,653	ND	ND	0	ND	ND	10,977	ND
1989	ND	3,414	ND	ND	1,371	ND	ND	3,649	ND	ND	1,630	ND	ND	19	ND	ND	10,083	ND
1990	7,795	2,738	35.1	5,094	2,424	47.6	7,537	2,741	36.4	14,151	4,079	28.8	0	0	0.0	34,577	11,982	34.7
1991	10,665	4,211	39.5	8,116	3,285	40.5	19,363	4,268	22.0	30,601	2,740	9.0	52	13	25.0	68,797	14,517	21.1
1992	11,822	3,777	31.9	5,899	2,516	42.7	26,348	4,900	18.6	34,754	3,269	9.4	ND	ND	ND	78,823	14,462	18.3
1993	13,019	4,599	35.3	6,079	1,539	25.3	20,778	3,503	16.9	36,451	3,057	8.4	26	26	ND	76,353	12,724	16.7
1994	8,752	3,276	37.4	5,185	1,107	21.4	14,584	2,051	14.1	33,168	2,052	6.2	ND	ND	ND	61,689	8,486	13.8
1995	10,146	4,069	40.1	5,399	1,732	32.1	12,447	2,113	17.0	27,103	1,609	5.9	ND	ND	ND	55,095	9,523	17.3
1996	9,787	2,411	24.6	5,973	1,797	30.1	14,506	1,995	13.8	26,245	1,281	4.9	ND	ND	ND	56,511	7,484	13.2
1997	9,955	2,518	25.3	5,268	1,042	19.8	22,266	2,824	12.7	48,883	573	1.2	ND	ND	ND	86,372	6,957	8.1
1998	7,560	1,977	26.2	5,961	1,787	30.0	11,732	1,847	15.7	35,659	468	1.3	ND	ND	ND	60,912	6,079	10.0
1999	14,752	3,867	26.2	6,316	1,086	17.2	20,053	1,932	9.6	31,826	683	2.1	ND	ND	ND	72,947	7,568	10.4
2000	18,261	3,916	21.4	9,122	1,759	19.3	21,291	1,403	6.6	56,375	349	0.6	ND	ND	ND	105,049	7,427	7.1
2001	16,304	3,763	23.1	8,367	1,613	19.3	28,312	789	2.8	54,802	363	0.7	ND	ND	ND	107,785	6,528	6.1
2002	16,414	2,191	13.3	7,751	1,431	18.5	13,384	1,105	8.3	38,481	766	2.0	1,324	288	21.8	77,354	5,781	7.5
2003	15,520	2,996	19.3	9,765	1,318	13.5	25,972	1,066	4.1	50,969	487	1.0	1,459	246	16.9	103,685	6,113	5.9
2004	14,386	1,759	12.2	13,591	2,129	15.7	23,833	1,220	5.1	89,318	452	0.5	5,072	285	5.6	146,200	5,845	4.0
2005	13,501	1,548	11.5	9,629	934	9.7	27,398	1,243	4.5	62,798	565	0.9	5,615	26	0.5	118,941	4,316	3.6
2006	11,405	971	8.5	8,135	1,061	13.0	24,499	515	2.1	52,048	414	0.8	2,211	257	11.6	98,298	3,218	3.3
2007	8,048	1,201	14.9	10,261	764	7.4	52,701	687	1.3	90,757	584	0.6	4,851	40	0.8	166,618	3,276	2.0
2008	19,177	1,154	6.0	17,063	961	5.6	30,579	604	2.0	78,489	1,003	1.3	2,293	44	1.9	147,601	3,766	2.6
2009	8,278	1,003	12.1	7,825	842	10.8	34,973	384	1.1	91,815	412	0.4	1,053	77	7.3	143,944	2,718	1.9
Avg. (2005–2009)	12,080	1,180	10.6	10,580	910	9.3	34,030	690	2.2	75,180	600	0.8	3,200	90	4.4	135,080	3,460	2.7
Avg. (2000–2009)	14,130	2,050	14.2	10,150	1,280	13.3	28,290	900	3.8	66,590	540	0.9	2,980	160	6.6	121,550	4,900	4.4
Avg. (1984–2009)	12,280	3,060	17.9	8,040	1,590	16.9	22,630	2,640	8.3	49,230	1,920	3.3				93,380	9,270	8.0

Source: Statewide Harvest Surveys from Mills 1985-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b; G. B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage, personal communication.

^a SWHS began consistently reporting in 2002.

^b In 1984 and 1985, catch estimates were mistakenly reported as harvest in Mills 1985, 1986. Corrected harvest numbers are presented here.

Note: ND = no data available

PROPOSAL 241 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would close Kenai River to sport fishing on Tuesdays and Fridays.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, no one may fish from a Alaska Department of Natural Resources registered guide vessel on any Sunday or Monday during May, June, and July (except Memorial Day).

Downstream from the outlet of Skilak Lake, no one may fish from any motorized vessel on Mondays (except Memorial Day) during May, June, and July. For purposes of this regulation, a motorized vessel is one that has a motor on board.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Fishing opportunity for all anglers would be reduced from seven days to five days per week, a reduction of 104 days annually, or approximately 29%. This proposal would reduce total fishing effort, catch, and harvest levels by an unknown, but potentially substantial, amount. This proposal will increase crowding by anglers displaced from the days closed to fishing.

BACKGROUND: Prior to 1983, there were no day-specific fishing closures on the Kenai River. From 1983 to 1985, fishing on Mondays in July after July 5 was prohibited from any vessel. From 1986 to 2002, fishing on Mondays in May, June, and July was prohibited from any vessel. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. There is no biological basis to require a two-day-per-week closure of all sport fishing on the Kenai River because regulations provide sustainable fisheries for Kenai River fish stocks. The department is **NEUTRAL** on the allocative aspects of this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 242 - 5 AAC 21.359. Kenai River Late-Run King Salmon Management Plan.

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would close large sections of the Kenai River to king salmon fishing on an annual rotational cycle as follows: river miles 0–19 are closed for the entire year, river miles 19–xx are closed the next year, and river miles xx–xx are closed the next year, and repeat the cycle.

Additionally, this proposal would extend the slot limit for king salmon through July 31, and require all king salmon greater than 55 inches in length be sealed by the department.

WHAT ARE THE CURRENT REGULATIONS? There are three seasonal king salmon area closures on the Kenai River. These closures total approximately 3.1 river miles of the 50 river miles open to king salmon fishing:

From January 1–July 31, that portion of the Kenai River from department markers about 300 yards downstream of the mouth of Slikok Creek upstream to department markers located approximately 100 yards upstream from the mouth of Slikok Creek are fly-fishing-only waters, is closed to sport fishing from a boat and is closed to the taking of king salmon.

From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately one mile downstream from the mouth of the Funny River, upstream to a department regulatory marker located approximately 200 yards upstream from the mouth of the Funny River, is fly-fishing-only waters and is closed to fishing for king salmon.

From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately three-quarters of a mile downstream from the mouth of the Lower Killey River, upstream to a department regulatory marker located approximately one mile upstream from the mouth of the lower Killey River, is fly-fishing-only waters and is closed to fishing for king salmon.

During the early run (January 1–June 30), regulations allow for the harvest of one king salmon per day 20 inches or greater in length, and less than 46 inches or 55 inches or greater in length. Any king salmon caught that is 46 inches or longer, but less than 55 inches, must be released unharmed. The nonretention slot limit is in effect from January 1 through June 30 in the Kenai River from the mouth upstream to the Soldotna Bridge, and from January 1 through July 14 for those waters of the Kenai River from the Soldotna Bridge upstream to the outlet of Skilak Lake. All Kenai River salmon 55 inches or longer must be sealed within three days of harvest by department staff.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would close an additional 14 to 19 river miles, roughly a third of the lower Kenai River, to king salmon fishing on an annual basis. Total fishing effort, catch, and harvest would decrease and crowding would increase, both by unknown amounts. Regulations would be more complex and confusing to the public, thereby increasing the demand for law enforcement. This

proposal may also result in the majority of the Kenai River king salmon harvest occurring in Cook Inlet commercial fisheries. This proposal would not change the existing sealing requirement.

BACKGROUND: King salmon returning to the Kenai River are managed as two distinct runs, early (May 16 to June 30) and late (July 1 to August10). Early-run fish spawn primarily in tributary streams, whereas late-run fish are destined primarily for mainstem spawning locations. King salmon of Kenai River origin are harvested in several fisheries, including a recreational marine fishery along the eastern shore of Cook Inlet from Anchor Point to Cape Ninilchik; commercial set and drift gillnet fisheries in Cook Inlet that harvest late-run king salmon while targeting sockeye salmon; and a major sport fishery for early- and late-run king salmon that occurs in the Kenai River itself (Table 242-1). Finally, incidental harvest of late-run king salmon occurs in the Kenai River personal use fishery during the last three weeks of July.

Management plans for the Kenai River king salmon fishery have been conservatively structured to constrain the ability of the angling public to harvest king salmon at sustainable levels while still providing for fishing opportunity.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. However, the department is **OPPOSED** to this proposal because there is no biological basis to require such a large king salmon fishing closure. Existing regulations provide sustainable fisheries for Kenai River king salmon stocks. In addition, the recent downturn seen in Kenai River king salmon runs is consistent with assessments of other king salmon stocks region- and statewide.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 242-1. Harvest of Kenai River late-run king salmon, 1986–2010.

Year	Deep Creek		Eastside		Drift		Inriver		Percent of total harvest by fishery		
	Marine	Set Net	Gillnet	Pers. Use	Ed. Fishery	Sport	Total	Commercial	All sport	Ed. Fishery	
	Harvest	Harvest	Harvest			Harvest ^a	Harvest				
1986	630	19,810	1,834			10,188	32,462	67%	33%	0%	
1987	1,218	20,588	4,551			13,223	39,580	64%	36%	0%	
1988	1,487	12,870	2,217			19,871	36,444	41%	59%	0%	
1989	1,368	10,919	0		22	9,779	22,089	49%	50%	0%	
1990	1,605	4,139	621	91	13	6,966	13,435	35%	64%	1%	
1991	1,705	4,891	241	130	288	7,919	15,173	34%	63%	3%	
1992	2,115	10,718	543	50	402	7,790	21,618	52%	46%	2%	
1993	2,834	13,977	751	129	27	18,253	35,970	41%	59%	0%	
1994	1,869	15,885	460	13	392	18,409	37,028	44%	55%	1%	
1995	2,069	12,032	523	36	646	13,081	28,387	44%	53%	2%	
1996	2,038	11,521	365	45	294	8,449	22,712	52%	46%	1%	
1997	2,931	11,281	489	339	26	13,325	28,391	41%	57%	1%	
1998	1,784	5,039	332	271	2	8,110	15,538	35%	64%	2%	
1999	1,004	9,463	575	488	4	14,277	25,811	39%	59%	2%	
2000	1,052	3,684	270	410	6	15,721	21,143	19%	79%	2%	
2001	920	6,009	619	638	8	17,305	25,499	26%	71%	3%	
2002	427	9,478	415	606	6	13,272	24,204	41%	57%	3%	
2003	200	14,810	1,240	1,016	11	18,746	36,023	45%	53%	3%	
2004	1,660	21,683	1,526	792	10	18,393	44,064	53%	46%	2%	
2005	1,040	21,472	1,839	775	11	19,481	44,618	52%	46%	2%	
2006	938	8,696	1,051	1,034	11	16,642	28,372	34%	62%	4%	
2007	797	12,292	912	1,509	6	12,111	27,627	48%	47%	5%	
2008	517	7,573	653	1,362	15	11,508	21,628	38%	56%	6%	
2009	256	5,588	859	1,189	4	9,662	17,558	37%	56%	7%	
2010 ^b	-	7,059	539	-	-	5,430	13,028	58%	42%	-	
Average											
1986–2009	1,353	11,434	954	546	105	13,437	27,724	43%	55%	2%	
Average											
2005–2009	710	11,124	1,063	1,174	9	13,881	27,961	42%	53%	5%	

^a Includes harvest above and below sonar and hook and release mortality.

^b 2010 estimates of harvest are **preliminary**.

PROPOSAL 243 - 5AAC 57.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Middle Section of the Kenai River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would require fish harvested in the Russian River Fly-Fishing-Only Area to be closely attended. “Closely attended” means within view and readily accessible at all times.

WHAT ARE THE CURRENT REGULATIONS? Currently, no regulations are in place that pertain to how fish are stored, kept, etc., after being harvested.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may result in a reduction of bears obtaining fish that are harvested by anglers and in their possession, because anglers would be able to secure the fish from bears more quickly when a bear is in the area.

BACKGROUND: Since 2006, the department has worked in coordination with federal land management agencies (U.S. Forest Service (USFS) and U.S. Fish and Wildlife Service (USFWS)) with the goal to reduce negative human/bear encounters. Interagency efforts have focused and implemented various actions relative to the three topics: 1) visitor education, 2) facility/infrastructure management, and 3) regulation.

Education has focused on disseminating information to the sport fishing public on how to handle fish and the waste from harvested fish that are processed onsite on the Russian River and Kenai-Russian rivers confluence area. Facility/infrastructure management focused on eliminating and redistributing approximately 17 fish cleaning tables and/or stations located throughout the area. About 12 fish cleaning tables were permanently removed from an approximate one-mile section of the lower Russian River and five tables were redistributed to three specific locations in the Kenai-Russian rivers confluence area. Finally, temporary forest order (USFS) and temporary order (USFWS) regulations were enacted to regulate food storage and handling of personal belongings to include the temporary storage of sport harvested fish by the public fishing in the area. These temporary federal regulations specified that personal belongings, including sport-harvested fish, were to remain within three feet of the angler. The intent of these regulations was to prevent bears from obtaining human-generated food items. In April, 2010, the USFS regulations were adopted as a codified federal regulation.

The USFWS has not yet adopted permanent regulations, but is committed to a collaborative public process to determine a long-term solution. In the meantime, they will continue to issue a temporary order for food storage regulations.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The issue to be addressed concerns bears rather than the fishery resource. Recreational activities in the Russian River drainage area have not displaced bears and the presence of bears in the area has increased over the last 10 years, resulting in an increased risk of a negative human/bear encounters. Bears

obtaining an easy meal from anglers may increase the likelihood of a negative encounter. The department is working cooperatively with federal land management agencies to help reduce negative human/bear encounters in the Russian River area and supports an open public discussion within the state board process to help guide possible management or regulatory recommendations.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 244 - 5 AAC XX.XXX. New section.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would establish a \$10 tax for northern pike attached to all sport fishing licenses and a \$3 bounty for each dead northern pike turned in.

WHAT ARE THE CURRENT REGULATIONS? There is no closed season or bag limit for northern pike on the Kenai Peninsula.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The board does not have the authority to establish any kind of tax or license fee for northern pike. If a bounty was set by the board, no bounty collection system would be in place to implement the bounty.

BACKGROUND: The authority for establishing taxes or license fees is retained by the legislature per AS 16.05.340 and AS 16.05.080. Although AS 16.05.210 appears to presume the ability of the state (through the boards, the department, or the legislature) to set bounties for certain species, the board, under AS 16.05.241, has no fiscal authority to require the department to establish a bounty collection system.

DEPARTMENT COMMENTS: The department recommends **NO ACTION** on this proposal.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 245 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would add an additional drift boat only day on the Kenai River for both guided and nonguided anglers, occurring each Wednesday in May, June, and July.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, no one may fish from a Department of Natural Resources (DNR) registered guide vessel on any Sunday or Monday during May, June, and July (except Memorial Day).

Downstream from the outlet of Skilak Lake, no one may fish from any motorized vessel on Mondays (except Memorial Day) during May, June, and July. For purposes of this regulation, a motorized vessel is one that has a motor on board.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would decrease fishing opportunity for power boat anglers by an additional day each week. This proposal would reduce the level of participation in Kenai River sport fisheries, especially the early- and late-run king salmon fisheries. Conflict related to issues such as congestion on the river, bank erosion, and poor quality of the angling experience could be reduced at the expense of king salmon harvest opportunity for anglers who fish from power boats. King salmon fishing effort and harvest would be lower initially. Effort and harvest may increase in the future if more anglers adapt to the new drift boat regulations.

BACKGROUND: There are a number of seasonal and river-reach-specific boat fishing restrictions that have been implemented over the past 20 years that address many of the issues described in this proposal. Prior to the 2002 season, fishing on Mondays in May and June was prohibited from any vessel. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels.

DNR and the Army Corps of Engineers have completed studies to better understand the effect of boat wakes on Kenai River channel morphology and also between boat hull design, engine horsepower, weight loading, and the size and speed of the wake generated by the configurations of these variables. Results of these studies concluded that the Kenai River was maintaining a natural channel and that boats of v-hull configuration with heavy loads generated the largest waves, as well as wave energy, while boats of flat-bottomed configuration produced small waves with less wave energy. In addition, it was concluded that increasing engine horsepower may slightly reduce wave size from boats of v-hull configuration.

A DNR regulation allowing the use of motors of up to, and including, those with a total propeller-shaft rating of 50 horsepower in the Kenai River Special Management Area (KRSMA) was adopted in 2008. Additional DNR motor horsepower restrictions enacted specify that

motors with a total propeller-shaft rating greater than 35 horsepower must be a four-stroke or a direct fuel injection motor. Furthermore, during the month of July, no one may operate a motorized boat on the Kenai River in the KRSMA unless the motor is a four-stroke motor or a direct fuel injection motor. Lastly, beginning in 2013 all power boats operating in the KRSMA year-round are required to use either four-stroke motor or a direct fuel injection motor.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The board has viewed drift boat only days as an allocative issue.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 246 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Kenai Area Fisherman's Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would add an additional drift boat only day on the Kenai River for both guided and nonguided anglers, occurring each Thursday in May, June, and July.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, no one may fish from a Department of Natural Resources (DNR) registered guide vessel on any Sunday or Monday during May, June, and July (except Memorial Day).

Downstream from the outlet of Skilak Lake, no one may fish from any motorized vessel on Mondays (except Memorial Day) during May, June, and July. For purposes of this regulation, a motorized vessel is one that has a motor on board.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would decrease fishing opportunity for power boat anglers by an additional day. This proposal would reduce the level of participation in Kenai River sport fisheries, especially the early and late-run king salmon fisheries. Conflict related to issues such as congestion on the river, bank erosion, and poor quality of the angling experience could be reduced at the expense of king salmon harvest opportunity for anglers that fish from power boats. King salmon fishing effort and harvest would be lower initially. Effort and harvest may increase in the future if more anglers adapt to the new drift boat regulations.

BACKGROUND: There are a number of seasonal and river-reach-specific boat fishing restrictions that have been implemented over the past 20 years that address many of the issues described in this proposal. Prior to the 2002 season, fishing on Mondays in May and June was prohibited from any vessel. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels. This proposal is asking for additional relief from erosion caused by boat wakes and hydrocarbon pollution caused by outboard motor emissions, while also increasing fishing opportunity from nonmotorized vessels without the presence of power boats in the fishery.

DNR and the Army Corps of Engineers have completed studies to better understand the effect of boat wakes on Kenai River channel morphology and also between boat hull design, engine horsepower, weight loading, and the size and speed of the wake generated by the configurations of these variables. Results of these studies concluded that the Kenai River was maintaining a natural channel and that boats of v-hull configuration with heavy loads generated the largest waves, as well as wave energy, while boats of flat-bottomed configuration produced small waves with less wave energy. In addition, it was concluded that increasing engine horsepower may slightly reduce wave size from boats of v-hull configuration.

A DNR regulation allowing the use of motors of up to, and including, those with a total propeller-shaft rating of 50 horsepower in the Kenai River Special Management Area (KRSMA) was adopted in 2008. Additional DNR motor horsepower restrictions enacted specify that motors with a total propeller-shaft rating greater than 35 horsepower must be a four-stroke or a direct fuel injection motor. Furthermore, during the month of July, no one may operate a motorized boat on the Kenai River in the KRSMA unless the motor is a four-stroke motor or a direct fuel injection motor. Lastly, beginning in 2013 all power boats operating in the KRSMA year round are required to use either four-stroke motor or a direct fuel injection motor.

In 2008, the board adopted a regulation prohibiting the taking of fish in the Kenai River personal use dip net fishery from a boat powered by a two-stroke motor, other than direct fuel injection. These new outboard motor type restrictions reduced hydrocarbon concentrations in the Kenai River in 2008–2010 that had been in excess of the Department of Environmental Conservation standard of 10 parts per billion during peak use in July.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The board has viewed drift boat only days as an allocative issue.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 247 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Kenai Area Fisherman's Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of a motor downstream of Cunningham Park (river mile 6.6) to exit the fishery on drift boat only Mondays.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, no one may fish from any motorized vessel on Mondays (except Memorial Day) during May, June, and July. For purposes of this regulation, a motorized vessel is one that has a motor on board.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase the fishing effort and harvest of king salmon in the Kenai River, particularly from river mile 11.5 downstream to river mile 6.6 on drift boat Mondays. It may initially reduce congestion in some boat launch areas of the lower river. Congestion may increase in the future if more anglers adapt to the new drift boat regulations.

BACKGROUND: Publically-owned and operated boat landing facilities to retrieve nonmotorized vessels in the lower Kenai River downstream of the Sterling Highway Bridge crossing (river mile 21) are located at approximately river mile 1.5, 12.5, and 20.5. In addition, privately-owned boat landing facilities available for public use are located at river mile 3.0, 11.5, and 13.5. Two other privately-owned boat landing facilities are operated under a fee-based limited entry business model, and hence are not open on a daily basis to the general public.

Prior to the 2002 season, fishing on Mondays in May and June was prohibited from any vessel. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels. On Mondays, the river is not closed to motorized vessels to access shore fishing locations; therefore, motorized fishing vessels are traveling up- and downstream through the fishery. Fishing from a nonmotorized vessel on Mondays has increased in popularity. Anglers fish the entire Kenai River downstream of Skilak Lake. Relatively few nonmotorized vessels continue downstream of river mile 11.5 to exit the fishery at river mile 1.5; occasional unfavorable winds and daily tidal influence impede downstream travel at times, but there are otherwise no impediments to doing so. A recent practice is to continue fishing and drifting downstream of river mile 11.5 and stop at Cunningham Park (river mile 6.6) or the Warren Ames Bridge (river mile 5.2), remove fishing equipment, as well as harvested fish, from the nonmotorized vessel, affix a motor to the vessel then travel downstream under power to the Kenai City Dock boat landing (river mile 1.5) to exit the fishery.

In the Kasilof River, motors 10 hp or less may be used only downstream of Trujillo's Landing, and only after fishing from the boat has stopped for the day. This regulation was created by the board in 2002 to allow anglers to exit the fishery with the use of a motor, which facilitated the ability to move downstream in sometimes difficult conditions due to tidal influence and wind.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. However, the proposed regulation is similar to a regulation in place for the Kasilof River, which has worked well for exiting the fishery safely and has been enforceable. Should the board adopt this proposal, the proposed language may need to be revised to meet enforcement requirements.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

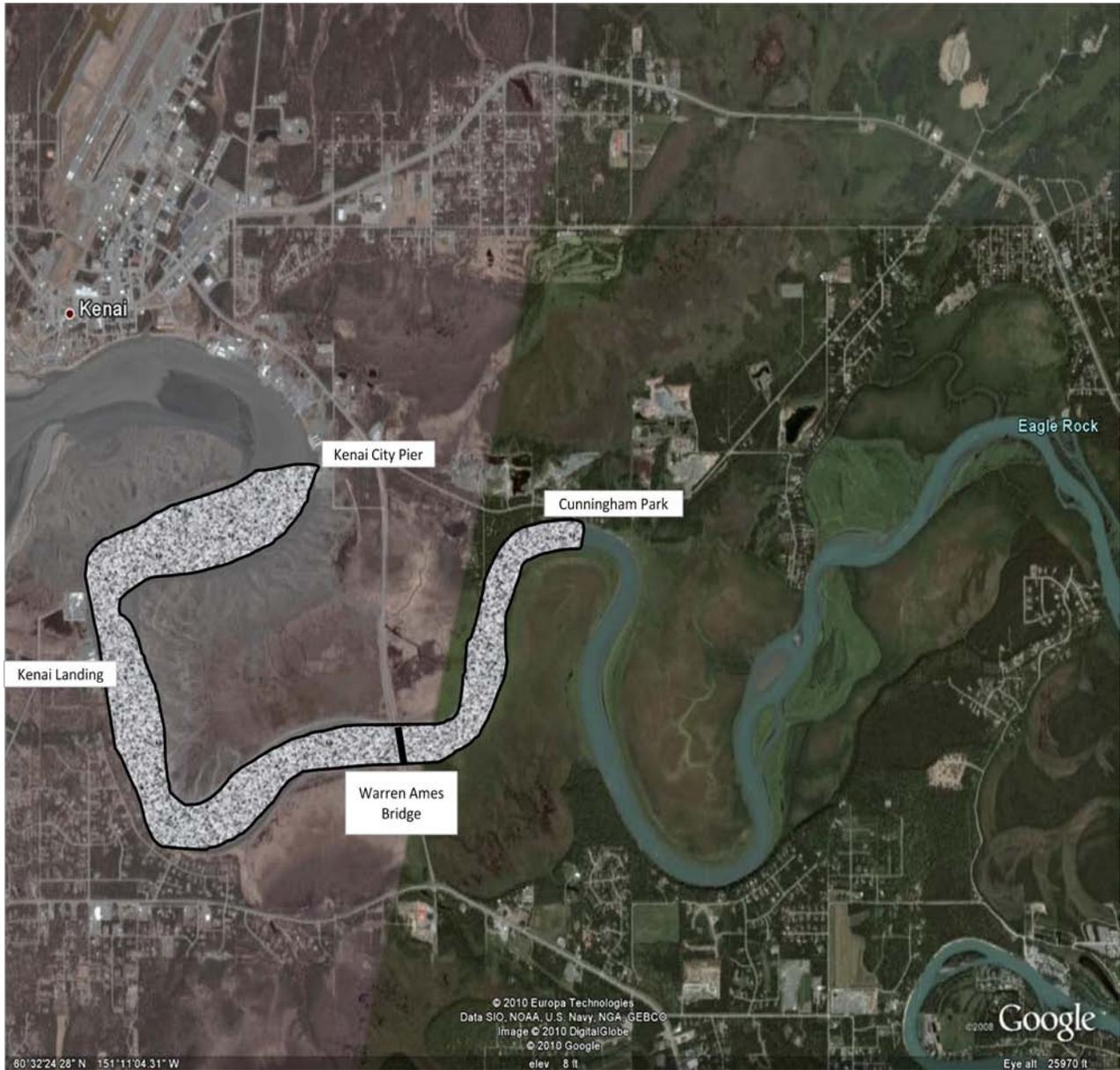


Figure 247-1. Map of lower Kenai River showing proposed area to allow the use of a motor to exit the fishery on drift boat only Mondays.

PROPOSALS 248 and 249 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Daniel Schaff (Proposal 248).
Ted Wellman (Proposal 249).

WHAT WOULD THESE PROPOSALS DO? Proposal 248 would prohibit fishing from drift boats after a motor has been used to propel the vessel in the waters of the Kenai River from the outlet of Skilak Lake downstream to Bings Landing.

Proposal 249 would prohibit all drift boats from using motors to travel upstream in the waters of the Kenai River from the outlet of Skilak Lake downstream to Naptowne Rapids (i.e., Bings Landing).

WHAT ARE THE CURRENT REGULATIONS? There are no regulations prohibiting fishing from drift boats that use motors to travel on the Kenai River.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would prevent anglers fishing in drift boats from using a motor to travel upstream and fish a section of river multiple times. Motor use on drift boats would likely be limited to exiting the fishery. This proposal may reduce bank erosion by an unknown amount.

BACKGROUND: Prior to the 2002 season, fishing on Mondays in May and June was prohibited from any vessel. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels. This proposal is asking for additional relief from erosion caused by boat wakes from drift boats traveling upstream.

The Department of Natural Resources and the Army Corps of Engineers have completed studies to better understand the effect of boat wakes on Kenai River channel morphology and also between boat hull design, engine horsepower, weight loading, and the size and speed of the wake generated by the configurations of these variables. Results of these studies concluded that the Kenai River was maintaining a natural channel and that boats of v-hull configuration with heavy loads generated the largest waves, as well as wave energy, while boats of flat-bottomed configuration produced small waves with less wave energy. In addition, it was concluded that increasing engine horsepower may slightly reduce wave size from boats of v-hull configuration. Although the study did not analyze drift boats, these boats have a flat hull configuration and have a low engine horsepower capacity. This combination forces the boat to “plow” through the water rather than “plane” on the water when the vessel is propelled by an engine to travel upstream against current, resulting in the generation of large waves or large “boat wake”.

The various riverine habitats of the Kenai River have been described as intertidal, transitional, entrenched, and inter-lake zones. The entrenched and inter-lake sections of the Kenai River contain mainly hardened shorelines and river bottom substrates comprised mainly of rock; this morphology is less susceptible to erosion than the intertidal or transitional zones, which are comprised of areas of sediment deposition and loose river bottom substrates. The area from

Bing's Landing upstream to Skilak Lake is in an area of the river defined as the entrenched and inter-lake zones.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these proposals. Proposal 249 differs from Proposal 248 in that it seeks to limit general boat use instead of limiting sport fishing activity from a vessel. The board may adopt regulations affecting general boat use it considers advisable for watershed, and habitat improvement, however, in this case, it may be difficult for the board to demonstrate the reasonable necessity of restricting general boat use for conservation or development purposes. The department recognizes that drift boats using motors to travel upstream create large boat wakes which can exacerbate erosion, but the department lacks information to quantify the extent or effect of the issue.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.



Figure 248-1. Map of Kenai River between Bing's Landing and Skilak Lake.

PROPOSAL 250 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Joseph Hanes.

WHAT WOULD THE PROPOSAL DO? This proposal would establish three areas in the lower Kenai River in which back trolling is prohibited as a fishing method during July. During the month of July, three designated areas would be fished by drift-fishing only: 1) top of upper bluffs (approximately river mile 15) to lower end of bluff at state park bathroom, 2) upper slough to Eagle Rock (approximately river mile 12) to lower slough at the top of Crossover, and 3) top of lower bluffs (approximately river mile 8) to tree line at lower end of bluff (Figure 250-1).

WHAT ARE THE CURRENT REGULATIONS? There are no regulations restricting back trolling to specific areas of the Kenai River.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase crowding in areas unrestricted to back trolling, and may decrease crowding and conflict between the two different fishing techniques within the proposed areas which encompass approximately 2.5 river miles. It would also result in creating regulatory definitions for fishing techniques or practices (drifting, backtrolling, back-bouncing, etc.) for the purpose of enforcement.

BACKGROUND: “Drifting” or “back trolling” are common names used to describe lawful fishing techniques or practices used by anglers fishing on the Kenai River. Drifting is moving downstream without power at the same rate of speed as the current, while back trolling is accomplished by moving downstream under power at a rate of speed less than the speed of the current. Either technique or practice is conducted using a wide variety of terminal tackle. On the Kenai River, some locations are known to be traditional drift fishing areas, while others are known to be back trolling areas. Locations to do either can vary with stage of tide, water discharge level, water clarity, and presence of other boats. During periods of high angler effort with high boat density, social conflict increases between anglers in different boats, when boats in close proximity to each other are employing different fishing techniques to fish primarily for king salmon. Drifting boats move downstream into back trolling boats or back trolling boats prevent drifting boats from fishing an area.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. This is a social issue related to fishing technique preferences and does not present a biological concern.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

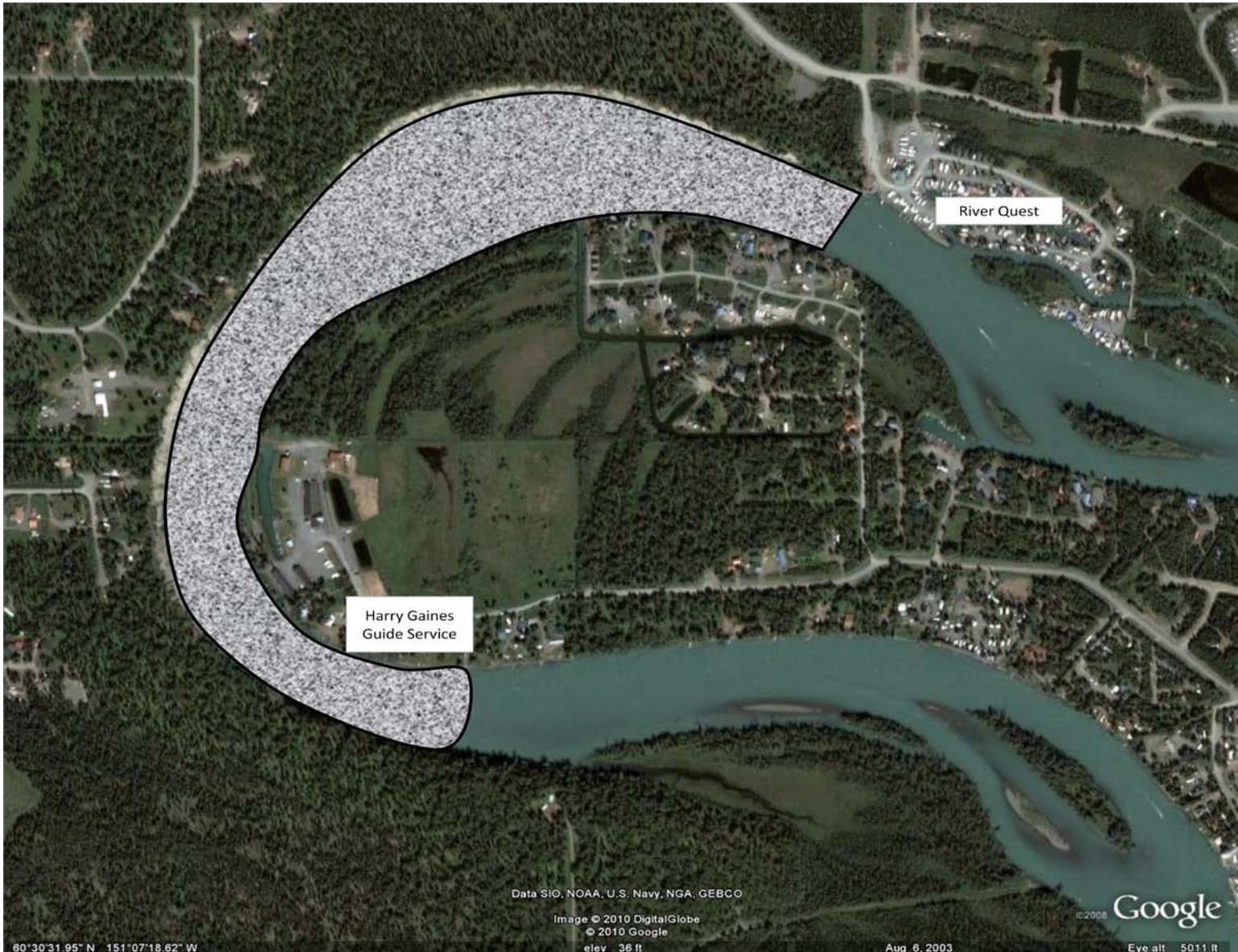


Figure 250-1. Map of Kenai River showing area proposed to be closed to back trolling.

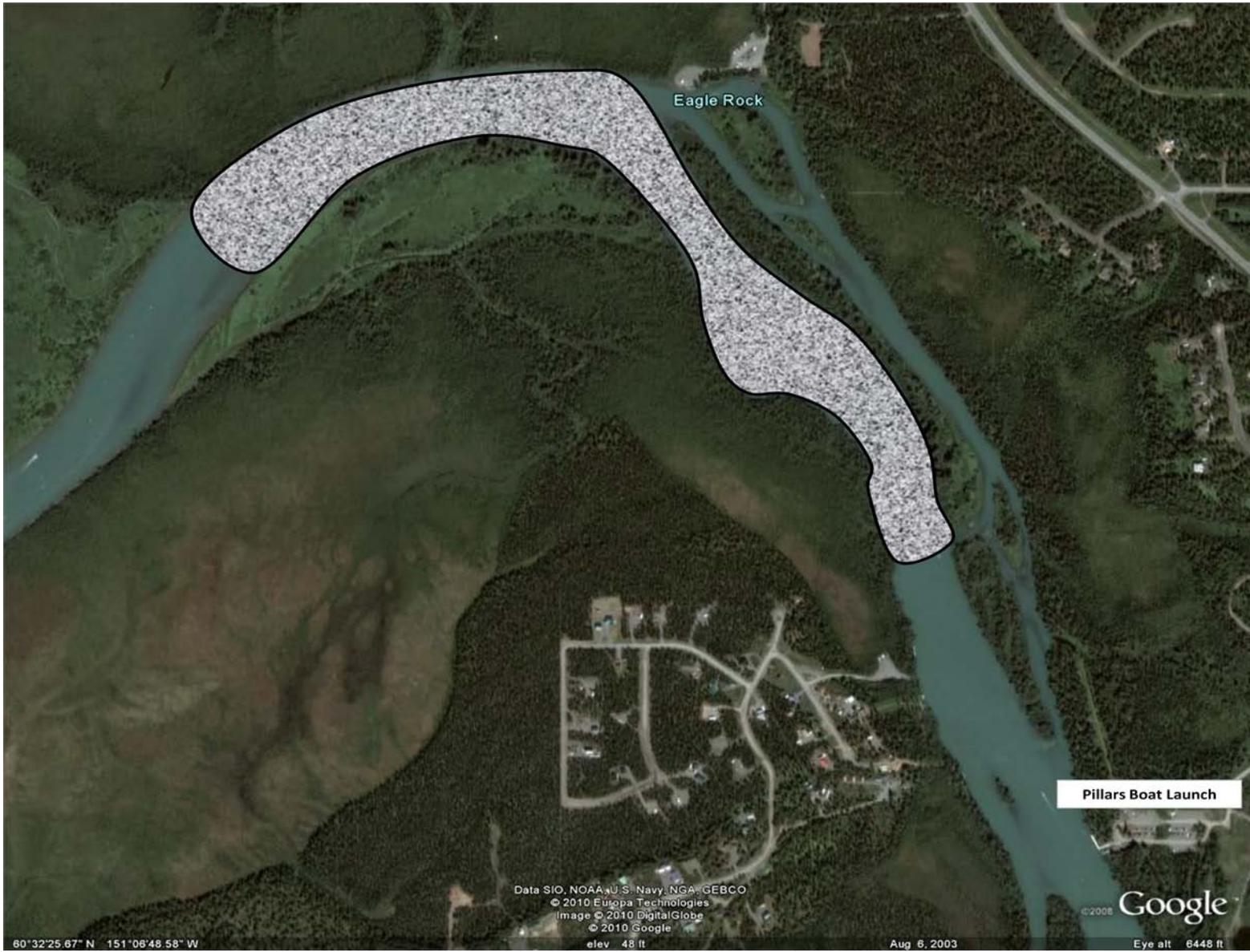


Figure 250-2. Map of Kenai River showing area proposed to be closed to back troling.



Figure 250-3. Map of Kenai River showing area proposed to be closed to back trolling.

PROPOSAL 251 - 5 AAC 57.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Middle Section of the Kenai River Drainage Area.

PROPOSED BY: Colin E. Lowe.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit boats from transiting through the Kenai and Russian river confluence “back” channel (on the south side of the island in front of the confluence area). Additionally, it would prohibit boats on the south bank of the fly-fishing-only waters area between the ferry crossing and the Russian River from anchoring or landing from May 1 through October 31.

WHAT ARE THE CURRENT REGULATIONS? There is no regulation restricting where boats may transition through the Kenai and Russian rivers’ confluence area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may decrease conflict between user groups and the chance of a boating accident in this high use area by an unknown amount.

BACKGROUND: The Kenai and Russian rivers’ confluence back channel area is located at approximately river mile 74 (Figure 251-1). Two public boat launches are present in this area. One is located at river mile 74 and the other is located upstream at Cooper Landing. Both provide access for anglers to drift and to fish from a boat or shore in this drift area of the Kenai River. During the midpoint of the early and late runs of sockeye salmon to the Russian River, numerous rafts and drift boats pass through this area daily. The majority of boats passing through this popular shore fishing area do not stop. The fishing season begins June 11 and fishing from the shoreline area declines dramatically after Labor Day weekend.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. This is a social issue related to fishing preferences and does not present a biological concern. The Department of Law has advised that the board may not regulate for general public safety concerns, but might be able to regulate fishing activity for safety concerns of fishery participants when those concerns have an actual impact on how the fisheries are prosecuted. The board may also adopt regulations affecting general boat use it considers advisable for watershed, and habitat improvement, however, in this case, it may be difficult for the board to demonstrate the reasonable necessity of restricting general boat use for conservation or development purposes. The use of drift boats in this area does not cause a conservation concern.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.



Figure 251-1. Map of Russian River confluence with Kenai River.

PROPOSAL 252 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Kip Minnery.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing for resident species from a motorized vessel on Mondays downstream of Skilak Lake.

WHAT ARE THE CURRENT REGULATIONS? Downstream from the outlet of Skilak Lake, no one may fish from any motorized vessel on Mondays (except Memorial Day) during May, June, and July. For purposes of this regulation, a motorized vessel is one that has a motor on board. The Kenai River is closed to rainbow trout fishing from May 2 through June 10. From March 15–June 14, operating a boat by use of a motor on the Kenai River is prohibited from river mile 47 upstream to the outlet of Skilak Lake.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely increase the effort, catch, and harvest of resident species by an unknown amount. It would complicate enforcement of regulations and increase fishing effort for resident species from boats in some areas of the river, especially if more anglers adapt to the new motorized boat regulations.

BACKGROUND: The closure of boat fishing on Mondays during May and June for Kenai River early-run king salmon was adopted by the board in 1982 and went into effect in 1983. The board adopted the Monday boat fishing closure as a means to reduce king salmon harvest in the sport fishery and to assure that spawning escapement goals are achieved. In February 2002, the board allowed fishing on Mondays from unguided nonmotorized vessels. On Monday, the river is not closed to motorized vessels to access shore fishing locations; therefore, motorized vessels are traveling up- and downstream through the fishery. Fishing from a nonmotorized vessel on Mondays has increased in popularity. Fishing for residents species when the river is open to fishing for rainbow trout from June 11 through May 1 is also popular each day of the week.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Adoption of this proposal will likely increase social conflict and enforcement issues because it would repeal the definition of a motorized vessel, as well as allow fishing from a vessel with a motor on board for resident species only. The regulation would also conflict with the intent of the drift boat Monday regulation. This proposal would complicate enforcement because if it were adopted, a person would be allowed to fish from a motorized vessel for freshwater resident species, but not salmon, and it is difficult to readily ascertain what species an angler is targeting. This proposal would require enforcement officers to identify whether an angler is fishing for resident species or salmon. To adequately do so would require contact with anglers in each motorized vessel in the fishery.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 253 - 5 AAC 57.121. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Lower Section of the Kenai River Drainage Area.

PROPOSED BY: Funny River Chamber of Commerce/Jim Harpring.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing for sockeye salmon from a boat in the Funny River king salmon sanctuary area.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31, that portion of the Kenai River from a department regulatory marker located approximately one mile downstream from the mouth of Funny River, upstream to a department regulatory marker located approximately 200 yards upstream from the mouth of the Funny River:

- a person may not sport fish from a boat;
- is closed to the taking of king salmon; and
- is fly-fishing-only waters.

In waters designated as fly-fishing-only waters, sport fishing is permitted only with not more than one unweighted, single-hook, fly with gap between point and shank three-eighths inch or less, and weights may be used 18 inches or more ahead of the fly. In addition, a bead not attached to the hook is an attractor and is not legal in fly-fishing-only waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase effort, catch, and harvest of sockeye salmon by an unknown amount. It would also result in complicated enforcement of regulations because fishing from a boat would still be prohibited in other king salmon sanctuary areas on the Kenai River downstream of Skilak Lake. Enforcement would also be complicated by the fact that it will be difficult to ascertain if a person fishing from a boat is fishing for species other than king salmon without contacting anglers in each boat present in the fishery.

BACKGROUND: In 1996, the board adopted, at the department's request, seasonal closures that restricted fishing in the confluence areas of Funny River (Figures 253-1) and Killey River. Information gathered during tagging and radiotelemetry studies conducted by the department and other resource agencies in 1990 and 1991 indicated that king salmon entering the Kenai River in May and June primarily spawn in tributaries of the 50-mile section of Kenai River open to king salmon fishing, such as Killey River/Benjamin Creek (46%–64%) and Funny River (approx. 20%), as well as other tributaries, such as Russian River and Slikok, Juneau, Quartz, and Grant creeks (4%–7%) (Table 224-1). Furthermore, a much smaller percentage of fish (9%–28%) entering the Kenai River in May and June were thought to spawn in various reaches of the mainstem below Skilak Lake.

In 2008, each seasonal closure was extended 17 days, from ending on July 15, to continuing until the end of the king season on July 31.

Multiple radiotelemetry studies on the Kenai River have found that early-run king salmon can hold in these seasonally closed confluence areas of the mainstem for some time into July before

ascending tributaries to spawn. A radiotelemetry study in 1990 found that by July 15, 91% of radio-tagged Killey River/Benjamin Creek spawners (46) had left the Kenai River mainstem holding areas to enter the Killey River to migrate upstream to their spawning areas. Similarly, by July 15, 84% of radio-tagged Funny River spawners (19) had left the Kenai River mainstem holding areas to enter the Funny River to migrate upstream to their spawning areas. A radio telemetry study in 1991 found that by July 15, 98% of radio-tagged Killey River spawners (49) had left the Kenai River mainstem holding areas to enter the Killey River to migrate upstream to their spawning areas. Similarly, by July 15, 100% of radiotagged Funny River spawners (16) had left the Kenai River mainstem holding areas to enter the Funny River to migrate upstream to their spawning areas. All radiotagged early-run tributary spawners ascended into these larger tributaries by July 21, while all radiotagged Slikok Creek spawners ascended into Slikok Creek by July 29. Studies also indicated that all king salmon tagged during the early-run period prior to July 1, which were determined to have spawned above the Soldotna Bridge, had migrated past the bridge by July 19.

A weir has been operated in the Funny River, about two miles upstream of the confluence of the Kenai and Funny rivers, from 2006 to present. During this period, the proportion of the total escapement of king salmon to pass through the Funny River weir by July 15 ranged from 65% to 90% (Table 224-2). The latest date a Funny River king salmon passed the weir during this period was August 24. For the past three years, a weir has also been run in Slikok Creek, approximately 0.4 miles upstream of the confluence of the Kenai River. During this period only one fish has passed the weir by July 15. From 2008 to 2010, the proportion of the total escapement of king salmon to pass through Slikok Creek weir by July 25 ranged from 43% to 77%; however, escapements were small with 59, 70, and 28 fish passing through the weir, respectively (Table 224-3). The latest a Slikok Creek king salmon passed through the weir was August 10.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Adoption of this proposal would complicate enforcement because it will be difficult to ascertain if a person fishing from a vessel is fishing for other species or fishing for the purpose of taking king salmon.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

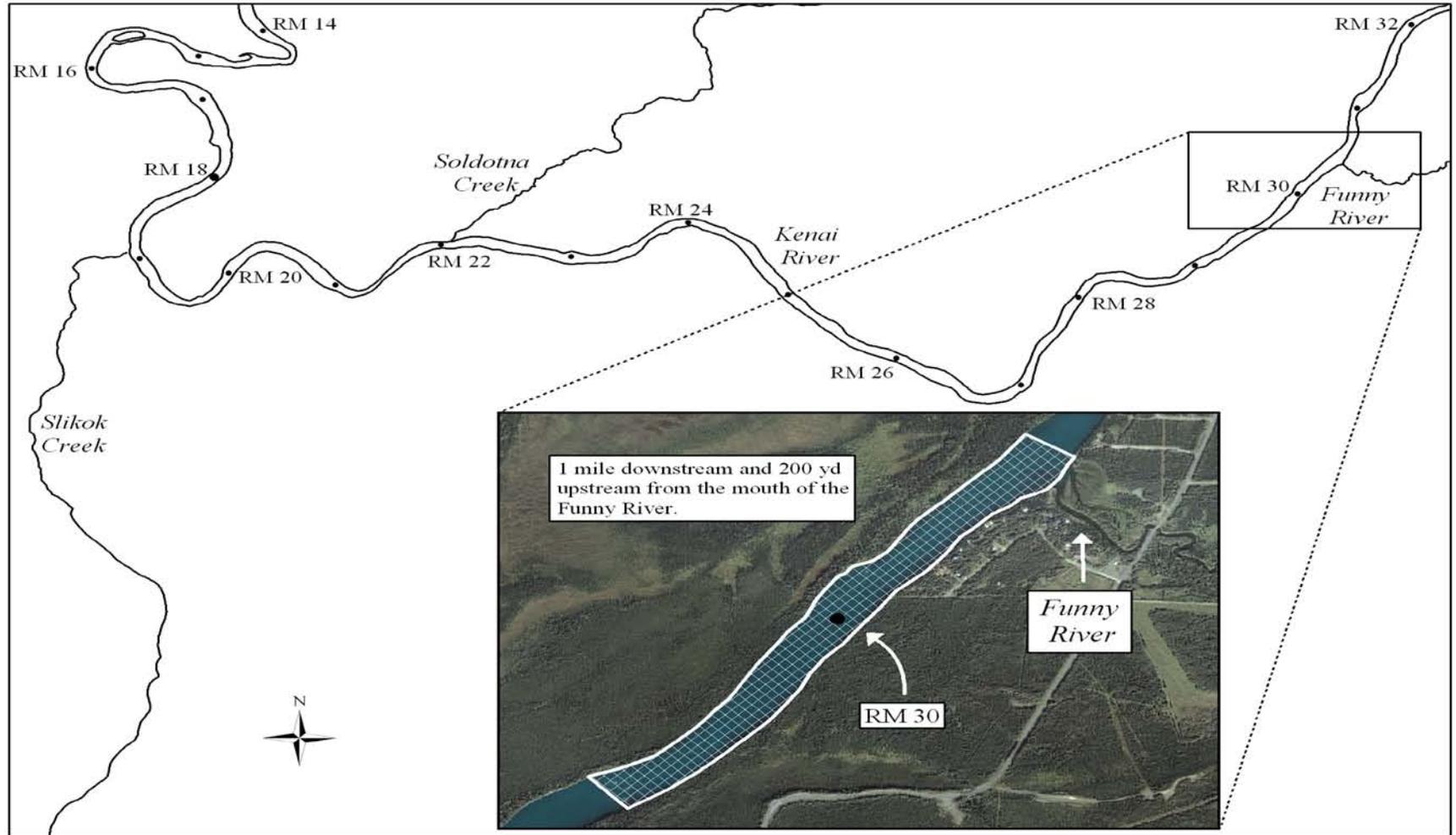


Figure 253-1. Map of the Funny River sanctuary.

PROPOSAL 254 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Dan Mortenson.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a motorized vessel in the Kasilof River drainage downstream of the Sterling Highway Bridge, from January 1–July 31.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River drainage downstream of the Sterling Highway Bridge, from January 1–July 31, a person may not sport fish from a vessel that has on board a motor that is more than 10 horsepower; from January 1–July 31, a motor may be used only between the mouth of the Kasilof River and Trujillo’s Landing, and only after fishing from the vessel has ceased for the day; a person may not deploy sport fishing gear from a vessel after a motor has been used to propel that vessel on the same day. Sport fishing from a power boat is allowed after July 31 downstream of the Sterling Highway Bridge and year-round upstream of the Sterling Highway Bridge.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely increase angler efficiency and harvest potential on king salmon by allowing power boat anglers the ability to fish each hole multiple times. Social conflicts may develop between power boat anglers and drift boat anglers due to crowding and competition for fishing areas. Drift boat anglers and shore anglers would be impacted because the primary methods of fishing for king salmon on the Kasilof River are from shore or from a drift boat.

BACKGROUND: Historically, throughout the 1970s and 1980s, nearly all fishing conducted at the Kasilof River was from the shoreline. Beginning in the 1990s, an increasing number of drift boats were used in the fishery. In 2002, the board adopted regulations prohibiting fishing from a motorized vessel during the king salmon season downstream of the Sterling Highway Bridge. This regulation was adopted in recognition of the predominance of the drift boat fishery and to address the growing number of anglers participating in the Kasilof River early-run king salmon fishery.

The Kasilof River king salmon fishery provides a diverse drift boat king salmon fishing experience that is unique to Southcentral Alaska and unique to king salmon fisheries connected to the Alaska road transportation system. The regulations in place have been developed around the harvest potential of the drift boat and shore fishery. From May through July, anglers fish for king and sockeye salmon, while from August through October anglers fish for sockeye and coho salmon, as well as resident species. Information separating out angling activity by motorized boats and nonmotorized boats participating in the sport fisheries after July is not available. Observations by department staff suggest this fishery is comprised of primarily local anglers using drift boats, although both motorized and nonmotorized boats are present. Even though fishing from a motorized vessel is not prohibited downstream of the Sterling Highway Bridge during August and September, observations indicate anglers primarily use nonmotorized vessels

during that period. Fishing from motorized vessels in the upper Kasilof River near Tustumena Lake is relatively popular during the fall months, September through October.

Prior to the 2009 fishing season, three privately-owned boat landings located in the lower Kasilof River were available for public use. The most popular and desirable landing, due to location, onsite infrastructure, and ease of use, was Trujillo's Landing (Figure 254-1). Trujillo's Landing closed to the public beginning in 2009. Consequently, anglers are required to end nonmotorized fishing trips about midway through the fishing area or continue farther downstream into the tidewater area to exit the fishery. Closure of the access created some social conflict due to the crowding of most nonmotorized vessels into one landing location.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal and is **NEUTRAL** on the social conflict between power boats and drift boats. Allowing fishing from power boats prior to August 1 would likely result in changes in fishing patterns, higher exploitation rates, and substantial regulatory actions in the future to ensure management objectives can be achieved.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

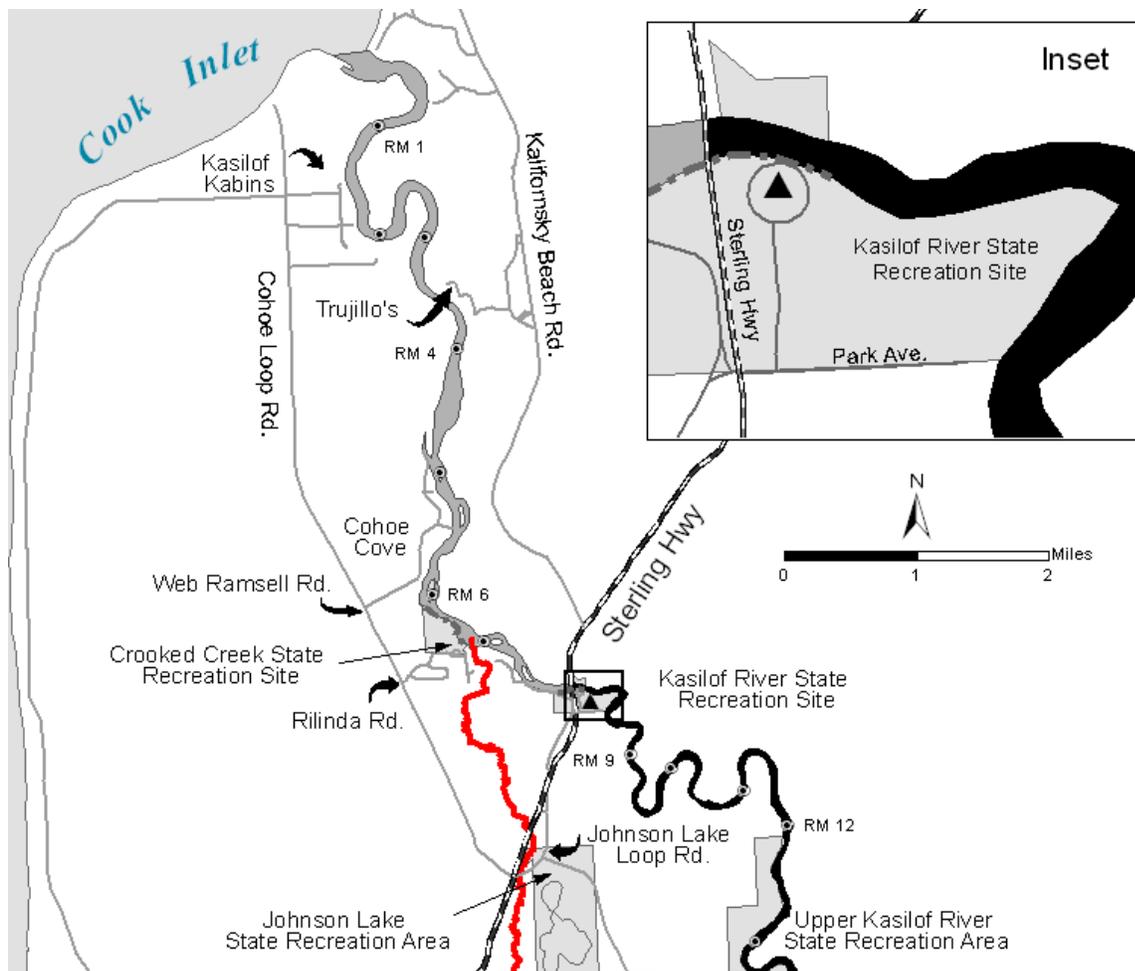


Figure 254-1. Map of Kasilof River.

PROPOSAL 255 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Kenai Area Fisherman’s Coalition.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit fishing from a boat while drifting through that portion of the Kasilof River adjacent to Crooked Creek known as “The People’s Hole” from January 1 through June 30.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River drainage from January 1 to June 30, a person may not sport fish from an anchored vessel in an area from a department regulatory marker located near the mouth of Crooked Creek, downstream approximately 2,700 feet to a department regulatory marker located near the cutbank.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would close approximately one-half of a mile of the lower Kasilof River to sport fishing from a vessel. This proposal may reduce some social conflict between boat anglers and banks anglers during the time boat anglers fish and drift past the area. This proposal would shift boats into other fishing areas. This proposal would not likely have an effect on the total number of king salmon harvested.

BACKGROUND: Historically, throughout the 1970s and 1980s, nearly all fishing conducted at the Kasilof River was from the shoreline. Beginning in the 1990s, an increasing number of drift boats were used in the fishery. In 2002, the board adopted regulations prohibiting fishing from a motorized vessel during king salmon season downstream of the Sterling Highway Bridge. This regulation was adopted in recognition of the predominance of the drift boat fishery and to address the growing number of anglers participating in the Kasilof River early-run king salmon fishery.

Growth in this fishery resulted in public access improvements at the Kasilof River that attracted both shore-based and drift boat anglers. Improvements at the Crooked Creek State Recreation Site attracted shore-based anglers to fish a section of river near the confluence of the Kasilof River and Crooked Creek known as “The People’s Hole” (Figure 255-1). A Kasilof River public boat launch located approximately two river miles upstream from the recreation site attracted drift boat anglers. Conflict due to crowding between these user groups for limited fishing space became a social issue. Shore-based anglers sought to eliminate fishing from drift boats in this area because they felt they were being displaced from the river; this section offered the only public shore-based fishing access to the Kasilof River below the Sterling Highway Bridge.

To provide some parity in fishing opportunity given the very limited public access to sport fishing from shore on the lower Kasilof River and to support a diversity of fishing experiences for the Kasilof River king salmon fishery, the board reached a compromise with both user groups to allow fishing from vessels , but to prohibit fishing from an anchored vessel in this section. This regulation became effective in 2002.

The harvest of early-run king salmon in the lower Kasilof River estimated by department onsite creel surveys from 2004 through 2010 indicates harvest of king salmon by all anglers is trending downwards (Table 255-1). Furthermore, the portion of the total king salmon harvest attributed to shore anglers has declined (Table 255-1). Low king salmon catch rates may be due to several factors, including lower king salmon stocking levels, lower marine survival of stocked fish, lower productivity of naturally-produced king salmon, removal by harvest of king salmon downstream of the “The People’s Hole,” or lower fishing effort from shore-based anglers than in the past.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 255-1. Fishing effort, catch and harvest of early-run king salmon by angler type, Kasilof River creel survey, May 16 through June 30, 2004–2010.

Year	Shore Guided				Shore Unguided				Shore Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	0	0	0	0	5,138	15,096	1,643	503	5,138	15,096	1,643	503
2005	0	0	0	0	5,142	16,452	1,366	497	5,142	16,452	1,366	497
2006	0	0	0	0	7,910	23,199	887	296	7,910	23,199	887	296
2007	0	0	0	0	6,181	17,953	747	329	6,181	17,953	747	329
2008	57	248	14	14	6,511	19,712	564	274	6,568	19,960	578	288
2009	50	204	0	0	6,242	17,091	354	169	6,292	17,295	354	169
2010	4	10	0	0	4,743	14,371	660	170	4,747	14,381	660	170
Year	Boat Guided				Boat Unguided				Boat Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	2,550	12,089	983	426	6,878	36,759	4,446	1,905
2005	4,615	32,840	3,446	1,768	2,297	11,300	743	401	6,912	44,140	4,189	2,169
2006	5,410	38,065	3,330	1,818	2,928	13,994	553	375	8,338	52,059	3,883	2,193
2007	4,625	32,363	3,162	1,940	2,109	10,926	516	384	6,734	43,289	3,678	2,324
2008	4,420	31,113	2,303	1,490	2,325	10,740	304	207	6,745	41,853	2,607	1,697
2009	3,526	24,255	1,711	1,196	1,575	7,361	211	166	5,101	31,616	1,922	1,362
2010	4,790	33,792	2,334	1,089	963	4,800	135	74	5,753	38,592	2,469	1,163
Year	Guided Total				Unguided Total				Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	7,688	27,185	2,626	929	12,016	51,855	6,089	2,408
2005	4,615	32,840	3,446	1,768	7,439	27,752	2,109	898	12,054	60,592	5,555	2,666
2006	5,410	38,065	3,330	1,818	10,838	37,193	1,440	671	16,248	75,258	4,770	2,489
2007	4,625	32,363	3,162	1,940	8,290	28,879	1,263	713	12,915	61,242	4,425	2,653
2008	4,477	31,361	2,317	1,504	8,836	30,452	868	481	13,313	61,813	3,185	1,985
2009	3,576	24,459	1,711	1,196	7,817	24,452	565	335	11,393	48,911	2,276	1,531
2010	4,794	33,802	2,334	1,089	5,706	19,171	795	244	10,500	52,973	3,129	1,333
Average	4,546	31,080	2,823	1,542	8,088	27,869	1,381	610	12,634	58,949	4,204	2,152
% of Total	36%	53%	67%	72%	64%	47%	33%	28%				

Source: Preliminary estimates from the Kasilof River early-run king salmon angler creel survey, 2004-2010.

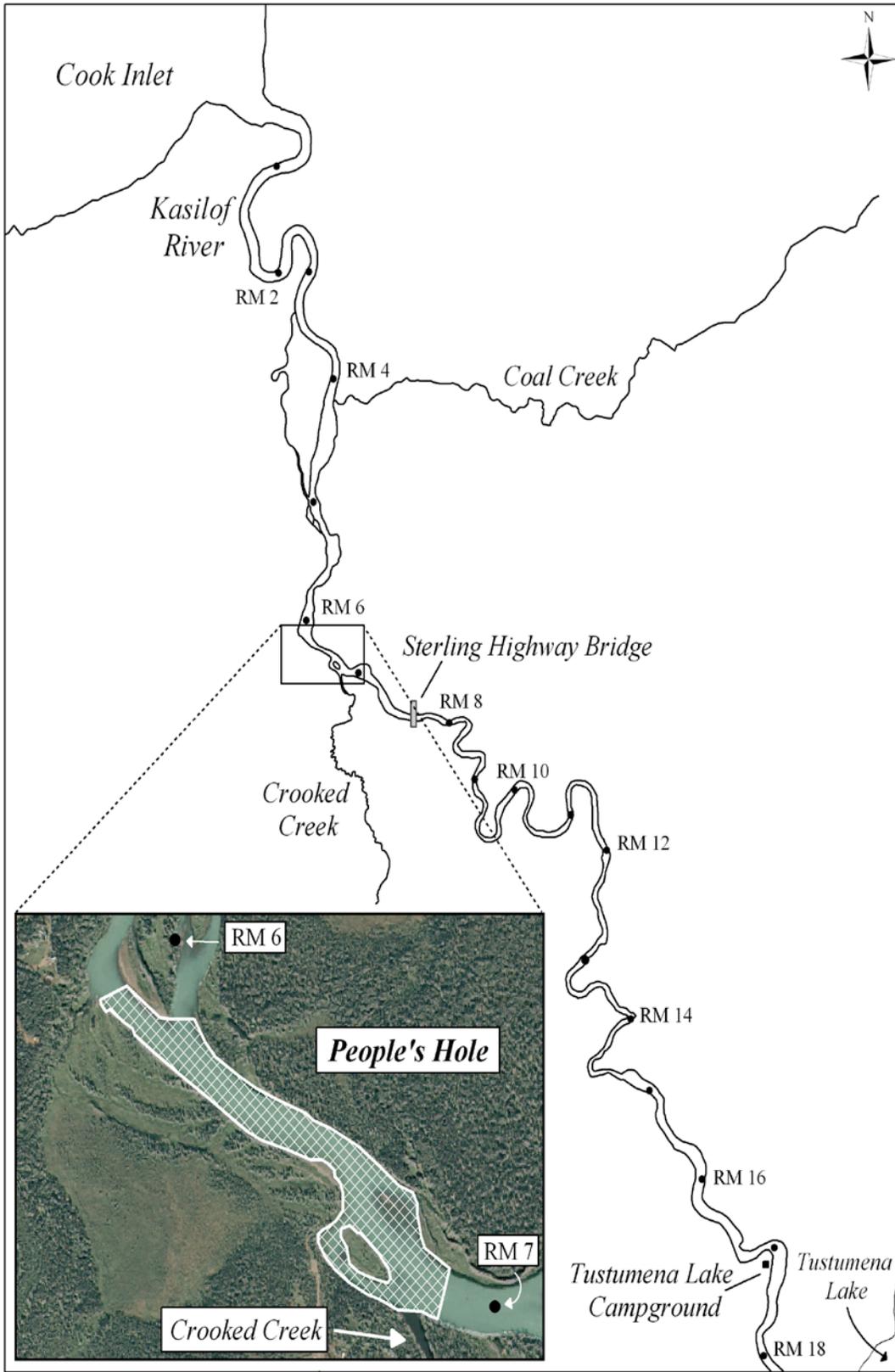


Figure 255-1. Map of Kasilof River showing "The People's Hole".

PROPOSAL 256 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Scott Eggemeyer.

WHAT WOULD THE PROPOSAL DO? This proposal would allow boat anglers to land a fish in the Kasilof River while anchored across from the area adjacent to Crooked Creek known as “The People’s Hole,” and only within one oar length of the waterline.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River drainage from January 1 to June 30, a person may not sport fish from an anchored vessel in an area from a department regulatory marker located near the mouth of Crooked Creek, downstream approximately 2,700 feet to a department regulatory marker located near the cutbank.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase boating safety by an unknown, but likely small, amount. This proposal may increase social conflict between boat anglers and bank anglers

BACKGROUND: Historically, throughout the 1970s and 1980s, nearly all fishing conducted at the Kasilof River was from the shoreline. Beginning in the 1990s, an increasing number of drift boats were used in the fishery. In 2002, the board adopted regulations prohibiting fishing from a motorized vessel during king salmon season downstream of the Sterling Highway Bridge. This regulation was adopted in recognition of the predominance of the drift boat fishery and to address the growing number of anglers participating in the Kasilof River early-run king salmon fishery.

Growth in this fishery resulted in public access improvements at the Kasilof River that attracted both shore-based and drift boat anglers. Improvements at the Crooked Creek State Recreation Site attracted shore-based anglers to fish a section of river near the confluence of the Kasilof River and Crooked Creek. A Kasilof River public boat launch located approximately two river miles upstream from the recreation site attracted drift boat anglers. Conflict due to crowding between these user groups for limited fishing space became a social issue. Shore-based anglers sought to eliminate fishing from drift boats in this area; they felt they were being displaced from the river because this section offered the only public shore-based fishing access to the Kasilof River below the Sterling Highway Bridge.

To provide some parity in fishing opportunity given the very limited public access to sport fishing from shore on the lower Kasilof River and to support a diversity of fishing experiences for the Kasilof River king salmon fishery, the board reached a compromise with both user groups to allow fishing from vessels in the river section known as “The People’s Hole” (Figure 256-1), but to prohibit fishing from an anchored vessel. This regulation became effective in 2002.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The proposal does not define the exact distance from shore or how that distance would be applied to

sport fishing boats, and it is not specified in the proposal what actual distance an "oar length" is. To be enforceable, these issues would need clear definition.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

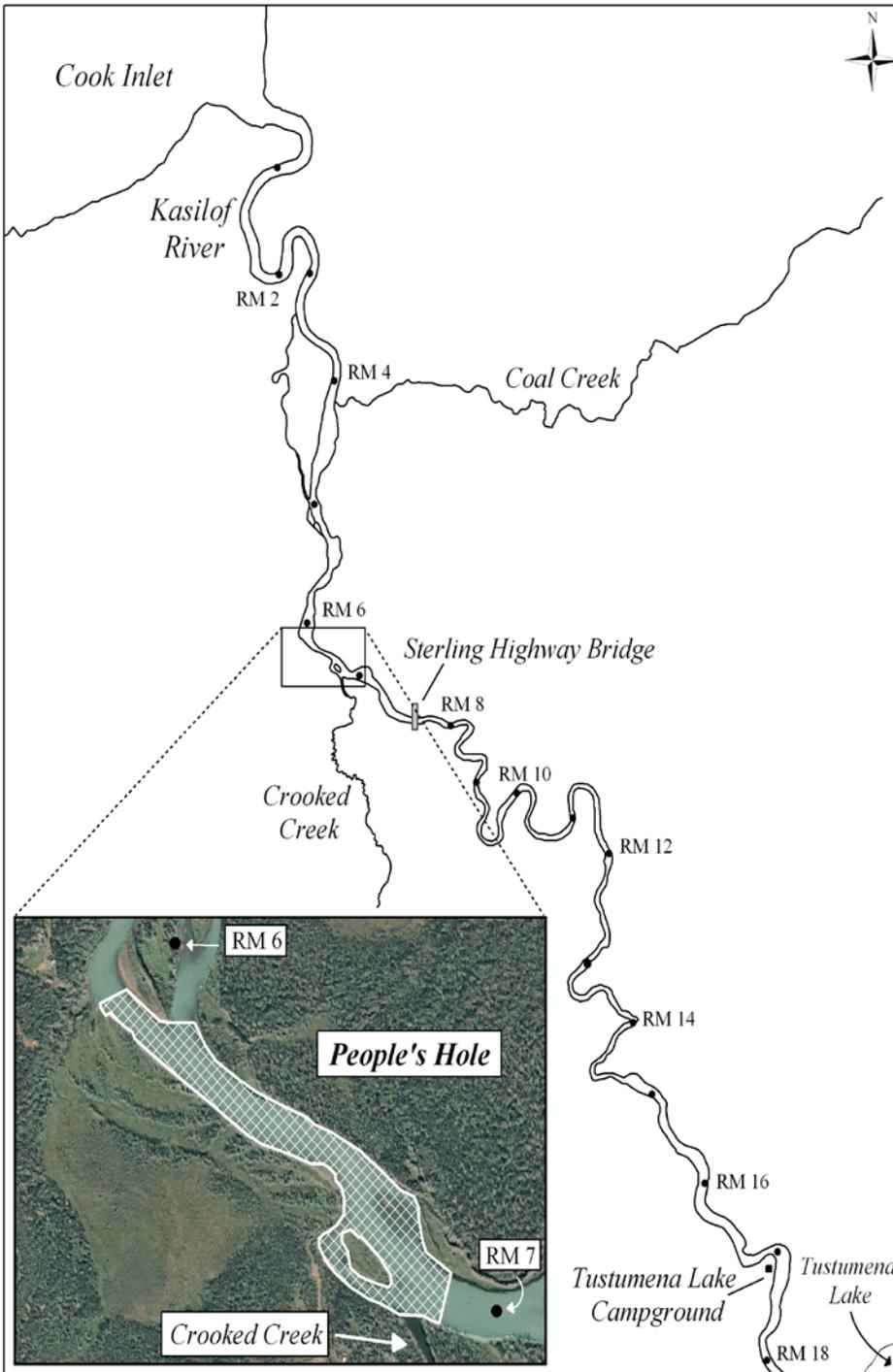


Figure 256-1. Map of Kasilof River showing "The People's Hole".

PROPOSAL 257 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Greg Brush.

WHAT WOULD THE PROPOSAL DO? This proposal would move the existing boundary marker for using a motor to exit the fishery on lower Kasilof River upstream approximately one-half mile.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River drainage downstream of the Sterling Highway Bridge, from January 1–July 31, a person may not sport fish from a vessel that has on board a motor that is more than 10 horsepower; from January 1–July 31, a motor may be used only between the mouth of the Kasilof River and Trujillo’s Landing, and only after fishing from the vessel has ceased for the day; a person may not deploy sport fishing gear from a vessel after a motor has been used to propel that vessel on the same day. Sport fishing from a power boat is allowed after July 31 downstream of the Sterling Highway Bridge and year-round upstream of the Sterling Highway Bridge.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would make it more convenient for boat anglers to exit the fishery. This proposal may increase the interaction between anglers fishing from drift boats and motorized vessels traveling downstream under power.

BACKGROUND: Historically, throughout the 1970s and 1980s, nearly all fishing conducted at the Kasilof River was from the shoreline. Beginning in the 1990s, an increasing number of drift boats were used in the fishery. In 2002, the board adopted regulations prohibiting fishing from a motorized vessel during king salmon season downstream of the Sterling Highway Bridge. This regulation was adopted in recognition of the predominance of the drift boat fishery and to address the growing number of anglers participating in the Kasilof River early-run king salmon fishery. Current regulations allowing use of a motor less than 10 horsepower only after fishing has ceased for the day were adopted at the March 2003 board meeting. The intent of this regulation was to provide angler safety while anglers traveled farther downstream to exit the fishery during unfavorable tides/winds.

Prior to the 2009 fishing season, three privately-owned boat landings located in the lower Kasilof River were available for public use. The most popular and desirable landing, due to location, onsite infrastructure, and ease of use, was Trujillo’s Landing. Trujillo’s Landing was the motor use boundary adopted into regulation during 2003 and is approximately one-half of a river mile downstream of the fishing area targeted by anglers (Figure 257-1). Therefore, anglers exiting at Trujillo’s often did not use motors to exit the fishery; however, many boats that exited the fishery downstream of Trujillo’s utilized motors. Trujillo’s is now closed to the public. Consequently, anglers are required to continue approximately 2.5 additional river miles downstream from the fishing area and travel well into the tidewater area to exit the fishery.

DEPARTMENT COMMENTS: The department **NEUTRAL** this proposal. This regulation has been enforceable since it was implemented in 2003. Due to changes in river use patterns caused by closure of a boat landing site, moving the marker upstream approximately one-half of a river mile to a new location aligns with the intent of the current regulation and is not likely to create concern about enforcement of the regulation.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

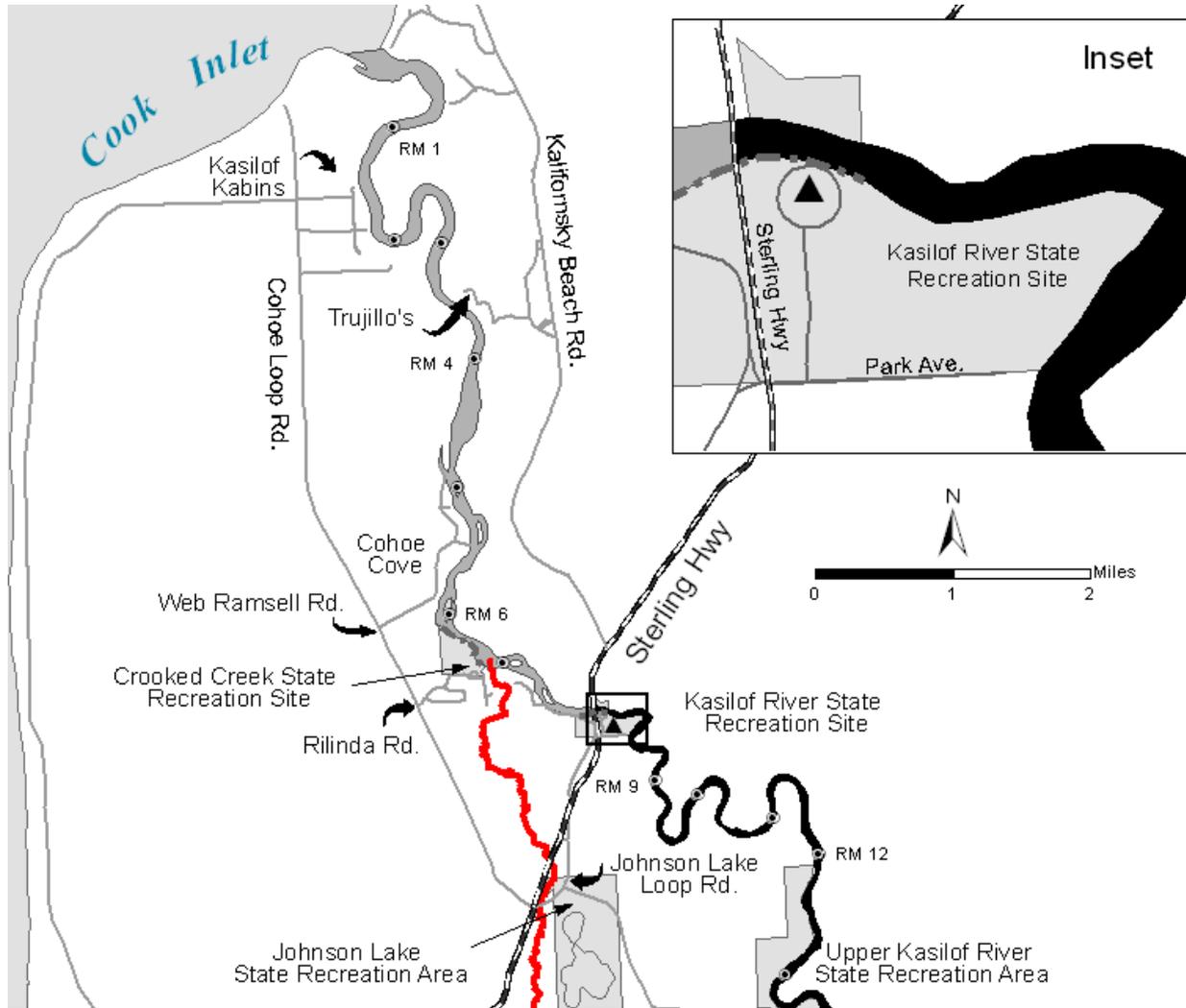


Figure 257-1. Map of Kasilof River showing "Trujillo's Landing" motor use boundary location.

PROPOSAL 258 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, bag possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would rename the boundary marker that designates the beginning of an area where seasonal motor use is allowed on the lower Kasilof River.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River drainage downstream of the Sterling Highway Bridge, from January 1–July 31, a person may not sport fish from a vessel that has on board a motor that is more than 10 horsepower; from January 1–July 31; a motor may be used only between the mouth of the Kasilof River and Trujillo’s Landing, and only after fishing from the vessel has ceased for the day; a person may not deploy sport fishing gear from a vessel after a motor has been used to propel that vessel on the same day. Sport fishing from a power boat is allowed after July 31 downstream of the Sterling Highway Bridge and year-round upstream of the Sterling Highway Bridge.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in clarifying where a motor can be used on the lower Kasilof River once fishing from the vessel has ceased for the day.

BACKGROUND: This proposal is housekeeping in nature. The boat landing most commonly used and evident to boaters during the fishery, Trujillo’s Landing, is named in regulation as the lower boundary for motor use (Figure 258-1). Trujillo’s Landing is now closed to public use and no longer in business. A department marker is now the appropriate tool to provide the location reference point for motor use.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

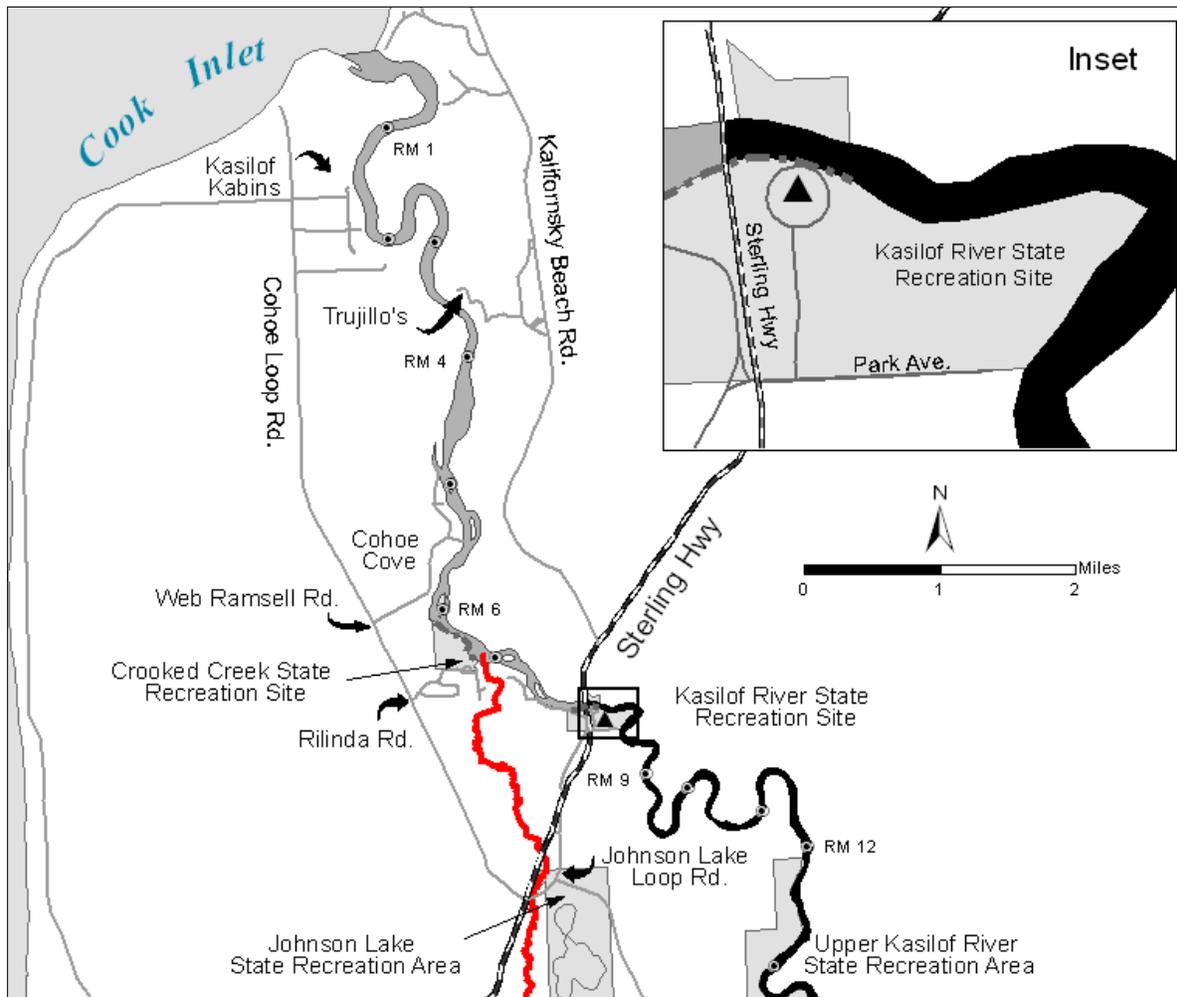


Figure 258-1. Map of Kasilof River showing "Trujillo's Landing" motor use boundary location.

PROPOSAL 259 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Kenai Soldotna Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the bag limit for king salmon on the Kasilof River from two fish, of which only one may be a naturally-produced king salmon, to one fish, either hatchery- or naturally-produced.

WHAT ARE THE CURRENT REGULATIONS? In Kasilof River drainage, excluding Crooked Creek and Tustumena Lake and its tributaries, from January 1–June 30, bag and possession limit for king salmon 20 inches or greater in length is two fish, of which only one fish may be a naturally-produced king salmon. A naturally-produced king salmon may be retained on Tuesdays, Thursdays, and Saturdays only.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the harvest and harvest opportunity for those hatchery-produced king salmon in the Kasilof River that are surplus to escapement needs. It would also increase the number of hatchery-produced king salmon in the escapement.

BACKGROUND: The Kasilof River supports both early-and late-run king salmon. King salmon returning to the Kasilof River prior to July 1 originate primarily from Crooked Creek, a Kasilof River tributary, and are managed as early-run fish. Late-run king salmon return from July through early September and originate primarily from the mainstem and, to a lesser extent, Crooked Creek.

From 1988–1996, the number of naturally-produced king salmon in the spawning escapement in Crooked Creek upstream from the weir was held at approximately 700 fish. During this time, total returns, supported mostly by annually stocking approximately 200,000 king salmon smolt, were thought to range from approximately 2,800 to 8,600 fish. Harvest of early-run king salmon was first estimated by the Statewide Harvest Survey in 1996. From 1996 to 2001, the years of the returns from the high stocking levels of 1988–1996, the average annual early-run king salmon harvest was 6,500 fish. Beginning in 1999, the number of fish allowed in Crooked Creek upstream of the weir to spawn was increased to approximately 2,700 king salmon. This action was taken to evaluate the potential returns from naturally-spawning king salmon as a means of compensating for a proposed reduction in stocking levels. From 1994 to 1999, an average of 192,500 smolt were stocked annually; since 2000, the number of smolt stocked has averaged 106,000 annually (Table 259-1). The stocking level was reduced in response to significant numbers of Crooked Creek early-run hatchery king salmon straying into Slikok Creek, a tributary of the Kenai River.

The current early-run king salmon sustainable escapement goal, set in 2001, is a range of 650 to 1,700 naturally-produced king salmon as established by weir counts at Crooked Creek. In 2002, the department began estimating the age, sex, and length composition of naturally and hatchery-produced king salmon returning to Crooked Creek at a weir located above the area open to

fishing at the Crooked Creek facility. At the weir, naturally-produced king salmon broodstock are collected for egg-takes to enhance Kasilof River early-run king salmon stocks. Approximately 50 returning adult naturally-produced fish are utilized for broodstock and the resulting smolt production is returned to Crooked Creek. Hatchery-produced king salmon adults that reach the weir are considered to be surplus stock excess to escapement needs.

A creel survey was conducted during the early run fishery during 2004 through 2010 to better estimate catch and harvest of early-run king salmon. Sport fishing effort, estimated in angler hours, has declined from 75,258 hours in 2006 to 52,973 hours in 2010 (Table 259-2).

The retention of naturally-produced early-run king salmon from the Kasilof River was first prohibited by emergency order in 2002 because of increased angler participation due a closure to sport fishing in the Kenai River and concern for not meeting the escapement goal. The Kasilof action resulted in an escapement of an estimated 813 naturally-produced king salmon and an estimated harvest of 4,791 king salmon. In 2003, the board passed regulations prohibiting retention of naturally-produced fish from the Kasilof River. During the 2003 and 2004 seasons, when the harvest of naturally-produced king salmon was prohibited, a total of 3,090 and 2,407 hatchery king salmon were harvested, and the escapement goal of naturally-produced fish was exceeded by 698 and 496 fish, respectively (Table 259-2). An additional escapement of 1,097 and 2,160 hatchery king salmon also occurred, indicating there was still a surplus of hatchery and naturally-produced king salmon. Due to increasing escapements of naturally-produced fish and the fact that the natural production could likely sustain some level of harvest, the board adopted regulations in 2005, which allowed the retention of naturally-produced fish two days each week, and which provided the ability to allow an additional third day by emergency order. In 2006 and 2007, Thursday was added by emergency order as the third day naturally-produced fish could be retained. In 2008, the board adopted two new regulations for the Kasilof River. The first added a third day naturally-produced fish could be retained, and the second increased the bag limit for hatchery-produced fish to two per day and two in possession.

The numbers of naturally-produced king salmon in the escapement exceeded the goal in 2005 (1,909) and achieved the goal in 2006 (1,516), 2007 (965), 2008 (879), and 2010 (1,088); the goal was not achieved in 2009 (617). Over this same time the escapement of surplus hatchery king salmon ranged from 117 to 1,027 king salmon.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The increased bag limit is used to harvest surplus hatchery king salmon. The increased bag limit for hatchery-produced early-run king salmon in the Kasilof River is a component of the enhancement program design that, to the maximum extent possible, maintains the genetic diversity of and reduces the adverse impacts from the enhancement efforts on naturally-produced Kasilof River early-run king salmon.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 259-1. Historical releases of adipose fin-clipped Crooked Creek king salmon, 1994–2010.

Release year	Broodstock Origin	Hatchery	No. of smolt released	No. of AFC smolt released	% AFC
1994	Crooked Creek	Elmendorf	224,784	43,609	19.4%
1995	Homer (Crooked Creek) ^a	Elmendorf	184,049	40,903	22.2%
1996	Homer (Crooked Creek) ^a	Elmendorf	193,180	40,827	21.1%
1997	Homer (Crooked Creek) ^a	Elmendorf	223,201	41,049	18.4%
1998	Homer (Crooked Creek) ^a	Elmendorf	137,338	42,874	31.2%
1999	Homer (Crooked Creek) ^a	Elmendorf	192,304	43,431	22.6%
2000	Crooked Creek	Elmendorf	108,507	108,507	100.0%
2001	Crooked Creek	Elmendorf	109,201	109,201	100.0%
2002	Crooked Creek	Elmendorf	99,547	99,547	100.0%
2003	Crooked Creek	Ft. Richardson	98,800	98,800	100.0%
2004	Crooked Creek	Ft. Richardson	80,601	80,601	100.0%
2005	Crooked Creek	Ft. Richardson	113,613	113,071	99.5%
2006	Crooked Creek	Ft. Richardson	111,705	111,705	100.0%
2007	Crooked Creek	Ft. Richardson	111,382	111,271	99.9%
2008	Crooked Creek	Ft. Richardson	114,588	114,588	100.0%
2009	Crooked Creek	Ft. Richardson	115,035	114,734	99.7%
2010	Crooked Creek	Ft. Richardson	106,145	106,145	100.0%
Average					
1994-1999			192,476		
Average					
2000-2010			106,284		

a Broodstock collection occurred at the Nick Dudiak Fishing Lagoon. Broodstock at this collection site were Crooked Creek progeny.

AFC = Adipose fin clip

Table 259-2. Historical summary of early-run Kasilof River/Crooked Creek king salmon stocks, 1996–2010.

Year	Harvest ^a		Return to the weir ^b			Total Return ^b		Spawning Escapement ^b				
	Total	Naturally Produced	Hatchery Produced	Total	Naturally Produced	Hatchery Produced	Total	Naturally Produced	Hatchery Produced	Total	Naturally Produced	Hatchery Produced
1996	5,295	ND	ND	2,224	ND	ND	7,519	ND	ND	764	ND	ND
1997 ^c	5,627	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1998 ^c	4,201	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1999	7,597	ND	ND	1,791			9,388			1,397		
2000	8,815	ND	ND	1,416			10,231			1,077		
2001	7,488	ND	ND	2,586			10,074			2,315		
2002	4,791	0 ^d	0 ^d	3,326			8,117			2,705	813	1,892
2003	3,090	0 ^d	3,090	4,127			7,217			3,597	2,396	1,201
2004	2,407	0 ^d	2,407	4,873	2,641	2,232	7,280	2,641	4,639	4,356	2,196	2,160
2005 ^e	2,665	572	2,093	3,231	2,160	1,071	5,896	2,732	3,164	2,936	1,909	1,027
2006 ^e	2,489	1,057	1,432	2,646	1,589	1,057	5,135	2,646	2,489	2,569	1,516	1,053
2007 ^e	2,654	1,107	1,547	1,527	1,038	489	4,181	2,145	2,036	1,452	965	487
2008 ^e	1,984	832	1,129	1,414	1,018	396	3,398	1,850	1,525	1,181	879	302
2009 ^e	1,532	576	956	929	674	255	2,461	1,250	1,211	734	617	117
2010 ^{e,f}	1,333	273	1,060	1,352	1,090	262	2,685	1,363	1,322	1,348	1,088	260
Mean	4,131			2,419			6,429			2,033		

Source: Cope *In prep*; J. L. Cope, Sport Fish Biologist, ADF&G, Soldotna, personal communication; Howe et al. 2001a-d, Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b; G. B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage, personal communication.

^a 1996-2003 data from SWHS; 2004 - 2010 data from inseason creel survey; does not include harvest in Kasilof River personal use fishery.

^b Excludes age-0.1 fish 1999-2010. Prior to 2004, hatchery returns were not marked at a rate of 100% and hatchery and naturally-produced escapements are estimated.

^c Weir not operational.

^d Retention of naturally-produced prohibited for part of 2002 season; prior to 2004 hatchery, returns were not marked at a rate of 100%.

The hatchery contribution to the harvest has not been estimated for 2002.

^e Retention of naturally produced king salmon limited to Tuesdays and Saturdays in 2005, then changed by EO in 2006-2007 to include Thursdays; in 2008 regulations were changed to allow retention of naturally-produced king salmon on Tuesdays, Thursdays, and Saturdays only, with a limit of two king salmon per day of which only one may be naturally-produced; annual limits apply.

Note: ND = no data collected.

PROPOSAL 260 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Greg Brush.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing from a boat in the flowing waters of the Kasilof River upstream of the Sterling Highway Bridge from July 1 through August 15.

WHAT ARE THE CURRENT REGULATIONS? From August 1 through August 15, fishing from a boat is prohibited in the flowing waters of the Kasilof River upstream of the Sterling Highway Bridge. The open season for king salmon is January 1–June 30.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase the effort, catch, and harvest of coho salmon by an unknown amount. This proposal may also increase the incidence of anglers illegally targeting king salmon under the guise of fishing for coho salmon. This proposal is unlikely to jeopardize the sustainability of king and coho salmon.

BACKGROUND: The Kasilof River supports both early-and late-run king salmon. King salmon returning to the Kasilof River prior to July 1 originate primarily from Crooked Creek, a Kasilof River tributary, and are managed as early-run fish. Late-run king salmon return from July through early September and originate primarily from the mainstem and, to a lesser extent, Crooked Creek. Late-run king salmon are thought to spawn from mid August through September. There is no escapement goal for Kasilof River late-run king salmon. From 1996–2006, harvest, as estimated by the Statewide Harvest Survey, has averaged 1,020 late-run king salmon (Table 260-1). In 2005, the department began a late-run king salmon assessment program to estimate run-timing and spawning distribution. Results indicate that spawning king salmon aggregations occur during August throughout the Kasilof River upstream of the Sterling Highway bridge crossing (Figure 260-1). The estimated abundance of late-run king salmon ranged from 8,276 to 12,097 fish from 2005–2008 (Table 260-1).

Prior to 2008, angler effort above the bridge during August resulted in some enforcement problems associated with anglers, under the guise of fishing for coho salmon, actively attempting to take king salmon in an area closed to king salmon fishing. Prior to 2008, regulations allowed anglers to fish throughout this area, where pre-spawning aggregations of king salmon are easily identified and are vulnerable to fishing. Typically on this section of the Kasilof River during July and August, anglers are fishing for sockeye and coho salmon, and, to a lesser extent, resident species. When fishing for coho salmon, anglers use a terminal gear configuration (line weight, hook, and bait size) similar to that used to fish for king salmon in the Kasilof River. Consequently, anglers may target king salmon in waters closed to king salmon fishing under the false pretext of fishing for coho salmon. Since these anglers use similar terminal gear for coho salmon and generally do not harvest king salmon, law enforcement has difficulty enforcing the king salmon fishing closure. Fishing effort in the upper Kasilof River is relatively low in July

and early August and closing sections of the river resulted in a loss of fishing opportunity for coho salmon and resident species.

A federal subsistence fishery also takes place in Kasilof River waters within the Kenai National Wildlife Refuge from the outlet of Tustumena Lake downstream to the first set of rapids (Silver Salmon Rapids). In this fishery, salmon may be taken by dip net, rod and reel, or by fish wheel. Seasons and harvest limits depend on the species. Specifically, king and sockeye salmon may be taken from June 16–August 15. The harvest limit for king salmon is 10 per permit holder and two for each additional household member, while for sockeye, the harvest limit is 25 per permit holder and five for each additional household member. For coho and pink salmon, the season is June 16–October 31 and harvest limits are the same as those for king salmon (10 per permit holder and two for each additional household member). The reported king salmon harvest in this fishery was zero from 2007 through 2010.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Although there are no conservation issues with late-run king salmon and coho salmon in the Kasilof River, the current regulation does help to prevent illegal fishing activity.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 260-1. Estimated harvest and inriver abundance of late-run king salmon, Kasilof River, 1996–2009.

Year	Harvest	Inriver Abundance
1996	833	ND
1997	1,101	ND
1998	637	ND
1999	658	ND
2000	1,086	ND
2001	1,378	ND
2002	451	ND
2003	1,144	ND
2004	1,038	ND
2005	1,052	12,097
2006	883	8,611
2007	1,062	8,522
2008	793	8,276
2009	2,164	ND
Min	451	8,276
Max	2,164	12,097
Average	1,020	9,377

ND = no data collected.

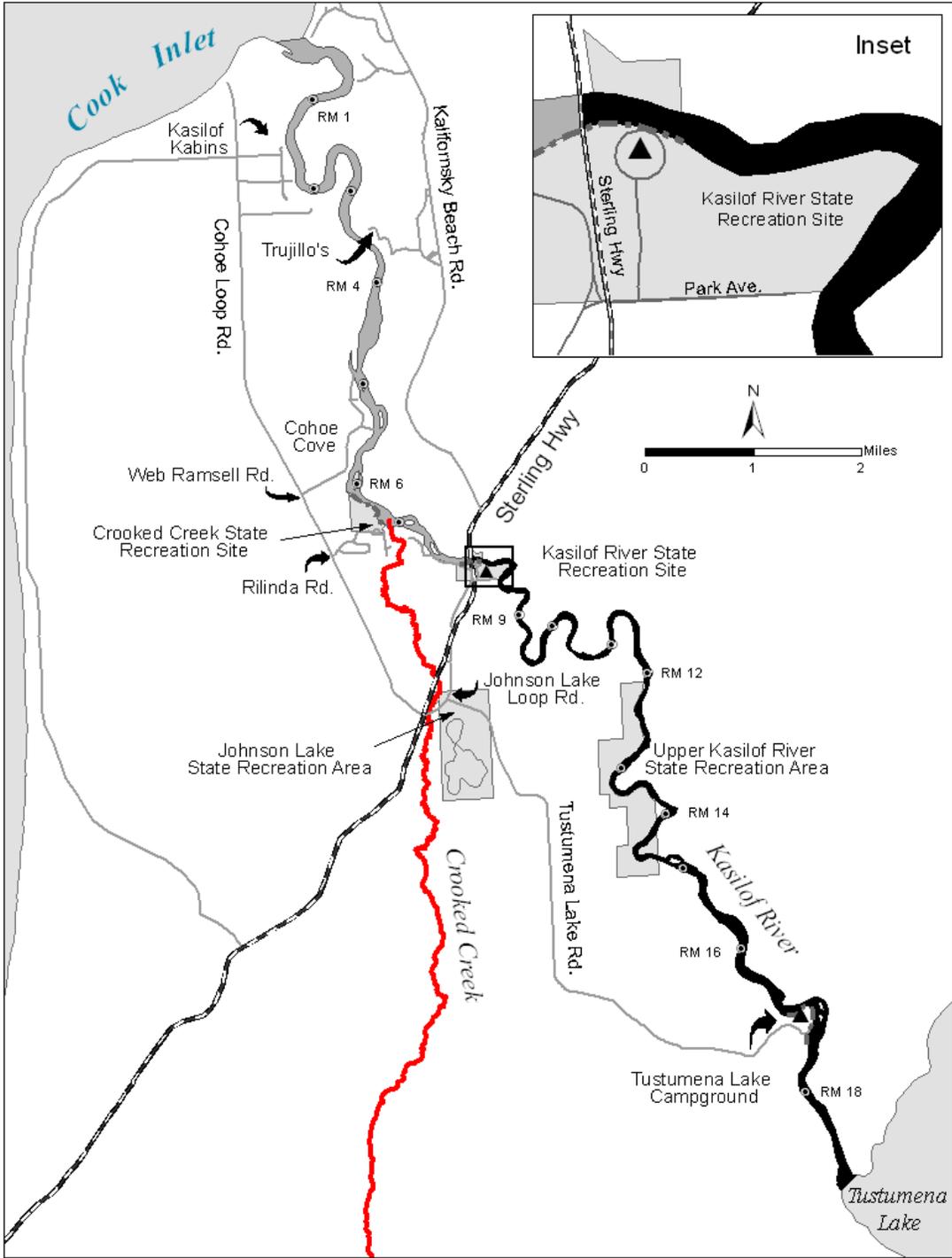


Figure 260-1. Map of Kasilof River.

PROPOSAL 261 - 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Kenai River Professional Guide Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow use of bait in the Kasilof River for an additional two weeks in September.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River (excluding Crooked Creek, Coal Creek, and Tustumena Lake and its tributaries) from its mouth upstream to the Sterling Highway Bridge, only one unbaited, single-hook, artificial lure is allowed September 1–May 15. From the Sterling Highway Bridge upstream to department markers located at the outlet of Tustumena Lake, only unbaited, artificial lures are allowed September 16–December 31.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase catch and harvest of fish by an unknown amount during the first 15 days of September.

BACKGROUND: During the first 15 days of September, anglers primarily target coho salmon and to a lesser extent, Dolly Varden and steelhead trout. Run timing is mid July to October for coho salmon and approximately late August through October for steelhead trout, while Dolly Varden are present in the fishery year-round.

Past regulations governing the use of bait in the Kasilof River were liberal and became more conservative to address concerns regarding mortality of steelhead trout. The Kasilof River steelhead trout stock was enhanced through a hatchery supplementation program conducted at Crooked Creek, a lower river tributary, from the early 1980s through 1993. In the steelhead fishery, bait was allowed and harvests in the drainage were controlled by the statewide standard regulations for rainbow/steelhead trout. The statewide standard, still in effect today, allows the harvest of two per day/in possession, of which only one may be 20 inches or greater in total length, with an annual limit of two fish 20 inches or greater in length. In 1993, the steelhead trout enhancement program was discontinued due to concerns about straying. At the time, it was thought nearly all of the Kasilof River steelhead stock originated from Crooked Creek. Consequently, regulations were created in 1996 that were aimed to protect steelhead trout resulted in the: 1) prohibition of retention of steelhead year-round downstream of the Sterling Highway Bridge, and 2) restriction of terminal tackle to only one unbaited, single-hook, artificial lure from September 1–May 15. Starting in 2000, terminal tackle was restricted to only unbaited, artificial lures from September 16–December 31 upstream of the Sterling Highway Bridge when all Kenai Peninsula flowing waters, excluding the Kenai River, were also restricted as such (Figure 261-1).

Recent steelhead trout assessment projects conducted by the U.S. Fish and Wildlife Service indicate the steelhead population is comprised of fish that overwinter and spawn throughout the drainage, immigration occurs primarily in September–October, and the numbers of fish

immigrating into Crooked Creek during spring to spawn ranged from 206 in 2004 to 877 in 2008 (Table 261-1). The number of steelhead enumerated at Nikolai Creek, a tributary of Tustumena Lake, ranged from 84 in 2005 to 660 in 2008 (Table 261-1). The Statewide Harvest Survey, as well as guide logbook catch and harvest data, indicate exploitation of rainbow/steelhead trout in the Kasilof River is likely quite low because harvest of steelhead trout has averaged 15 fish per year in the Kasilof River sport fishery since 2004 (Table 261-1).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Current regulations for late-season fisheries within the Kasilof River drainage are not consistent and are more restrictive than regulations in other locations that support similar fisheries.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

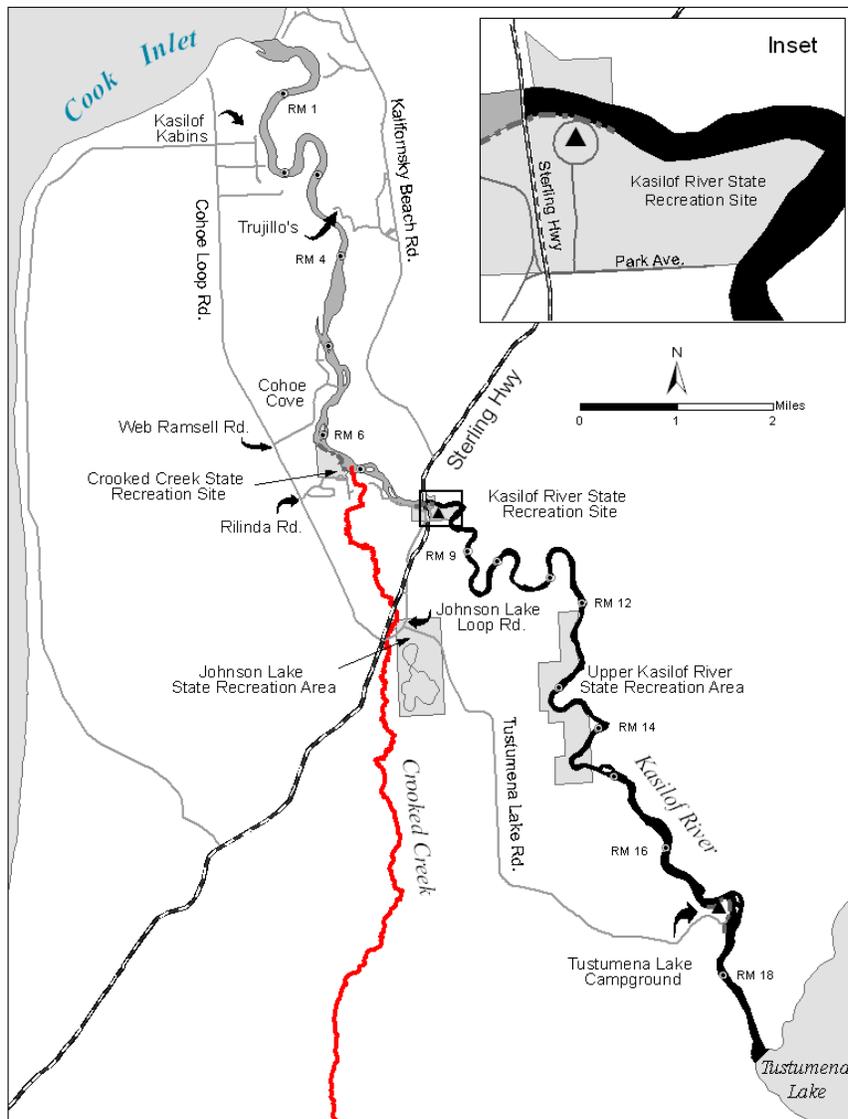


Figure 261-1. Map of Kasilof River.

Table 261-1. Catch, harvest, and weir counts of steelhead trout in the Kasilof River drainage, 1986–2009.

Year	Catch ^a	Harvest ^a	Crooked Creek Weir Count of Steelhead ^c	Nikolai Creek Weir Count of Steelhead
1986	ND	92		
1987	ND	185	142	
1988	ND	36	228	
1989	ND	48	420	
1990	ND	145	236	
1991	179	12	ND	
1992	1,746	520	805	
1993	7,517	2,237	2,960	
1994	6,156	1,262	511	
1995	3,835	692	583	
1996 ^b	1,320	36	108	
1997 ^b	552	7		
1998 ^b	223	0		
1999 ^b	764	0		
2000 ^b	617	65		
2001 ^b	577	26		
2002 ^b	983	21		
2003 ^b	619	26		
2004 ^b	299	0	206	
2005 ^b	954	38	399	84
2006 ^b	380	7	605	451
2007 ^b	628	8	766	630
2008 ^b	506	0	877	660
2009 ^b	619	38	584	496
Average				
2004-2009	564	15	573	464

^aSource: Statewide Harvest Surveys from Mills 1979-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010a-b; G. B. Jennings, Sport Fish Program Coordinator, ADF&G, Anchorage, personal communication. Kasilof River drainage data. Hatchery return began in 1986 stocking terminated 1993.

^b Fishery regulated as catch and release beginning in 1996 below Sterling Hwy. bridge; retention allowed above the Sterling Hwy. Bridge.

^c Weir not installed to count steelhead 1997-2003; weir installed early to count steelhead 2004-2009 by USFWS.

ND - No data available

PROPOSAL 262 - 5 AAC 56.140. Kasilof River guiding and guided fishing requirements.

PROPOSED BY: Kenai River Professional Guide Association.

WHAT WOULD THE PROPOSAL DO? This proposal would allow guides to take more than one group of clients per day on the Kasilof River.

WHAT ARE THE CURRENT REGULATIONS? From January 1–July 31 on the Kasilof River, during any one day, a sport fishing guide may guide only that client or group of clients initially guided by the sport fishing guide that day; different or additional clients may not be guided.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would result in an increase in the guided fishing effort and harvest of king salmon by an undetermined amount.

BACKGROUND: Beginning in 2002, guides operating on the Kasilof River were restricted to one group of clients per day. Sport fish guide logbook regulations became effective in 2006; therefore, the number of guides servicing two separate clients or groups of clients in one day prior to implementation of the logbook program is not known. The number of guided sport fishing trips taken on the Kasilof River has averaged 2,035 annually from 2006 through 2009 (Table 262-1). The guided sport fishing effort estimated by the department's early-run king salmon creel survey indicates that from 2004–2010 guides account for about 53% of the total early-run king salmon sport fishing effort from May 16 through June 30 (Table 262-2). Total sport fishing effort during the early-run Kasilof River king salmon fishery has declined from approximately 75,000 angler hours in 2006 to about 53,000 angler hours in 2010 (Table 262-2). Over these years, guided sport fishing effort has declined from about 38,000 to 33,000 angler hours, while unguided effort dropped from approximately 37,000 to 19,000 angler hours. Nearly twice as many unguided anglers (2004–2010 average was 8,088) fish the river as guided anglers (2004–2010 average of 4,546), indicating guided anglers expend more fishing effort each trip (Table 262-2). Since 2004, guided anglers have accounted for a majority of the total early-run king salmon catch (67%) and harvest (72%) in the Kasilof early-run king salmon fishery (Table 262-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The regulations in place have been developed around the harvest potential of the drift boat and shore fisheries. Allowing an increase in the number of guided anglers may result in higher exploitation rates on naturally-produced fish, which would then require regulatory actions in the future to ensure the escapement goal can be achieved.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 262-1. Guide logbook fishing effort, number trips, businesses, and guides, Kasilof River, 2006–2009.

	Days fished	Trips	Businesses	Guides
2006				
Below Highway	6,563	1,936	113	151
Above Highway	158	47	14	15
Unspecified	182	57	18	21
Total	6,903	2,040	145	187
2007				
Below Highway	6,761	2,022	106	152
Above Highway	89	30	13	14
Unspecified	220	69	20	25
Total	7,070	2,121	139	191
2008				
Below Highway	6,660	1,980	88	139
Above Highway	89	28	10	11
Unspecified	316	97	19	21
Total	7,065	2,105	117	171
2009				
Below Highway	5,757	1,746	84	117
Above Highway	102	32	8	8
Unspecified	296	96	27	33
Total	6,155	1,874	119	158
Average				
Below Highway	6,435	1,921	98	140
Above Highway	110	34	11	12
Unspecified	254	80	21	25
Total	6,798	2,035	130	177

Source: Participation, effort and Harvest in the Sport Fish Business/Guide Licensing and Logbook Programs, 2006-2009.

Table 262-2. Fishing effort, catch and harvest of early-run king salmon by angler type, Kasilof River creel survey, May 16 through June 30, 2004–2010.

Year	Shore Guided				Shore Unguided				Shore Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	0	0	0	0	5,138	15,096	1,643	503	5,138	15,096	1,643	503
2005	0	0	0	0	5,142	16,452	1,366	497	5,142	16,452	1,366	497
2006	0	0	0	0	7,910	23,199	887	296	7,910	23,199	887	296
2007	0	0	0	0	6,181	17,953	747	329	6,181	17,953	747	329
2008	57	248	14	14	6,511	19,712	564	274	6,568	19,960	578	288
2009	50	204	0	0	6,242	17,091	354	169	6,292	17,295	354	169
2010	4	10	0	0	4,743	14,371	660	170	4,747	14,381	660	170

Year	Boat Guided				Boat Unguided				Boat Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	2,550	12,089	983	426	6,878	36,759	4,446	1,905
2005	4,615	32,840	3,446	1,768	2,297	11,300	743	401	6,912	44,140	4,189	2,169
2006	5,410	38,065	3,330	1,818	2,928	13,994	553	375	8,338	52,059	3,883	2,193
2007	4,625	32,363	3,162	1,940	2,109	10,926	516	384	6,734	43,289	3,678	2,324
2008	4,420	31,113	2,303	1,490	2,325	10,740	304	207	6,745	41,853	2,607	1,697
2009	3,526	24,255	1,711	1,196	1,575	7,361	211	166	5,101	31,616	1,922	1,362
2010	4,790	33,792	2,334	1,089	963	4,800	135	74	5,753	38,592	2,469	1,163

Year	Guided Total				Unguided Total				Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	7,688	27,185	2,626	929	12,016	51,855	6,089	2,408
2005	4,615	32,840	3,446	1,768	7,439	27,752	2,109	898	12,054	60,592	5,555	2,666
2006	5,410	38,065	3,330	1,818	10,838	37,193	1,440	671	16,248	75,258	4,770	2,489
2007	4,625	32,363	3,162	1,940	8,290	28,879	1,263	713	12,915	61,242	4,425	2,653
2008	4,477	31,361	2,317	1,504	8,836	30,452	868	481	13,313	61,813	3,185	1,985
2009	3,576	24,459	1,711	1,196	7,817	24,452	565	335	11,393	48,911	2,276	1,531
2010	4,794	33,802	2,334	1,089	5,706	19,171	795	244	10,500	52,973	3,129	1,333
Average	4,546	31,080	2,823	1,542	8,088	27,869	1,381	610	12,634	58,949	4,204	2,152
% of Total	36%	53%	67%	72%	64%	47%	33%	28%				

Source: Preliminary estimates from the Kasilof River early-run king salmon angler creel survey 2004-2010.

PROPOSAL 263 - 5 AAC 56.140. Kasilof River guiding and guided fishing requirements.

PROPOSED BY: Robert Achia, Tom Ferguson, and Mike Zwack.

WHAT WOULD THE PROPOSAL DO? This proposal would limit guided sport fishing as follows:

From May 16–June 30, guided sport fishing would be allowed six days per week, from 6:00 a.m. to 6:00 p.m. only.

From July 1–September 15, guided sport fishing would be allowed Monday through Saturday, from 6:00 a.m. to 6:00 p.m. only.

WHAT ARE THE CURRENT REGULATIONS? In the Kasilof River from January 1–July 31,

- on any Sunday in July, a person may not sport fish from a registered sport fishing guide vessel;
- during any one day, a sport fishing guide may guide only that client or group of clients initially guided by the sport fishing guide that day; different or additional clients may not be guided.
- a sport fishing guide may not sport fish while a client is present or is within the sport fishing guide's control or responsibility; notwithstanding the provisions of this paragraph, a sport fishing guide may provide assistance to a client with a disability in order to enable the client to engage in sport fishing; in this paragraph "disability" has the same meaning given in 42 U.S.C. 12102(2)(A) and (C), as amended as of February 8, 1994;

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely reduce guided fishing effort and harvest of king and coho salmon by an unknown amount. It may result in an increase the number of guided anglers on the river on the specific days and during the hours guided fishing is allowed.

BACKGROUND: In 2000, the regulation that prohibited guided fishing on Sundays during July was established and beginning in 2002, guides operating on the Kasilof River were restricted to one group of clients per day. Sport fish guide logbook regulations became effective in 2006. During 2006–2009, logbook data indicate the number of days fished by guided anglers has ranged from 6,155 to 7,070 and averaged 6,798 (Table 263-1). The number of guides who report fishing on the Kasilof River has remained relatively stable, has ranged from 158 to 191, and averaged 177 (Table 263-1). Guided fishing activity measured by logbook data was lower in 2009 than the previous three years (2006–2008).

The department does not have information to differentiate between angler effort and harvest in Kasilof River fisheries from July 1–September 15. The guided sport fishing effort estimated by the department's early-run king salmon creel survey data indicate that from 2004–2010, guides account for about 53% of the total early-run king salmon sport fishing effort from May 16 through June 30 (Table 263-2). Total sport fishing effort during the early-run Kasilof River king salmon fishery has declined from approximately 75,000 angler hours in 2006 to about 53,000 angler hours in 2010 (Table 263-2). Over these years, guided sport fishing effort has declined

from about 38,000 to 33,000 angler hours, while unguided effort dropped from approximately 37,000 to 19,000 angler hours. Nearly twice as many unguided anglers (2004–2010 average of 8,088) fish the river as guided anglers (2004–2010 average of 4,546), indicating guided anglers expend more fishing effort each trip (Table 263-2). Since 2004, guided anglers have accounted for a majority of the total early-run king salmon catch (67%) and harvest (72%) in the Kasilof early-run king salmon fishery (Table 263-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 263-1. Guide logbook fishing effort, number trips, businesses, and guides, Kasilof River, 2006–2009.

	Days fished	Trips	Businesses	Guides
2006				
Below Highway	6,563	1,936	113	151
Above Highway	158	47	14	15
Unspecified	182	57	18	21
Total	6,903	2,040	145	187
2007				
Below Highway	6,761	2,022	106	152
Above Highway	89	30	13	14
Unspecified	220	69	20	25
Total	7,070	2,121	139	191
2008				
Below Highway	6,660	1,980	88	139
Above Highway	89	28	10	11
Unspecified	316	97	19	21
Total	7,065	2,105	117	171
2009				
Below Highway	5,757	1,746	84	117
Above Highway	102	32	8	8
Unspecified	296	96	27	33
Total	6,155	1,874	119	158
Average				
Below Highway	6,435	1,921	98	140
Above Highway	110	34	11	12
Unspecified	254	80	21	25
Total	6,798	2,035	130	177

Source: Participation, effort and Harvest in the Sport Fish Business/Guide Licensing and Logbook Programs, 2006-2009.

Table 263-2. Fishing effort, catch and harvest of early-run king salmon by angler type, Kasilof River creel survey, May 16 through June 30, 2004–2010.

Year	Shore Guided				Shore Unguided				Shore Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	0	0	0	0	5,138	15,096	1,643	503	5,138	15,096	1,643	503
2005	0	0	0	0	5,142	16,452	1,366	497	5,142	16,452	1,366	497
2006	0	0	0	0	7,910	23,199	887	296	7,910	23,199	887	296
2007	0	0	0	0	6,181	17,953	747	329	6,181	17,953	747	329
2008	57	248	14	14	6,511	19,712	564	274	6,568	19,960	578	288
2009	50	204	0	0	6,242	17,091	354	169	6,292	17,295	354	169
2010	4	10	0	0	4,743	14,371	660	170	4,747	14,381	660	170

Year	Boat Guided				Boat Unguided				Boat Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	2,550	12,089	983	426	6,878	36,759	4,446	1,905
2005	4,615	32,840	3,446	1,768	2,297	11,300	743	401	6,912	44,140	4,189	2,169
2006	5,410	38,065	3,330	1,818	2,928	13,994	553	375	8,338	52,059	3,883	2,193
2007	4,625	32,363	3,162	1,940	2,109	10,926	516	384	6,734	43,289	3,678	2,324
2008	4,420	31,113	2,303	1,490	2,325	10,740	304	207	6,745	41,853	2,607	1,697
2009	3,526	24,255	1,711	1,196	1,575	7,361	211	166	5,101	31,616	1,922	1,362
2010	4,790	33,792	2,334	1,089	963	4,800	135	74	5,753	38,592	2,469	1,163

Year	Guided Total				Unguided Total				Total			
	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest	Number	Angler	Catch	Harvest
	Anglers	Hours			Anglers	Hours			Anglers	Hours		
2004	4,328	24,670	3,463	1,479	7,688	27,185	2,626	929	12,016	51,855	6,089	2,408
2005	4,615	32,840	3,446	1,768	7,439	27,752	2,109	898	12,054	60,592	5,555	2,666
2006	5,410	38,065	3,330	1,818	10,838	37,193	1,440	671	16,248	75,258	4,770	2,489
2007	4,625	32,363	3,162	1,940	8,290	28,879	1,263	713	12,915	61,242	4,425	2,653
2008	4,477	31,361	2,317	1,504	8,836	30,452	868	481	13,313	61,813	3,185	1,985
2009	3,576	24,459	1,711	1,196	7,817	24,452	565	335	11,393	48,911	2,276	1,531
2010	4,794	33,802	2,334	1,089	5,706	19,171	795	244	10,500	52,973	3,129	1,333
Average	4,546	31,080	2,823	1,542	8,088	27,869	1,381	610	12,634	58,949	4,204	2,152
% of Total	36%	53%	67%	72%	64%	47%	33%	28%				

Source: Preliminary estimates from the Kasilof River early-run king salmon angler creel survey 2004-2010.

**COMMITTEE G – NORTHERN COOK INLET AND ANCHORAGE SPORT FISHERIES
(TOTAL PROPOSALS:40)**

SUSITNA RIVER SALMON: 264, 265, 266, 267, 268, 269, 270

WEST COOK INLET SALMON: 271

KNIK ARM SALMON: 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282

NORTHERN COOK INLET RESIDENT SPECIES: 283, 284, 285, 286, 287, 288, 289, 290, 291

ANCHORAGE AREA SPORT FISHERIES: 292, 293, 294, 295, 296, 297, 298

PROPOSAL 264 - 5 AAC 61.114. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 2 of the Susitna River Drainage Area.

PROPOSED BY: Stephan Warta.

WHAT WOULD THE PROPOSAL DO? This proposal would increase the area open to king salmon fishing in the Kashwitna River to include the river section upstream of the Alaska Railroad Bridge to the Alaska Electrical Intertie, a distance of approximately 3.5 miles. The resulting total area open to king salmon fishing in the Kashwitna River would include all waters within a quarter-mile of its confluence with the Susitna River upstream to the Alaska electrical intertie.

WHAT ARE THE CURRENT REGULATIONS? The Kashwitna River is open to fishing for king salmon 20 inches or greater in length from the mouth upstream to the Alaska Railroad Bridge and all waters within a one-quarter mile radius of its confluence with the Susitna River from January 1 through the third Monday in June, and on Saturday–Monday for three consecutive weeks starting on the Saturday following the third Monday in June. No bait is allowed. The bag and possession limit is one per day with an annual limit of five, for which a harvest record is required.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the area open to king salmon fishing by approximately 3.6 miles, more than doubling the current area open (Figure 264-1), thereby increasing effort and harvest by an appreciable, but unknown, number. The additional harvest could be between 50 and 100 king salmon.

BACKGROUND: The Kashwitna River is a relatively large tributary to the Susitna River and the mainstem is too glacial to monitor king salmon escapement by aerial survey. However, aerial surveys of the king salmon escapement to the North Fork, a major clearwater tributary to the Kashwitna River, have been conducted since 1979. King salmon harvests from the Kashwitna River averaged 85 fish from 1990–2004; from 2005–2009, approximately 200 fish were harvested (Table 264-1).

The Parks Highway streams, which include the Kashwitna River, are currently experiencing a period of low king salmon production. During 2009, three of the eight streams failed to achieve the escapement goal (Table 264-2). During 2010, six of the eight failed to meet the escapement goal. Although no escapement goal has been established for the Kashwitna River drainage,

escapement surveys of the North Fork Kashwitna River are conducted and have averaged about 600 fish during the past 10 years. Only 317 fish were counted in 2009, the lowest number of king salmon observed in this system since 1985. Poor visibility precluded a survey count in 2010.

In 2005, the board increased the area open to king salmon fishing on the Kashwitna River from the Parks Highway to the Alaska Railroad Bridge. The majority of the land surrounding the proposed area is privately owned and access to this stretch of river would primarily be by riverboat from the state-owned Susitna Landing. Bank anglers would be restricted to fishing either in the creek, from the highway right-of-way, within the section line easements, or within the mean high water mark. Fishing in this section of river is not allowed for other salmon.

This fishery has doubled in size as indicated by harvest over recent years due to an increase in popularity. Further, the department has not had a chance to fully assess the impact of the extension made to the fishery in 2005 because any increase in harvest due to this extension was likely masked by low king salmon returns to Parks Highway streams beginning soon after the extension.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, which would favor boat users above bank anglers due to limited bank access in the proposed extension. The department is **OPPOSED** to the biological aspects of increasing the harvest of king salmon until current harvest trends can be better assessed.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

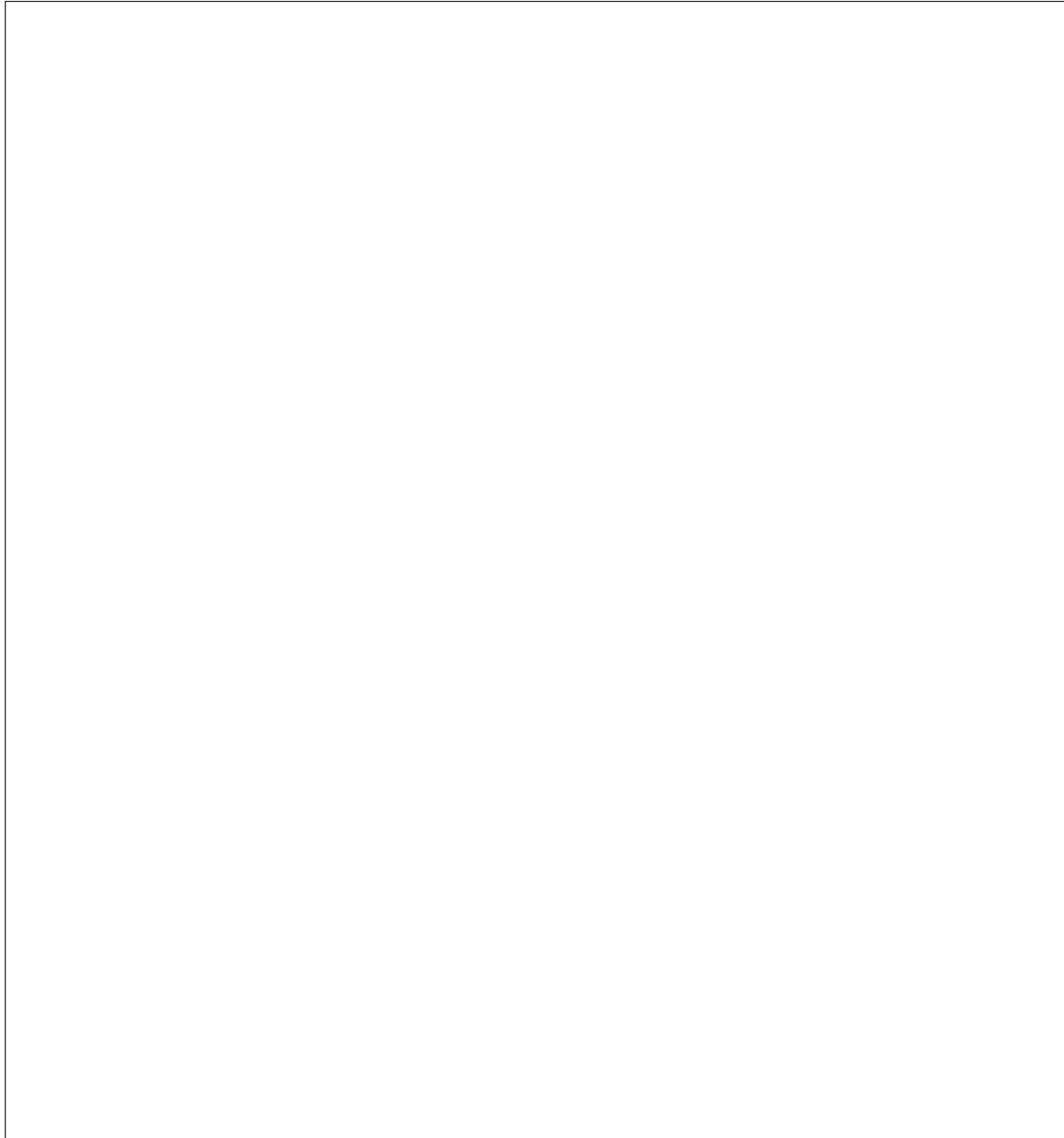


Figure 264-1. Proposed extension of the king salmon fishery on Kashwitna River.

Table 264-1. Kashwitna River king salmon harvest and escapement, 1990–2009.

Year	Harvest	Escapement ^a
1990	6	872
1991	41	340
1992	16	470
1993	38	525
1994	78	430
1995	18	836
1996	21	782
1997	10	761
1998	15	619
1999	83	644
2000	160	329
2001	74	604
2002	217	1,049
2003	373	546
2004	125	342
2005	112	454
2006	210	613
2007	223	895
2008	237	no count
2009	212	317
<hr/>		
1990-2004		
Mean	85	610
2005-2009		
Mean	199	570

Note: Not counted in 2010.

^a Aerial index count of spawners.

Table 264-2. Eastside Susitna River king salmon escapement index counts (aerial), 1981–2010.

Year	Willow Creek ^a	L. Willow Creek	Sheep Creek	Goose Creek	Montana Creek	Clear Creek	Praire Creek	Chulitna River	Portage Creek	Indian River	Kashwitna River
1981	991	459	1,013	262	814	^c	1,875	^c	659	422	558
1982	592	316	527	140	887 ^d	982	3,844	863	1,111	1,053	156
1983	777	1,042	975	477	1,641 ^d	938	3,200	4,058	3,140	1,193	297
1984	2,789		1,028	258	2,309 ^d	1,520	9,000	4,191	2,341	1,456	111
1985	1,856	1,305	1,634	401	1,767 ^d	2,430	6,500	783	^f	^f	457
1986	2,059	2,133	1,285	630	^c	^c	8,500	^c	^c	^c	700
1987	2,768	1,320	895	416	1,320 ^d	^c	9,138	5,252	2,616	1,246	872
1988	2,496	1,515	1,215	1,076	2,016 ^d	4,850	9,280	^c	1,402	456	1,159
1989	5,060	1,325	610	835	2,701 ^d	^c	9,463	^c	1,309	659	355
1990	2,365	1,115	634	552	1,269	2,380	9,113	2,681	1,886	1,473	872
1991	2,006	498	154 ^g	968	1,215	1,974	6,770	4,410	1,223	1,468	340
1992	1,660	673	^c	369	1,560	1,530	4,453	2,527	1,078	479	470
1993	2,227	705	^c	347	1,281	886	3,023	2,070	629	362	525
1994	1,479	712	542	375	1,143	1,204	2,254	1,806	857	336	430
1995	3,792	1,210	1,049	374	2,110	1,928	3,884	3,460	1,505	796	836
1996	1,776	1,077	1,028	305	1,841	2,091	5,037	4,172	2,185	579	782
1997	4,841	2,390	^c	308	3,073	5,100	7,710	5,618	3,086	1,700	761
1998	3,500	1,782	1,160	415	2,936	3,894	4,465	2,586	1,261	502	619
1999	2,081	1,837	^c	268	2,088	2,216	5,871	5,455	1,797	1,049	644
2000	2,601	1,121	1,162	348	1,271	2,142	3,790	4,218	1,015	601	329
2001	3,188	2,084	^c	^c	1,930	2,096	5,191	2,353 ^g	2,334	1,292	604
2002	2,758	1,680	854	565	2,357	3,496	7,914	9,002	3,336	1,126	1,049
2003	3,964	879	^c	175	2,576	^c	4,095	^c	827 ^d	1,365	546
2004	2,985	2,227	285	417	2,117	3,417	5,570	2,162	1,972	593	342
2005	2,463	1,784	760	468	2,600	1,924	3,862	2,838	2,151	670	454
2006	2,217	816	580	306	1,850	1,520	3,570	2,862	942	718	613
2007	1,373	1,103	400	105	1,936	3,310	5,036	5,166	2,284	1,017	895
2008	1,255 ^g	^c	^c	117	1,357	1,795	3,039	2,514	169	288	^c
1981-2008 Mean	2,426	1,273	847	418	1,851	2,331	5,552	3,524	1,658	881	584
1999-2008 Mean	2,489	1,503	674	308	2,008	2,435	4,794	4,063	1,683	872	608
2004-2008 Mean	2,059	1,483	506	283	1,972	2,393	4,215	3,108	1,504	657	576
2009	1,133	776	500	65 ⁱ	1,460	1,205	3,500	2,093	1,228	409	317
2010	1,173	468	^c	76 ⁱ	755	903	3,022	1,052	^c	^c	^c
SEG ^h	1,600-2,800	450-1,800	600-1,200	250-650	1,100-3,100	950-3,400	6,100-9,200	1,800-5,100			

^a Includes hatchery fish.

^b May include Honolulu, Byers, Troublesome, Bunco, Birch, Sunshine, and Larson creeks.

^c No counts conducted due to poor water visibility.

^d Foot survey.

^e Combination of foot surveys and weir counts.

^f Included with other streams.

^g Poor count due to timing, poor visibility or weather conditions.

^h SEG = Sustainable Escapement Goal.

ⁱ Beaver dam blocks fish passage.

PROPOSAL 265 - 5 AAC 61.114. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for Unit 2 of the Susitna River Drainage Area.

PROPOSED BY: Matanuska Valley Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would extend, by about 1.5 miles, the area open to king salmon fishing on Willow Creek upstream of the Parks Highway Bridge to Willow Creek's confluence with Deception Creek.

WHAT ARE THE CURRENT REGULATIONS? In the Willow Creek Drainage, the waters upstream of the Parks Highway bridge to its confluence with Deception Creek are open to sport fishing, except for king salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase effort and harvest of king salmon by some unknown, but likely unsustainable, amount.

BACKGROUND: The Parks Highway streams, which include Willow Creek, are currently experiencing a period of low king salmon returns. Aerial surveys have been used as a method to index king salmon escapement to Parks Highway streams since 1979. These counts are one of only two ways the department has of evaluating the return of king salmon; the other is angler reports of fishing success. During 2009, three of the eight streams failed to achieve the escapement goals (Figure 265-1). During 2010, six of the eight failed to meet the escapement goal (Sheep Creek was not surveyed in 2010 due to poor water clarity). Willow Creek has failed to achieve the escapement goal (1,600-2,800) in four of the past five years. Sport harvest of king salmon from Willow Creek over the past two decades (1987-2008) averaged about 3,800 fish (Table 265-1). The average for 2004 to 2008 is less than 2,200 fish, with only about 1,000 fish being harvested in 2008.

During 2009 and 2010, in response to low numbers of king salmon caught in the sport fisheries and low inseason aerial counts on both Willow and Montana creeks, the department issued an emergency order to close Willow Creek and other Parks Highway streams to king salmon fishing for the final three-day weekend in 2009 and the last two three-day weekends in 2010. Despite these restrictive measures, Willow Creek and five other Parks Highway streams still failed to achieve their escapement goals.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Given that Willow Creek has failed to meet the lower range of its sustainable escapement goal in four of the past five years, it is likely that additional area opened to sport fishing could jeopardize the future sustainability of king salmon returns to this system.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

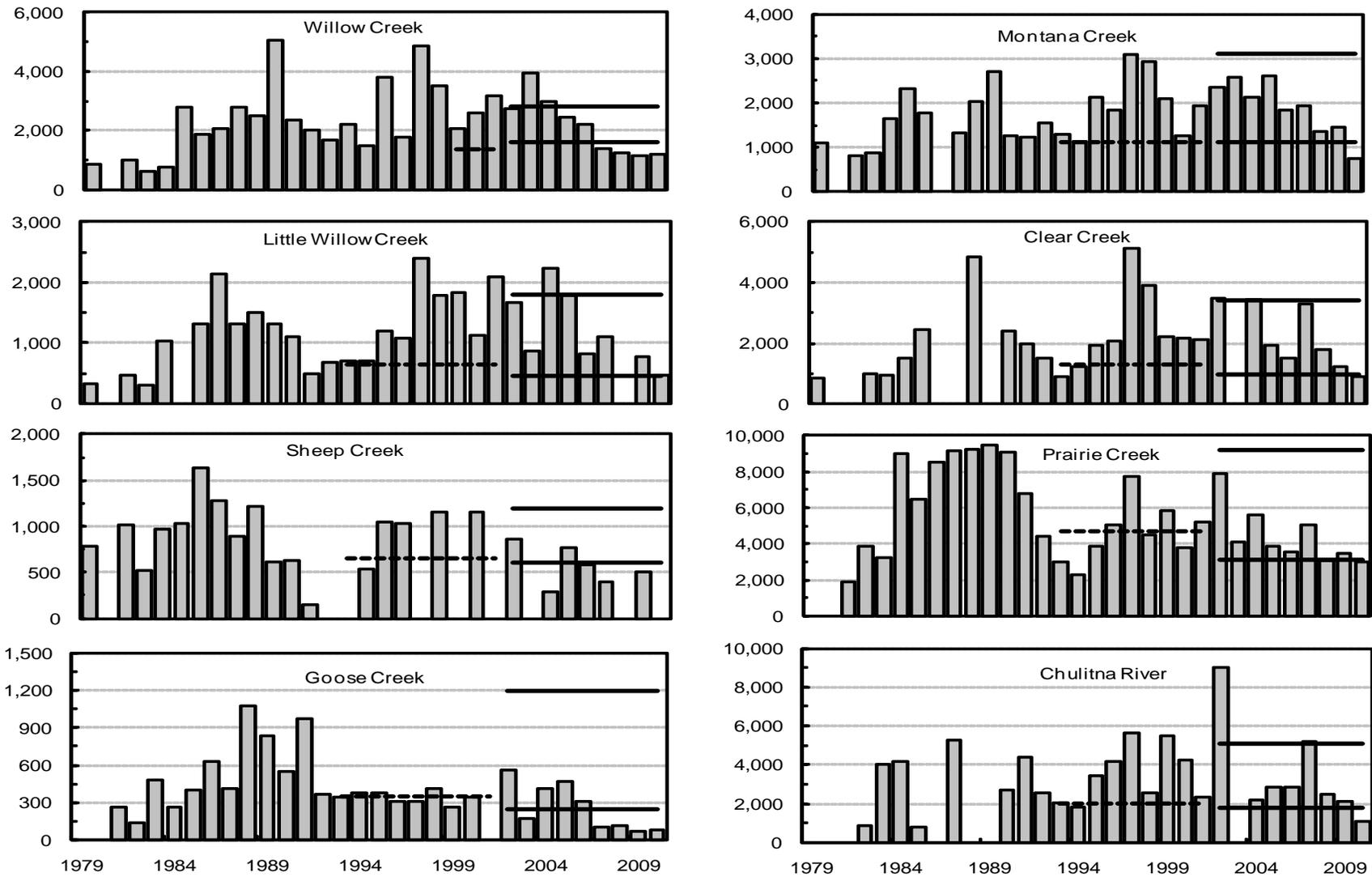


Figure 265-1. Eastside Susitna River king salmon escapement index counts (aerial), 1979–2010.

Table 265-1. Harvest and escapement of king salmon on Willow Creek, 1989–2010.

Year	Harvest	Escapement
1989	2,846	5,060
1990	3,237	2,365
1991	3,208	2,006
1992	8,884	1,660
1993	8,626	2,227
1994	5,980	1,479
1995	2,742	3,792
1996	2,690	1,776
1997	3,135	4,841
1998	2,793	3,500
1999	4,988	2,081
2000	3,782	2,601
2001	4,573	3,188
2002	3,591	2,758
2003	3,922	3,964
2004	2,818	2,985
2005	2,466	2,463
2006	2,141	2,217
2007	2,258	1,373
2008	1,101	1,255
1989-2008		
Mean	3,789	2,680
2009	499	1,133
2010	N/A	1,173

PROPOSAL 266 - 5 AAC 61.114. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 2 of the Susitna River Drainage Area.

PROPOSED BY: Mark Chryson.

WHAT WOULD THE PROPOSAL DO? This proposal would make it illegal to fish from a boat or to anchor or beach a boat within a one-quarter-mile radius of the mouth of Willow Creek and Susitna River.

WHAT ARE THE CURRENT REGULATIONS? There are no restrictions for fishing from a boat, anchoring, or beaching a boat within a one-quarter-mile radius of the mouth of Willow Creek.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely displace a few boat anglers who fish near the mouth each day. Additionally, the few boaters that generally tie, anchor or beach their boats in this area to fish from the bank would be displaced, as well.

BACKGROUND: Most of the sport fishing effort (more than 90%) that occurs on Willow Creek occurs within a one-quarter-mile-radius of the stream mouth. In many instances, during the king salmon fishing season, anglers fish shoulder to shoulder. There can be as many as 300 anglers in this area at a time, with anglers waiting to take their place once an individual is done fishing for the day. On occasion, some anglers will try fishing from boats in that same area. This generally causes conflicts between bank and boat anglers. The conflicts come when boaters anchor their boats at or near where bank anglers are casting their lines. Complaints regarding these types of conflicts at the mouth of Willow Creek have been reported each year.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. This is a social issue between bank anglers and boat anglers. The department does not expect any change in harvest levels as a result of this proposal.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 267 – 5 AAC 61.118. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for Unit 4 of the Susitna River Drainage Area.

PROPOSED BY: Jason Rockvam.

WHAT WOULD THE PROPOSAL DO? This proposal would impose restrictions on all boat users within the Lake Creek drainage for safety and habitat reasons. Restrictions proposed are:

1. Restrict the number of persons allowed in a boat to six, including the driver,
2. Restrict boats from anchoring in the main traffic channel of the river,
3. Restrict boats to jet drive units only,
4. Require power boats with prop-shaft rating of more than 40 hp to have a four stroke with direct fuel injection,
5. Prohibit boats with greater than 75 hp engines,
6. Restrict boat size, and
7. Disallow the use of airboats.

WHAT ARE THE CURRENT REGULATIONS? There are no power boat restrictions on Lake Creek.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If it fell within the board’s authority, adoption of this proposal would likely improve boating safety to some degree. This proposal could also reduce angler effort and salmon harvest as a result of anglers not wishing, under the proposed restrictions, to boat the long distance needed to reach this fishery or to purchase different boat engines or different sized boats.

BACKGROUND: Lake Creek is a fast moving, winding river draining into the Yentna River. Due to its rocky nature, only the lower three miles of this river are boatable. Access to this system is fairly remote: it requires either a 60-mile boat trip from the Dëshka Landing, or a float or wheeled plane. The Lake Creek system receives about 20,000 angler days of sport fishing effort each year. The majority of sport fishing effort is expended by anglers using “power” boats, which range in size from 12 to 24 feet, and which use both outboard and inboard engines ranging from 10 to 250 hp for outboard motors, and, for inboard engines, as large as 460 cubic inches. Except for lodge owners or guide operations, most of the boats on Lake Creek have motors larger than 75 hp. Because of the creek has narrow, small channels and high water velocity, boating safety has always been a concern. There are several boating accidents each year.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department recognizes that safety is a concern on Lake Creek. The Department of Law has advised that the board may not regulate for general public safety concerns, but might be able to regulate fishing activity for safety concerns of fishery participants when those concerns have an actual impact on how the fisheries are prosecuted. The board may also adopt regulations affecting general boat use it considers advisable for watershed, and habitat improvement, however, in this case, it may be difficult for the board to demonstrate the reasonable necessity of restricting general boat use for conservation or development purposes. The department does not

have data to conclude that vessel engine horsepower or boat sizes are causing a conservation concern.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Many individuals would be required to buy new boats or motors, or to fish elsewhere.

PROPOSAL 268 - 5 AAC 61.118. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for Unit 4 of the Susitna River Drainage Area.

PROPOSED BY: John Schwan, John Delane, Gene Desjorlias, and Mark Hansen.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit fishing for king salmon on the Talachulitna River on the same day once an angler has retained a king salmon 20 inches or longer.

WHAT ARE THE CURRENT REGULATIONS? King salmon 20 inches or greater in length may be taken only from January 1–July 13; bag and possession limit is one per day; there is an annual limit of five fish and a harvest record is required. A king salmon 20 inches or greater in length removed from the water shall be retained and becomes part of the bag limit of the person originally hooking it; a person may not remove a king salmon from the water before releasing the fish. Only one, unbaited, single-hook, artificial lure is allowed year-round. Legal hours for fishing are between the hours of 6:00 a.m. and 11:00 p.m.

King salmon less than 20 inches in length may be taken from January 1–July 13 in flowing waters and unstocked lakes and ponds; bag and possession limit is 10 fish; a person may not remove a king salmon from the water before releasing the fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would decrease the catch and release related mortality by an unknown, but likely small, amount and allow an orderly fishery to occur at the mouth of the Talachulitna River.

BACKGROUND: The Talachulitna River supports the third largest king salmon fishery among four major king salmon fisheries that occur on Westside Susitna River. The average sport harvest of king salmon from the Talachulitna is approximately 600 fish per year (Table 268-1). Angler participation averages about 5,000 days. Nearly all the harvest takes place at or near the mouth. There are currently four lodges that operate in that area. Because of the stream's morphology, there are only a few productive fishing holes in the lower river. Complaints from the public are that these fishing holes are generally occupied by lodge/guide boats for the entire king salmon season. Legal hours for fishing are between the hours of 6:00 a.m. and 11:00 p.m. A common complaint from nonguided anglers is that guides without clients in their boats show up at 4:00 a.m. or 5:00 a.m. and hold the fishing holes until another guide/lodge boat delivers clients. Because it is legal on the Talachulitna to continue fishing once a fish is harvested, there is opportunity for anglers to stay in the productive holes for long periods of time.

In 1996, following a period of low king salmon runs experienced throughout the area, the board adopted restrictive regulations across all Westside Susitna fisheries, including the Talachulitna River. One of these restrictions prevented anglers from continuing to fish for king salmon for the rest of the day after retaining a bag limit of one king salmon. The intent was to minimize release mortality, and, to some extent, reduce angler dissatisfaction in lost harvest opportunity under crowded fishing conditions. While other restrictions stemming from 1996 remain in effect on the Talachulitna, this particular restriction was removed by the board in 1999 on all Westside Susitna king salmon streams, except on Lake Creek, Fish Lake Creek, Alexander Creek, and Deshka

River. This more restrictive regulation remained on these fisheries due to crowded fishing conditions (higher angler effort) and to minimize catch-and-release-related mortality. Currently the average king salmon catch on the Talachulitna is 3,800 fish, about six times the average harvest of 600 fish. King salmon catch at Lake Creek is about four times the harvest, and at the Deshka River, two times the harvest. Adoption of this proposal would likely result in an additional 200 fish in the Talachulitna king salmon escapement on an average return year. In 2010, the escapement of king salmon into the Talachulitna fell short of the escapement goal (SEG 2,500 -7,100).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. This proposal would provide consistency in regulation across the four major king salmon fisheries on Westside Susitna.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 268-1. Catch, harvest, escapement, and effort of king salmon on the Talachulitna River, 1990–2010.

Year	Catch	Harvest	Escapement	Effort (angler-days)
1990	3,485	709	2,694	5,184
1991	2,885	848	2,457	6,589
1992	3,839	445	3,648	5,153
1993	6,492	875	3,269	5,613
1994	1,329	927	1,575	7,292
1995	2,207	509	2,521	6,354
1996	7,223	697	2,748	5,151
1997	6,618	778	4,494	5,651
1998	4,555	563	2,759	3,224
1999	8,758	977	4,890	7,680
2000	4,062	695	2,414	6,415
2001	5,953	409	3,309	5,813
2002	1,998	508	7,824	3,995
2003	4,640	587	9,573	4,391
2004	2,665	344	8,352	3,631
2005	7,501	800	4,406	4,740
2006	2,364	452	6,152	4,455
2007	4,822	1,021	3,871	6,704
2008	1,861	435	2,964	5,310
1999–2008				
mean	4,462	623	5,376	5,313
2009	3,025	258	2,608	3,855
2010		N/A	1,499	N/A
SEG			2,200–5,000	

PROPOSAL 269 - 5 AAC 61.120. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for Unit 5 of the Susitna River Drainage Area.

PROPOSED BY: Matanuska Valley Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would extend the time bait is allowed on the Talkeetna River by an additional week until September 8.

WHAT ARE THE CURRENT REGULATIONS? From September 1 through July 13, in all flowing waters, only unbaited, artificial lures may be used.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely increase the harvest of coho salmon by an unknown, but likely small, amount. Harvest and incidental catch and release mortality would increase on rainbow trout, Dolly Varden, and Arctic grayling.

BACKGROUND: The Susitna River drainage, which includes the Talkeetna River, contains the majority of wild rainbow trout waters in the Northern and Western Cook Inlet management areas. For several years prior to 1986, the board attempted to accommodate a wide array of individual requests for regulatory reform for conservative rainbow trout management in the Northern Cook Inlet Management Area (NCIMA). In 1984, a 13-member citizen planning team, working with department staff and the angling community, drafted a *Cook Inlet Rainbow Trout/Steelhead Management Policy* (CIRTMP) to provide guidelines for the management of rainbow trout in the NCIMA. The board officially adopted the CIRTMP as the management policy in 1986. The policy provided a systematic approach for selecting fishery regulations, as well as a process for identification of waters for special management. Part of the policy called for management under a conservative yield strategy aimed at maintaining historical size and age compositions and stock levels for wild rainbow trout. Bag and possession limits under this concept are two trout, of which only one may be 20 inches or more in length; the annual limit is two trout. Harvest is not allowed during the spawning period (April 15-June 14). This management strategy calls for the use of unbaited artificial lures in all flowing waters from September 1 through May 15 to enhance survival of released fish at the time when trout are often targeted. This regulation was implemented in 1987, and set the bait closure from September 1–December 31. Rainbow trout exit the upper reaches of tributaries in the fall (September–October) and ultimately congregate on the lower reaches or completely exit tributaries for the winter months. The bait closure was extended in 1993 to September 1–May 15 to provide further protection to trout reentering Susitna tributaries following the winter period. This regulation exists for the entire Susitna River drainage (the actual bait closure dates are September 1–July 13: the period from May 15–July 13 is intended for king salmon management).

A statewide *Statewide management standards for Wild Trout* (5 AAC 75.220), adopted by the board in 2003, currently guides wild rainbow trout regulatory changes. This policy is similar to CIRTMP with respect to protection and conservative management of wild rainbow trout. Presently, most major rainbow trout fisheries on the Susitna are catch-and-release, although some allow minimal harvest. Special management waters allowing only catch-and-release fishing have

been designated since the late 1980s and now include portions of Lake Creek, Deshka River, Willow Creek, and Clear Creek, and; the entire drainages of the North Fork of the Kashwitna and Prairie, Alexander, Fish (Talkeetna River drainage), and Montana creeks. Waters of the Susitna River upstream of Talkeetna River have been designated trophy rainbow trout waters, allowing only one trout over 20 inches per day.

The combination of restrictions over the years has greatly benefited Susitna River rainbow trout stocks during a time of rapid growth in major trout fisheries through the 2000s, particularly those of Eastside Susitna River tributaries. The 10-year average rainbow trout catch from 1990–1999 was 25,700 fish, while the last 10-year average was 47,700 fish (Table 269-1). Most of this increase in catch can be attributed to Willow and Montana creeks.

The coho salmon fishery on the Talkeetna River overlaps the area and time period in which rainbow trout are migrating to the lower reaches of the river in preparation for winter. Coho salmon are caught throughout August, with the peak of effort around August 20 and then gradually reducing until early September. A bait fishery through the first week in September could have negative consequences on prewintering aggregates of rainbow trout. The 2004–2008 average coho salmon harvest for the Talkeetna River is 3,466 fish (Table 269-2).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Regulatory strategies have been carefully crafted and enacted by the board and the department over the past two decades to manage trout conservatively in order to maintain historical conditions as defined under the *Statewide management standards for Wild Trout (5 AAC 75.220)*. Allowing a bait fishery to occur in area where prewintering aggregates of rainbow trout are present would be inconsistent with wild rainbow trout management.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 269-1. Eastside Susitna River rainbow trout catch, 1990–2010.

Year	Willow Creek	Little Willow	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River ^a	Other Streams	Other Lakes	Total
1990	3,914	689	1,630	689	840	1,378	1,277		622	4,788	3,913	2,066	21,806
1991	3,965	1,230	692	446	1,076	2,183	2,136	307	154	5,072	6,347	2,721	26,329
1992	3,206	1,124	293	142	633	617	2,501	40	103	5,581	2,754	2,921	19,915
1993	3,934	829	995	217	967	2,054	2,034	49	407	5,685	4,441	2,628	24,240
1994	4,673	2,024	319	172	757	1,566	1,807	56	56	4,687	2,838	4,664	23,619
1995	2,340	730	178	127	506	280	1,245	47	150	3,510	3,078	3,172	15,363
1996	4,766	1,077	654	21	2,077	384	2,828	0	179	6,790	3,049	2,983	24,808
1997	5,198	1,415	2,177	60	2,008	2,139	3,473	179	60	7,040	5,355	5,638	34,742
1998	4,487	1,259	1,593	93	4,885	333	4,138	135	186	4,560	2,492	2,080	26,241
1999	11,965	2,484	1,016	72	1,415	960	5,337	140	465	7,402	5,188	3,309	39,753
2000	8,836	1,920	2,107	145	2,173	3,175	7,236	569	132	6,669	3,740	5,901	42,603
2001	11,510	1,414	882	184	763	1,103	5,678	123	17	5,937	2,844	2,449	32,904
2002	22,650	2,821	1,402	105	9,308	4,063	19,170	45	66	11,312	5,164	4,084	80,190
2003	13,750	3,576	2,315	344	5,289	1,691	12,393	54	97	7,875	5,191	6,865	59,440
2004	10,920	2,293	698	58	1,869	1,835	10,171	540	351	6,384	6,961	4,050	46,130
2005	10,863	2,878	961	11	2,218	685	6,151	133	183	6,772	1,759	3,574	36,188
2006	10,032	1,744	993	46	2,716	1,121	7,610	60	24	7,653	4,997	1,866	38,862
2007	20,905	2,800	163	191	4,244	506	16,740	0	12	8,766	9,005	745	64,077
2008	8,235	2,597	1,068	78	1,769	746	8,014	909	632	7,889	3,649	1,212	36,798
Mean													
2004–2008	12,191	2,462	777	77	2,563	979	9,737	328	240	7,493	5,274	2,289	44,411
2009	14,700	1,707	558	269	1,137	237	6,474	26	30	6,482	4,156	1,713	37,489

^a Talkeetna River and tributaries, including Clear Creek.

Table 269-2. Eastside Susitna River drainage coho salmon harvest by fishery, 1977–2009.

Year	Willow Creek	Lt. Willow Creek	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River ^a	Other ^b	Total
1977	679	225			438		1,415			1,070	1,882	5,709
1978	905	151			478		2,451			2,200	2,388	8,573
1979	462	262		624	462		1,735		774	1,248	1,997	7,564
1980	1,207	494		1,124	430		2,684		1,534	661	2,234	10,368
1981	747	29		901	326		2,261		968	422	939	6,593
1982	1,069	398		776	367		3,060		1,719	996	1,782	10,167
1983	576	52	52	408	596		1,402		722	836	532	5,176
1984	1,846	1,147	162	1,247	661	449	4,502		1,733	1,509	660	13,916
1985	1,026	528		608	478		1,972		1,205	747	478	7,042
1986	944	363	871	472	1,343	363	1,488	980	4,029	3,376	1,961	16,190
1987	2,898	561	36	453	1,068	145	1,394	163	1,612	2,608	90	11,028
1988	4,875	1,237	327	1,455	3,165	291	2,219	691	2,146	2,929	183	19,518
1989	4,218	1,388	336	834	2,231	190	2,295	281	2,159	2,775	371	17,078
1990	2,711	639	197	2,596	991	180	778		704	2,539	408	11,743
1991	4,154	1,308	167	3,819	1,544	657	1,612	322	1,761	3,435	700	19,479
1992	8,591	1,830	713	5,393	4,049	502	3,595	858	2,259	5,531	469	33,790
1993	5,743	1,213	554	2,385	2,413	428	3,496	535	2,922	5,830	544	26,063
1994	4,504	1,452	328	1,569	1,586	478	2,619	281	1,906	5,476	671	20,870
1995	3,498	992	472	1,687	1,092	152	2,385	198	1,385	6,672	632	19,165
1996	5,176	1,892	360	668	1,896	430	3,118	258	2,612	7,325	439	24,174
1997	2,401	661	202	294	1,198	166	1,692	177	443	2,815	248	10,297
1998	5,908	1,185	670	564	3,417	382	2,720	920	1,589	5,340	382	23,086
1999	5,019	871	260	1,198	3,045	440	3,382	622	1,709	5,814	932	23,292
2000	8,679	2,885	994	1,702	3,348	1,181	5,454	1,160	3,274	7,703	1,368	37,748
2001	6,835	1,936	728	1,408	2,588	683	5,023	146	1,072	5,195	1,003	26,617
2002	6,040	1,513	494	797	2,995	204	4,644	288	3,238	5,640	1,330	27,183
2003	2,918	635	1,090	938	1,908	220	3,361	421	2,508	3,984	602	18,585
2004	2,981	1,290	251	189	2,636	248	4,866	223	2,070	4,454	1,276	20,484
2005	4,255	1,103	369	340	2,337	267	2,592	288	2,493	3,359	68	17,471
2006	5,031	1,511	1,202	780	3,602	906	2,622	281	3,460	3,224	100	22,719
2007	3,625	853	253	185	2,707	75	2,017	149	1,318	2,166	116	13,464
2008	3,760	1,340	2,880	649	2,125	594	5,628	58	2,928	4,128	121	24,211
Mean												
2004–2008	3,930	1,219	991	429	2,681	418	3,545	200	2,454	3,466	336	19,670
2009	3,232	1,027	525	607	1,594	635	3,087	320	816	3,114	1,713	16,670

^a Talkeetna River and tributaries, including Clear Creek.

^b Includes lakes and streams.

PROPOSAL 270 - 5 AAC 61.112. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 1 of the Susitna River Drainage Area, 5 AAC 21.366. Northern District King Salmon Management Plan, and 5 AAC 01.560. Fishing seasons and daily fishing periods. *(This proposal erroneously cited only as 5 AAC 61.112. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 1 of the Susitna River Drainage Area.)*

PROPOSED BY: Steve Runyan.

WHAT WOULD THIS PROPOSAL DO? This proposal would prohibit sport fishing for any species of fish within a one-quarter-mile radius of the mouth of Alexander Creek from May 1–July 14. Northern pike regulations would be liberalized across the Alexander Creek drainage as follows: there would be no limit to the number of lines used year-round when fishing for northern pike. In open waters, “jug” lines with up to 20 hooks would be allowed and multiple lines could be used. There would be no limit to the number of tip-ups allowed while fishing through the ice. It would be illegal to release live pike back into the water. Bow and arrow and spears would be acceptable methods for harvesting northern pike year-round.

This proposal would also reduce the Northern District commercial king salmon fishery from up to five regular fishing periods to three periods and reduce each fishing period from 12 hours per day to six hours per day.

This proposal would also reduce the open season of the subsistence set gillnet fishery that occurs in the Tyonek Subdistrict by approximately ten days by changing the opening date from May 15 to June 1, and by reducing the open periods from three days per week to one day per week. The proposal would also increase, by 40 feet, the length of subsistence setnets used in this fishery. The proposal would clarify that only one net per household would be allowed.

WHAT ARE THE CURRENT REGULATIONS?

Sport Fishing Regulations - In the Alexander Creek drainage, and all waters within a one-half mile radius of the confluence of Alexander Creek with the Susitna River, sport fishing for king salmon is closed. Fishing for rainbow trout, Dolly Varden, and Arctic grayling is allowed under catch and release regulations only.

In Alexander Lake, the size and bag limits for northern pike are as follows: northern pike less than 27 inches in length, no bag or possession limit; northern pike 27 inches or greater in length, bag and possession limit of one fish; spears and bow and arrow may not be used to take northern pike in Alexander Lake. Sport fishing through the ice with five lines is allowed on Sucker and Alexander lakes and Alexander Creek provided the fishing gear is closely attended and all other fish caught are released immediately.

Commercial Fishing Regulations – The *Northern District King Salmon Management Plan* directs the harvest of king salmon in the Northern District by set gillnet. The season begins on the first Monday on or after May 25 and continues through June 24 unless closed earlier by emergency order. Fishing periods are from 7:00 a.m. to 7:00 p.m. on Mondays and no more than

12,500 king salmon may be taken. The area from an ADF&G regulatory marker located one mile south of the Theodore River to the Susitna River is open to fishing the second regular Monday period only. Specific actions within this plan that are triggered by restrictions in the sport fishery are as follows:

- If the Theodore, Lewis, or Ivan River is closed to sport fishing, the commissioner shall close, by emergency order, the area from an ADF&G regulatory marker located one mile south of the Theodore River to the Susitna River to commercial king salmon fishing for the remainder of the fishing periods.
- If the Dëshka River is closed to sport fishing, the commissioner shall close, by emergency order, the commercial king salmon fishery throughout the Northern District for the remainder of the fishing periods provided.
- If the Chuitna River is closed to sport fishing, the commissioner shall close, by emergency order, the area from an ADF&G regulatory marker located one mile south of the Chuitna River to the Susitna River to commercial king salmon fishing for the remainder of the directed king salmon fishery.

Subsistence Regulations – Fishing in the Tyonek Subdistrict is allowed from May 15 through June 15 from 4:00 a.m. through 8:00 p.m. on Tuesdays, Thursdays, and Fridays, and from June 16 through October 15 from 6:00 a.m. through 6:00 p.m. on Saturdays. The early season closes by emergency order when 4,200 king salmon have been taken. If 4,200 king salmon have been taken before June 16, the late season cannot open until July 1. Allowable gear is one 10-fathom (60 ft) gillnet with mesh size no greater than six inches. Permit conditions stipulate that only one permit is allowed per household and only one set of gear is allowed per permit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the incidental catch-and-release mortality on king salmon in Alexander Creek by an unknown, but likely small, amount. The use of jugs with up to twenty hooks/set and multiple lines when fishing for northern pike during the open water period would increase the harvest of northern pike by a small amount. In addition, the incidental catch-and-release mortality of king, coho, chum, and pink salmon, and other resident fish species would increase by an unknown, but likely high, amount. Spearing and bow fishing would likely increase the harvest of northern pike by a small amount. Allowing an unlimited number of tip-ups when fishing for northern pike during through the ice would increase harvest of northern pike by an unknown amount. This proposal would also make it a criminal offense to release northern pike for anglers who do not want to kill a northern pike. Restriction in the Tyonek subsistence fishery may reduce opportunity for subsistence. Subsistence and Northern District king salmon commercial fisheries harvest of king salmon bound for Alexander Creek would be reduced by an unknown number.

BACKGROUND: Sport fisheries on Alexander Creek historically generated an average of 13,700 angler-days of effort annually for the 20-year period 1980–1999 (Table 270-1). The king salmon fishery is assumed to have contributed greater than 90% of that expended effort, and was once one of largest fisheries within Westside Susitna streams and able to support six lodges. The average annual king salmon harvest was 2,880 fish during 1980–1999. The peak of the fishery occurred in 1991, with 26,235 days of effort and 6,548 king salmon harvested. The coho salmon fishery had an average harvest of 1,683 from 1985–2004 (20 years) (Table 270-2). Alexander Creek supported large rainbow trout and Arctic grayling fisheries through the end of the 1980s.

In addition, float trips from the lake to the creek's mouth occurred frequently. The historical rainbow trout harvest averaged 1,368 fish from 1977–1991 (15 years). The historical Arctic grayling harvest for the same time period was 835 fish.

Northern pike have threatened multiple fish species in the Alexander Creek drainage. Aerial indices of escapement have shown a downward trend in king salmon spawners over the past decade, with a dramatic drop in the past five years. The sustainable escapement goal (SEG) for king salmon is 2,100–6,000 fish. Escapement counts were 885, 440, 185, 275, and 177 fish, respectively, for 2006–2010. The king sport fishery was closed in 2008. Aerial surveys have also shown a change in the distribution of spawners. Since about 1992, king salmon spawners have disappeared from the tributaries upstream of the lake, and since about 1998, from the upper mainstem between Sucker Creek and Alexander Lake. In the past four years, few lower mainstem spawners have been observed. Presently, spawning is mostly isolated to Sucker Creek and the Wolverine Creek branch of Sucker Creek. Harvest of coho salmon has been below the historical average of 1,683 since 2004, ranging from 757 fish in 2005 to 10 fish reported in 2008. The rainbow trout and Arctic grayling fisheries were closed to harvest in 1996. Despite these fisheries becoming catch-and-release, catch rates have declined precipitously over the past 20 years for both species. Northern pike were thought to have been introduced in Alexander Lake during the 1960s. Initially, northern pike only inhabited the lake. The first Statewide Harvest Survey-documented harvest was in 1985. Reports from residents living on the lower river indicate the spread of northern pike from the lake to the lower river occurred slowly over a 10–20 year period. The first recorded catch of northern pike from the lower river occurred around 1995. Northern pike suppression efforts by the department, as well as harvest statistics, indicate northern pike occur in significant numbers in side channels of the lower creek.

The department conducted feasibility studies in 2009 and 2010 to determine how much gillnetting effort was needed to reduce numbers of northern pike existing in side-channel sloughs along the 40 miles of Alexander Creek. In 2009, an average of seven days of gillnetting was needed to reduce the number of northern pike in a particular slough by about 85% of the initial catch; 12 sloughs were targeted and 1,147 pike were netted. In 2010, it took an average of nine days to reduce a particular slough by 85% of the peak catch; 20 sloughs were targeted and 875 pike were netted. A project has been recently funded by the Alaska State Legislature to initiate a full scale gillnetting effort to suppress northern pike numbers along 40 miles of Alexander Creek. The field portion of this project will commence early May 2011.

Subsistence fishing is allowed only in the Tyonek Subdistrict of the Northern District. A permit is required which allows 25 salmon per permit holder and 10 salmon for each additional member. An additional 70 king salmon per permit holder is allowed in the Tyonek Subsistence fishery from May 15 to June 15 during three 16-hour opening per week; the early season closes when 4,200 king salmon have been harvested. Fishing is open from June 16 through October 15 for 12-hour periods on Saturdays.

In 2008, 94 subsistence permits were issued for the Tyonek Subdistrict, including 60 permits issued to Tyonek residents (64%) and 34 permits issued to other Alaska residents (36%), mostly residents of Anchorage (18 permits). The 2008 harvest of 1,515 salmon was close to the historical average of 1,565 salmon, and higher than the 5-year average of 1,339 salmon or the 10-

year average of 1,340 salmon (Table 270-3). Of the total reported subsistence salmon harvest of 1,515 salmon, 1,178 were king salmon (77%), 194 were coho salmon (13%), 121 were sockeye salmon (8%), 13 were pink salmon (1%), and 9 were chum salmon (1%). Residents of Tyonek accounted for 76% of the harvest total (1,155 salmon); including 82% of the king salmon harvest (961 fish).

The proposal requests a reduction to one day per week after June 1. The board has determined that the current three day per week fishing period from May 15 through June 15 provides a reasonable opportunity for subsistence in the Tyonek Subdistrict subsistence fishery. Most subsistence fishing occurs over multiple days per week for up to two weeks in a row to harvest an average of 22 king salmon per permit of fish, less than half the allowable catch. The average harvest per permit was 3.1 king salmon per day of fishing effort (Table 270-4). The average number of days a permit holder fished was six days.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal but **SUPPORTS** addressing the biological aspects through development, in collaboration with the board, of an action plan designed to address the department's stock of management concern recommendation for Alexander Creek king salmon.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is this stock customarily and traditionally taken or used for subsistence? Yes. The board has found that salmon in the Tyonek Subdistrict are customarily and traditionally used for subsistence (5 AAC 01.566).
3. Can a portion of this stock be harvested consistent with sustained yield? Yes.
4. What amounts are reasonably necessary for subsistence uses? In an administrative finding made in November 1992, the board established the following amounts as reasonably necessary for subsistence for this fishery: 750–2,750 king salmon, 100–275 sockeye salmon, 50–100 chum salmon, 50–100 pink salmon, and 100–375 coho salmon. The board has not adopted this ANS finding into regulation.
5. Do the regulations provide a reasonable opportunity for subsistence? This is a board determination.

Table 270-1. Harvest and escapement of king salmon and effort on Alexander Creek, 1980–2010.

Year	Harvest	Escapement	Effort
1980	1,438	no count	6,812
1981	1,121	no count	6,892
1982	2,506	2,546	10,748
1983	1,711	3,755	9,425
1984	2,107	4,620	7,261
1985	2,761	6,241	12,884
1986	2,937	5,225	19,113
1987	2,224	2,152	13,220
1988	4,687	6,273	19,591
1989	4,882	3,497	14,651
1990	5,119	2,596	19,863
1991	6,548	2,727	26,235
1992	4,124	3,710	18,085
1993	5,154	2,763	21,660
1994	3,070	1,514	25,608
1995	1,217	2,090	10,648
1996	1,005	2,319	6,062
1997	1,470	5,598	7,514
1998	1,275	2,807	6,538
1999	2,241	3,974	11,187
2000	2,721	2,331	11,733
2001	2,313	2,282	9,360
2002	1,992	1,936	10,169
2003	2,293	2,012	6,855
2004	1,294	2,215	5,679
2005	1,052	2,140	3,907
2006	1,396	885	4,337
2007	412	480	2,666
2008	0	150	299
2009	0	275	2,660
<hr/>			
1980–1999			
average	2,880	3,578	13,700
2000–2009			
average	1,347	1,471	5,767
<hr/>			
2010	N/A	177	N/A

Figure 270-2. Alexander Creek coho harvest and rainbow trout and Arctic grayling catch, 1985–2009.

Year	Coho harvest	Rainbow trout catch	Grayling catch
1985	1,455		
1986	1,352		
1987	1,539		
1988	1,965		
1989	2,207		
1990	1,973	3,065	893
1991	2,296	2,301	705
1992	834	1,124	248
1993	1,719	992	361
1994	2,188	1,075	187
1995	2,692	472	489
1996	803	195	90
1997	1,307	1,034	10
1998	1,158	490	30
1999	1,418	643	707
2000	2,695	759	392
2001	1,972	1335	244
2002	1,191	728	654
2003	1,071	313	72
2004	1,827	220	109
2005	757	64	16
2006	119	402	286
2007	328	106	0
2008	10	0	0
2009	501	34	704
Mean	1,415	768	310

Table 270-3. Historical subsistence salmon harvests, Tyonek subdistrict, 1981–2008.

Year	Permits		Reported salmon harvests					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1981	70	NA	2,002	269	64	32	15	2,382
1982	69	NA	1,590	310	113	4	14	2,031
1983	75	NA	2,665	187	59	6	0	2,917
1984	75	NA	2,200	266	79	23	3	2,571
1985	76	NA	1,472	164	91	10	0	1,737
1986	65	NA	1,676	203	223	46	50	2,198
1987	64	61	1,610	166	149	24	10	1,959
1988	47	42	1,587	91	253	12	8	1,951
1989	49	47	1,250	85	115	1	0	1,451
1990	42	37	781	66	352	12	20	1,231
1991	57	54	902	20	58	0	0	980
1992	57	44	907	75	234	19	7	1,242
1993	62	54	1,370	57	77	17	19	1,540
1994	58	49	770	85	101	22	0	978
1995	70	55	1,317	45	153	15	0	1,530
1996	73	49	1,039	68	137	7	21	1,272
1997	70	42	639	101	137	8	0	885
1998	74	49	1,027	163	64	2	1	1,257
1999	77	54	1,230	144	94	11	32	1,511
2000	60	59	1,157	63	87	0	6	1,313
2001	84	58	976	172	49	6	4	1,207
2002	101	71	1,080	209	115	4	9	1,417
2003	87	74	1,183	111	44	10	7	1,355
2004	97	75	1,345	93	130	0	0	1,568
2005	78	66	982	61	139	2	0	1,184
2006	82	55	943	20	14	1	0	978
2007	84	67	1,281	200	123	2	3	1,609
2008	94	77	1,178	121	194	9	13	1,515
5-year average (2003–2007)	86	67	1,147	97	90	3	2	1,339
10-year average (1998–2007)	82	63	1,120	124	86	4	6	1,340
Historical average (1981–2007)	70	55	1,296	129	121	11	8	1,565

Source ADF&G Division of Subsistence, ASFDB 2009 (ADF&G 2009).

NA Information regarding the number of permits returned in 1981-1986 does exist; however, it was not available at the time this report was written.

Table 270-4. Average king salmon harvest per permit in the Tyonek Subdistrict subsistence fishery, 2008.

2008	Average harvest per permit	Total daily harvest
15-May	1.1	19
16-May	1.4	26
20-May	1.8	28
22-May	2.2	41
23-May	3.1	59
27-May	2.3	44
29-May	3.1	68
30-May	2.3	43
3-Jun	3.4	74
5-Jun	4.9	103
6-Jun	5.3	126
10-Jun	3.1	64
12-Jun	3.3	62
13-Jun	6.1	109
14-Jun	4.1	62
21-Jun	4.5	49
28-Jun	0.6	5

PROPOSAL 271 - 5 AAC 62.122. Special Provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the West Cook Inlet Area.

PROPOSED BY: Duane T. Gluth.

WHAT WOULD THE PROPOSAL DO? This proposal would restrict the king salmon fisheries on the Theodore and Lewis rivers to use of barbless hooks only or total closure, and determine the impact of northern pike on salmon stocks on these rivers.

WHAT ARE THE CURRENT REGULATIONS? The Theodore and Lewis rivers are open to catch-and-release only for king salmon from January 1–June 30.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Opportunity to land fish may be reduced since it is generally considered to be more difficult to land fish without a barb on the hook. The hook may be removed from the fish easily since it is generally considered to be more difficult to remove a hook from a fish that has a barb on it. The effect of barbless hooks on mortality is unknown because research on mortality due to hook type is inconclusive.

BACKGROUND: The Theodore and Lewis rivers drain into West Cook Inlet north of the village of Tyonek. About 900 fishing days of effort are expended on the Theodore River to catch 800 king salmon, while on average, anglers spend 300 days fishing the Lewis River to catch 130 fish (Table 271-1). The board took action in 1999 to restrict these rivers to catch-and-release only due to low observed escapements during the mid-1990s. Despite very restrictive sport fish regulations, neither system has met the lower bounds of their respective escapement goals in the past four years (Figure 271-1).

Northern pike are not indigenous to the Northern and Western Cook Inlet management areas. Northern pike were illegally introduced during the 1950s. Their proliferation and subsequent impact on area fish stocks were not measurably noticeable until about the mid-1980s when northern pike harvest rates began to increase. Over the past 25 years, harvest of northern pike in Northern Cook Inlet has increased from just over 100 fish in 1981 to nearly 12,023 pike in 2001. Growth in the fishery during the mid-1980s to mid-1990s indicated a period of rapid range expansion by northern pike throughout the Westside Susitna area waters. West Cook Inlet area streams have most recently been impacted in those systems where northern pike habitat is most abundant. It is assumed northern pike are responsible for a decline in both anadromous and resident fish within the Threemile/Tukhalla system, which is directly adjacent to village of Tyonek. Since the Theodore and Lewis rivers support relatively little northern pike habitat, impacts to associated fish stocks is assumed to be negligible. However, the department has little information regarding northern pike in West Cook Inlet waters. What little information exists comes from aerial observations of habitat type by staff and harvest estimates from the Statewide Harvest Survey.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The department will be developing an action plan designed to address stock of

management concern recommendation for Theodore, Lewis, and Chuitna rivers' king salmon stocks. The department also recognizes the need to assess the actual and/or potential impact of northern pike on West Cook Inlet rivers.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

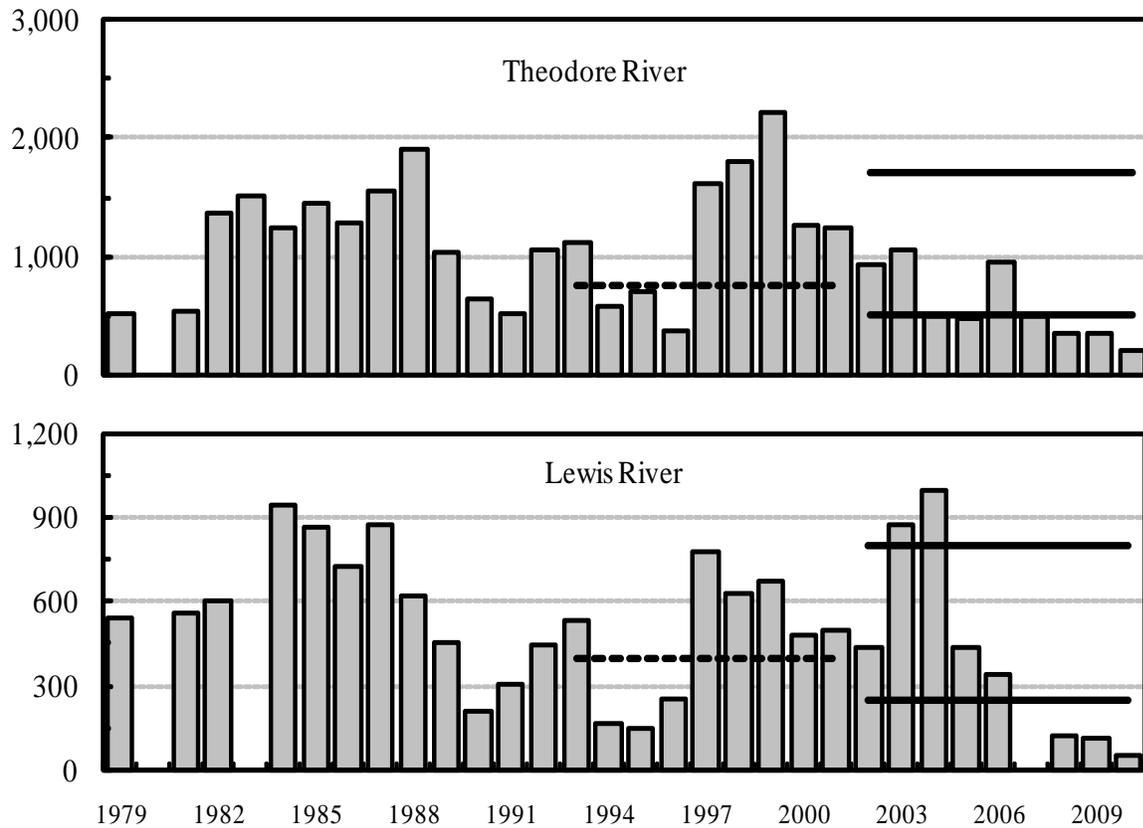


Figure 271-1. Escapement of king salmon on the Theodore and Lewis rivers, 1979–2010.

Table 271-1. Catch of king salmon and effort on the Theodore and Lewis rivers, 1990–2009.

Year	Theodore River		Lewis River	
	Catch	Effort	Catch	Effort
1990	2,252	3,626	887	1,285
1991	692	2,841	16	496
1992	1,945	2,091		
1993	1,390	2,528	409	400
1994	877	3,492		
1995	748	2,425		
1996	621	1,811		
1997	107	521		
1998	13	280		
1999	196	488		
2000	887	1,452		
2001	1,232	1,347		
2002	2,431	1,450	215	237
2003	622	618	108	310
2004	446	828	480	428
2005	904	669	215	310
2006	503	337	13	228
2007	129	749	0	238
2008	809	525	15	222
2009	35	952	0	485
2000–2009				
mean	800	893	131	307

PROPOSAL 272 - 5 AAC 60.170. Little Susitna River Coho Salmon Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would repeal 5 AAC 60.170 *Little Susitna Coho Salmon Management Plan*.

WHAT ARE THE CURRENT REGULATIONS? The purpose of the management plan is to ensure an adequate spawning escapement of coho salmon into the Little Susitna River and provide management guidelines to the department. The department shall manage the sport fishery in the Little Susitna River to attain an escapement goal of 10,100–17,700 nonhatchery coho salmon into the Little Susitna River upstream of the Parks Highway bridge. The bag and possession limit for coho salmon 16 inches or greater in length is two fish, and only unbaited, artificial lures may be used from July 14 through August 5.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would have no effect on management of the coho salmon fishery in the Little Susitna River. Current provisions listed in the plan are already elsewhere in regulation under Title 5, Chapter 60 of the Alaska Administrative Code.

BACKGROUND: The *Little Susitna River Coho Salmon Management Plan* (LSCSMP) was adopted by the board in 1990. The original goals/intent of the plan were to: establish an escapement goal; restrict the harvest of wild coho salmon by reducing bag limits prior to August 5; increase harvest after August 6 to maximize the harvest of hatchery produced fish, and provide for a bag limit of five coho salmon on select river reaches if the projected escapement would exceed the goal. Since the plan's inception, the department has discontinued the stocking program (1995) on the Little Susitna River, therefore, hatchery fish no longer return to the river. Over the past 20 years there have been several regulatory changes that have occurred regarding the management of the Little Susitna River coho salmon sport fishery. New regulations were adopted by the board which calls for a two fish bag limit and a bait restriction from October 1 through August 5; an escapement goal was established in the early 1990s and revised in 1999. As these regulatory changes occurred, over time the management plan was amended and revised to reflect these changes. The current language in the management plan now repeats what is already in regulation under general and special provisions for the river.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal and considers it housekeeping in nature. The *Little Susitna Coho Salmon Management Plan* is no longer necessary because regulations in that plan are already included under the general provisions of 5 AAC 60.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSALS 273 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area.

PROPOSED BY: Kurt Hensel.

WHAT WOULD THE PROPOSAL DO? This proposal would make it illegal for anglers to continue fishing for any species of fish on the Little Susitna River downstream of the Parks Highway bridge once they have taken a bag limit of salmon on that same day.

WHAT ARE THE CURRENT REGULATIONS? A person who takes a bag limit of salmon, other than king salmon, 16 inches or greater in length from the Little Susitna River downstream of the department regulatory marker located at river mile 32.5, may not fish for any species of fish in the Little Susitna River that same day. In the Little Susitna River drainage, after taking a king salmon 20 inches or greater in length, a person may not fish on that same day anywhere in waters open to king salmon fishing. A coho salmon that is removed from the water shall be retained.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would decrease the catch-and-release mortality of coho salmon by an unknown number and provide some regulatory consistency for that section of the Little Susitna River, from its mouth upstream to the Parks Highway bridge, a distance of approximately 69 river miles.

BACKGROUND: In 1993, the department conducted a coho salmon hook-and-release mortality study in the lower reaches of the Little Susitna River. This study was prompted by concerns over dead or dying coho salmon observed in the lower river. Results from this study showed a much higher mortality rate (69%) than initially thought for coho salmon that were released by sport anglers in the lower river. Under the current regulation, downstream of river mile 32.5, anglers must quit fishing once they have harvested a limit of salmon. However, an angler fishing upstream of river mile 32.5 may continue to catch-and-release. This regulation was adopted by the board in 2000 to reduce the catch-and-release-related mortality of coho salmon in the lower river. River mile 32.5 was chosen because it was once the location of a weir, last operated in 1995, and was thought to represent a sufficient boundary to distinguish between the lower and upper river as related to the 1993 mortality study (Figure 273-1).

The department operates a weir at a different location on the Little Susitna River to assess coho salmon escapement. The weir is located at river mile 71 and is approximately one mile upstream of the Parks Highway Bridge. Escapements of coho salmon counted past the weir have been within or above the department's escapement goal of 10,100 to 17,700 fish for seven of the past 10 years. However, in 2009 and 2010, the escapement goal for the Little Susitna was not met (Figure 273-2). Inriver exploitation averages approximately 50% due to relatively high angler effort. On years when runs are average to below average and fishing conditions are good, inriver exploitation has exceeded 50% (Figure 273-3). The average annual harvest of coho salmon from the Little Susitna River is about 21,000 fish, with an additional 6,500 fish being released (Table 273-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Harvests have been sustainable over most years under the current regulation.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

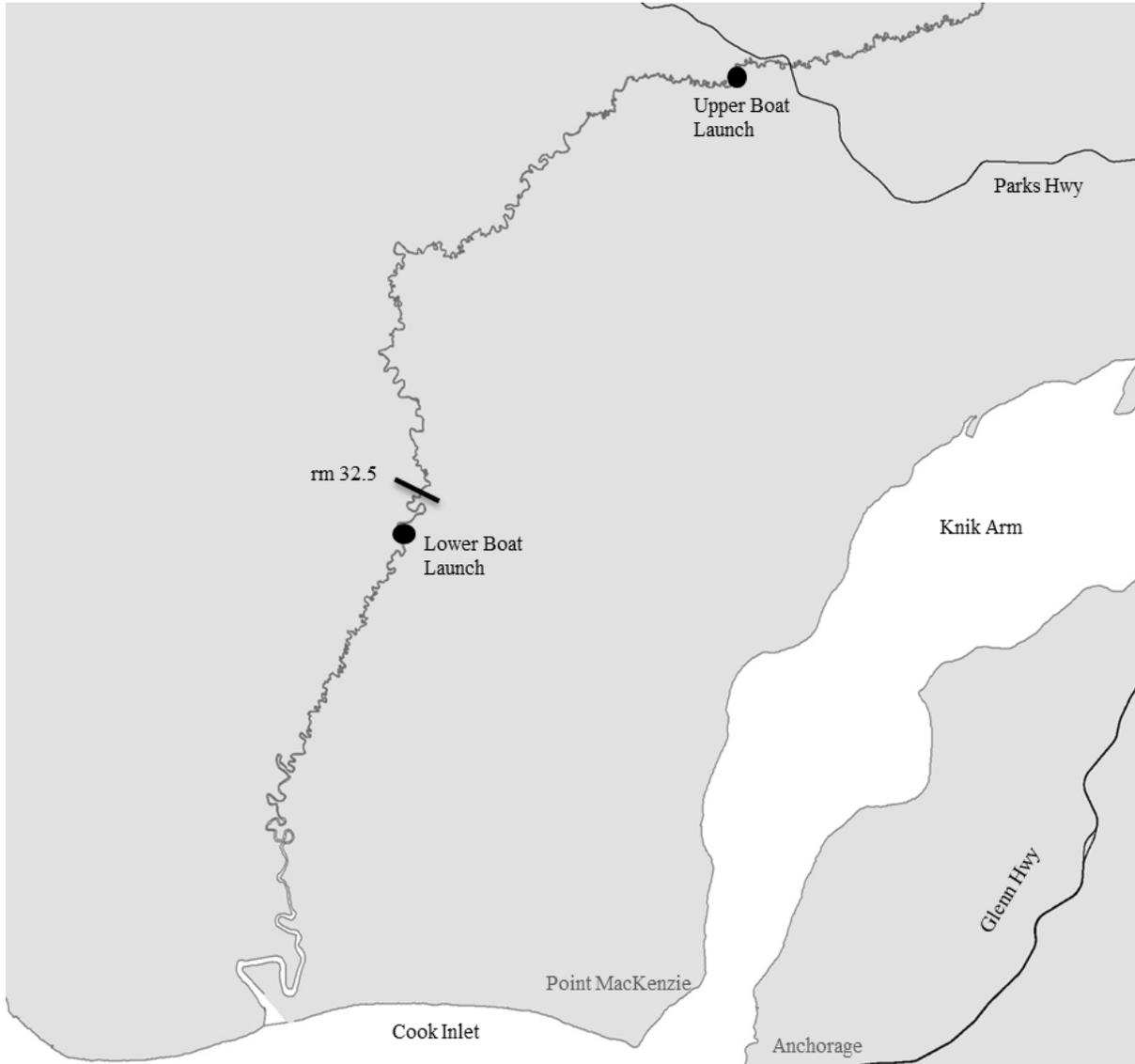


Figure 273-1. Map of the Little Susitna River.

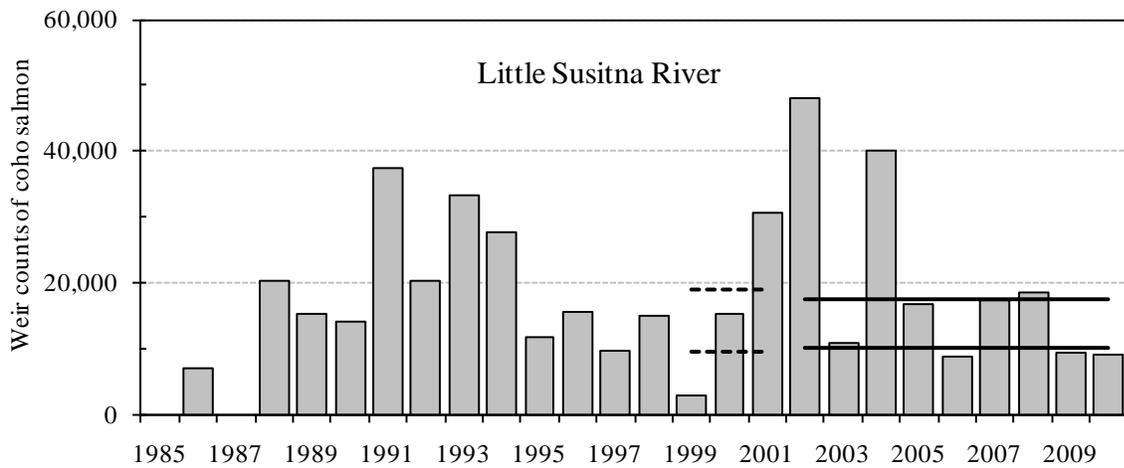


Figure 273-2. Escapement of coho salmon in the Little Susitna River, 1985–2010. No weir in 1985 and 1987; incomplete counts at Little Susitna River weir in 1986, 1997, 1999, 2005, and 2006 due to flooding.

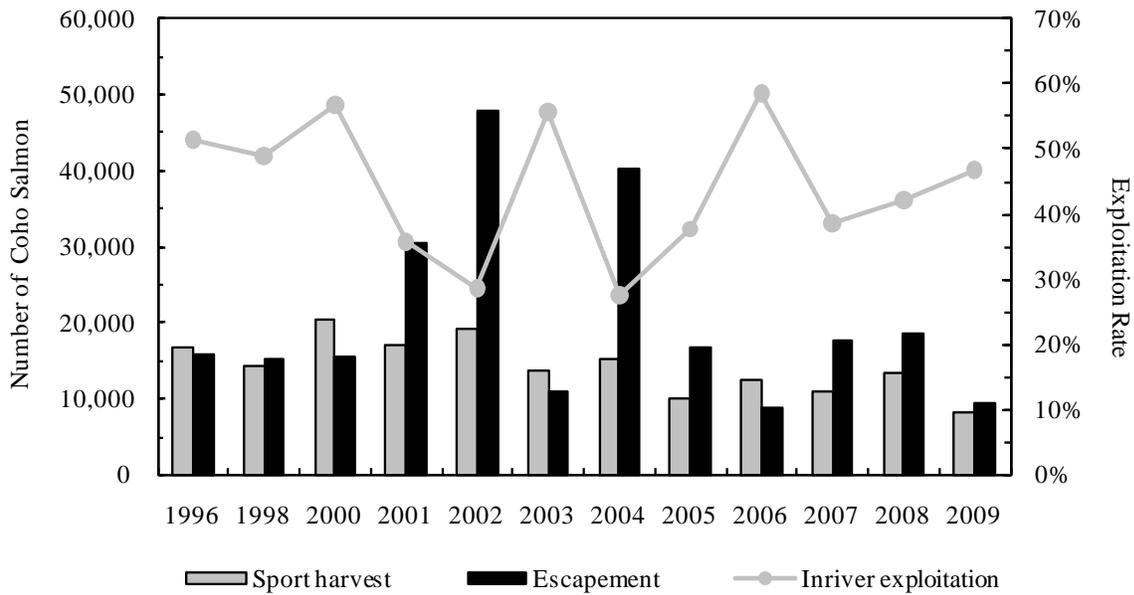


Figure 273-3. Coho salmon harvest, escapement, and inriver exploitation from the Little Susitna River sport fishery and weir located above the fishery at rm 71. Escapement counts in 1997, 1999, and 2005–2006 were incomplete due to flooding.

Table 273-1. Coho salmon catch and harvest on the Little Susitna River, 1990–2009.

Year	Catch	Harvest
1990	12,403	7,497
1991	21,142	16,450
1992	27,993	20,033
1993	38,199	27,610
1994	22,241	17,665
1995	19,853	14,451
1996	22,996	16,753
1997	11,560	7,756
1998	18,621	14,469
1999	11,990	8,864
2000	31,517	20,357
2001	24,636	17,071
2002	30,582	19,278
2003	21,649	13,672
2004	24,981	15,307
2005	13,447	10,203
2006	20,558	12,399
2007	14,895	11,089
2008	18,618	13,498
2009	11,283	8,346
Mean	20,958	14,638

PROPOSAL 274 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Knik Arm Drainages Area.

PROPOSED BY: James Garhart.

WHAT WOULD THE PROPOSAL DO? This proposal would allow fishing for king salmon upstream of the Parks Highway bridge on the Little Susitna River.

WHAT ARE THE CURRENT REGULATIONS? The Little Susitna River upstream of the Parks Highway is closed year-round to all salmon fishing. From its mouth upstream a distance of 70 miles to the Parks Highway, sport fishing is open for king salmon January 1 through July 13. Fishing is only allowed from 6:00 a.m. to 11:00 p.m. daily and bait is not allowed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of king salmon on the Little Susitna River by an unknown, but likely significant, amount. It is likely that this would jeopardize the sustainability of the king salmon resource on the Little Susitna River.

BACKGROUND: In response to king salmon returns below biological escapement goals (BEG) in several Northern Cook Inlet streams beginning in the early 1990s, action was taken by emergency orders and regulatory changes to reduce harvest levels. Prior to the 1995 season, the board implemented the following regulations to the Little Susitna River: prohibiting bait during king salmon season, setting the bag and possession limit at one king salmon, and allowing fishing only between the hours of 6:00 a.m. and 11:00 p.m. Approximately 32,000 angler days are expended each year on the Little Susitna River, of which about half is directed at fishing for king salmon. On average, 3,000 king salmon are harvested each year (Table 274-1), about the same number that reaches the spawning grounds (index count represents about 50% of the actual escapement). Inriver exploitation is suspected to be at 50% over most years. The current fishery takes place over 70 miles of river between the mouth and Parks Highway Bridge. The approximately 30 miles of river upstream of the bridge is the area in which the majority of spawning takes place and constitutes the majority of the index area surveyed by the department each year. The sport harvest of king salmon from the little Susitna River is already at peak capacity, and any additional liberalization would have to come at a cost of restricting either time, methods and means, or area, which are already restricted. In 2009, the escapement of king salmon into the Little Susitna River was just over the lower range of the escapement goal of 900–1,800 (Figure 274-1); in 2010, only 589 fish were observed, which is far short of the goal.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Existing sport fishing regulations for the Little Susitna River provide ample harvest opportunity while still maintaining a sustainable level of king salmon. Any increase in sport fishing opportunity on the Little Susitna River would likely not be sustainable.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

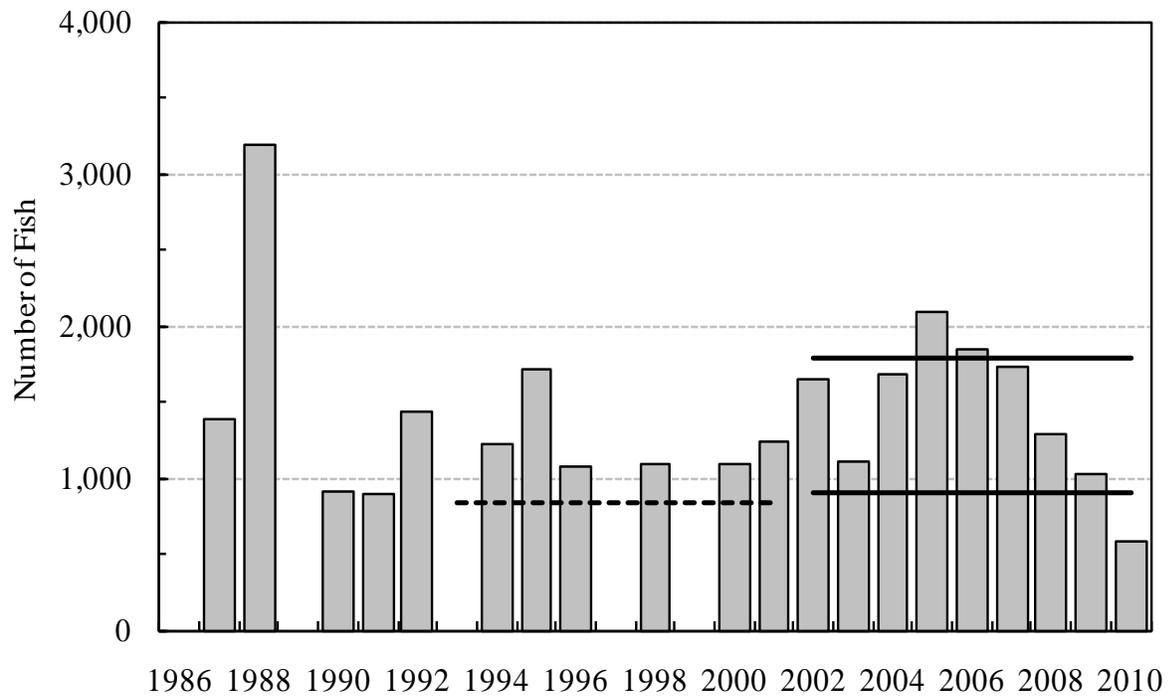


Figure 274-1. Escapement of king salmon in the Little Susitna River, 1986–2010.

Table 274-1. Harvest and escapement of king salmon in the Little Susitna River, 1989–2010.

Year	Harvest	Escapement ^a
1989	4,204	b
1990	1,965	922
1991	2,102	892
1992	3,920	1,441
1993	3,441	b
1994	4,204	1,221
1995	1,698	1,714
1996	1,484	1,079
1997	2,938	b, c
1998	2,031	1,091
1999	2,713	b, c
2000	2,802	1,094
2001	2,243	1,238
2002	3,144	1,660
2003	2,138	1,114
2004	2,362	1,694
2005	2,724	2,095
2006	3,303	1,855
2007	3,210	1,731
2008	2,219	1,297
1989–2008		
Average	2,742	1,384
2009	1,653	1,028
2010	NA	589

^a Aerial index count.

^b No count conducted; water too turbid.

^c Biological Escapement Goal (BEG) = 850 fish.

^d Sustainable Escapement Goal (SEG) = 900 to 1,800 fish.

PROPOSAL 275 - AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Michael A. Hendrickson.

WHAT WOULD THE PROPOSAL DO? This proposal would restrict motor boat horsepower to 25 or less for all users on the Little Susitna River.

WHAT ARE THE CURRENT REGULATIONS? There are currently no power boat restrictions on the Little Susitna.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED? If it fell within the board's authority, adoption of this proposal would likely improve boating safety to some degree. It is difficult to determine what effect this proposal would have on fishing effort and harvest. In the short term, effort and harvest would likely decrease until boating anglers exceeding the horsepower limit come into compliance. Some anglers would fish elsewhere if unwilling or unable to come into compliance.

BACKGROUND: The Little Susitna River is a fairly small, twisting river system located within the Matanuska-Susitna Valley. There are two boat access points to the Little Susitna River. One is located immediately downstream of the Parks Highway bridge and the other is a department-owned site located 40 miles downstream of the Parks Highway bridge in the vicinity of Point MacKenzie. Due to the river's shallowness, jet-equipped boats are nearly exclusively used on the 40-mile stretch of river between the lower access and the Parks Highway bridge. Some propeller-driven boats are used downstream of the lower access. Every year this river system receives about 35,000 angler days of effort. The majority of this effort is expended by anglers using power boats. Power boats on the river range in size from 10 to 30 feet and use both outboard and inboard engines ranging in horse power from 2–250 hp for outboard motors or with inboard engines, as large as 460 cubic inches. According to the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, which manage the lower access, approximately 1,600 boats use the lower access each year; the average boat length is 17 feet and average horsepower about 52. Because this is such a small twisting river, with a high volume of boat traffic, there are many complaints of oversized and overpowered boats, and several boating accidents each year. Accidents requiring hospitalization have taken place.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department recognizes that safety is a concern on the Little Susitna River. The Department of Law has advised that the board may not regulate for general public safety concerns, but might be able to regulate fishing activity for safety concerns of fishery participants when those concerns have an actual impact on how the fisheries are prosecuted. The board may also adopt regulations affecting general boat use it considers advisable for watershed, and habitat improvement, however, in this case, it may be difficult for the board to demonstrate the reasonable necessity of restricting general boat use for conservation or development purposes. The department does not have data to conclude that vessel engine horsepower sizes are causing a significant conservation concern.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Individuals who own boats with outboards having greater than 25 hp would be required to purchase engines and/or boats if they wanted to continue to fish from their boat on the Little Susitna River.

PROPOSAL 276 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Mat-Su Anglers Sportfishing Club.

WHAT WOULD THE PROPOSAL DO? This proposal would allow youths only (under 16 years of age) to fish on Fish Creek during the first Saturday and Sunday in August.

WHAT ARE THE CURRENT REGULATIONS? In the Fish Creek drainage, the waters from department regulatory markers located at its mouth upstream to a department regulatory marker located one-quarter mile upstream from the Knik-Goose Bay Road, are open to sport fishing beginning the second Saturday in August through December 31 on Saturdays and Sundays from 6:00 a.m. to 6:00 p.m., except that sport fishing for king salmon is closed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would create an opportunity for youth anglers to fish for sockeye and coho salmon on Fish Creek for two days in early August. The increased sport catch of sockeye and coho salmon from this system would likely be fewer than 100 fish. On years of low sockeye salmon returns, it could contribute to not meeting the escapement goal depending unless the department issued an emergency order prohibiting the retention of sockeye salmon.

BACKGROUND: In 2004, the Alaska State Legislature enacted HB 98, which gave authority to the board to create youth-only fisheries. These fisheries are designed to allow young anglers, aged 15 and younger, an opportunity to fish without having to compete with more skilled adult anglers. Youth-only salmon fisheries are now in regulation on Campbell Creek in Anchorage for king salmon, at the Nick Dudiak Fishing Lagoon in Homer for both king and coho salmon, and at two locations in Seward for stocked trout, king salmon, and coho salmon.

In the past decade, angler participation on Fish Creek has ranged between 900 and 4,200 angler days, averaging approximately 1,600 angler days per year (Table 276-1). Based on Statewide Harvest Survey information, the average sport harvest of sockeye and coho salmon from Fish Creek is approximately 165 and 600 fish, respectively. The department operates a weir on Fish Creek upstream of the sport fishery to estimate the spawning escapement of sockeye salmon. Prior to the date the youth fishery would begin, approximately 90% of the sockeye salmon returning to Fish Creek have already passed through the area where the youth fishery would occur (Figure 276-1 and Figure 276-2).

In previous years, the department counted coho salmon returning to this system. Due to budget constraints, the coho salmon portion of the weir program was eliminated. With the current weir program and an overlap in run timing, the department is able to assess approximately 50% of the coho salmon escapement into the Fish Creek system. Even with incomplete coho salmon counts, coho salmon escapements have exceeded the upper range of the previously-established SEG in five of the past ten years (Figure 276-3).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, but **SUPPORTS** providing opportunity for youths to fish on Fish Creek. Creating a youth-only fishery on Fish Creek would allow a minimal harvest of sockeye and coho salmon, which could be managed inseason on a sustained yield basis.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

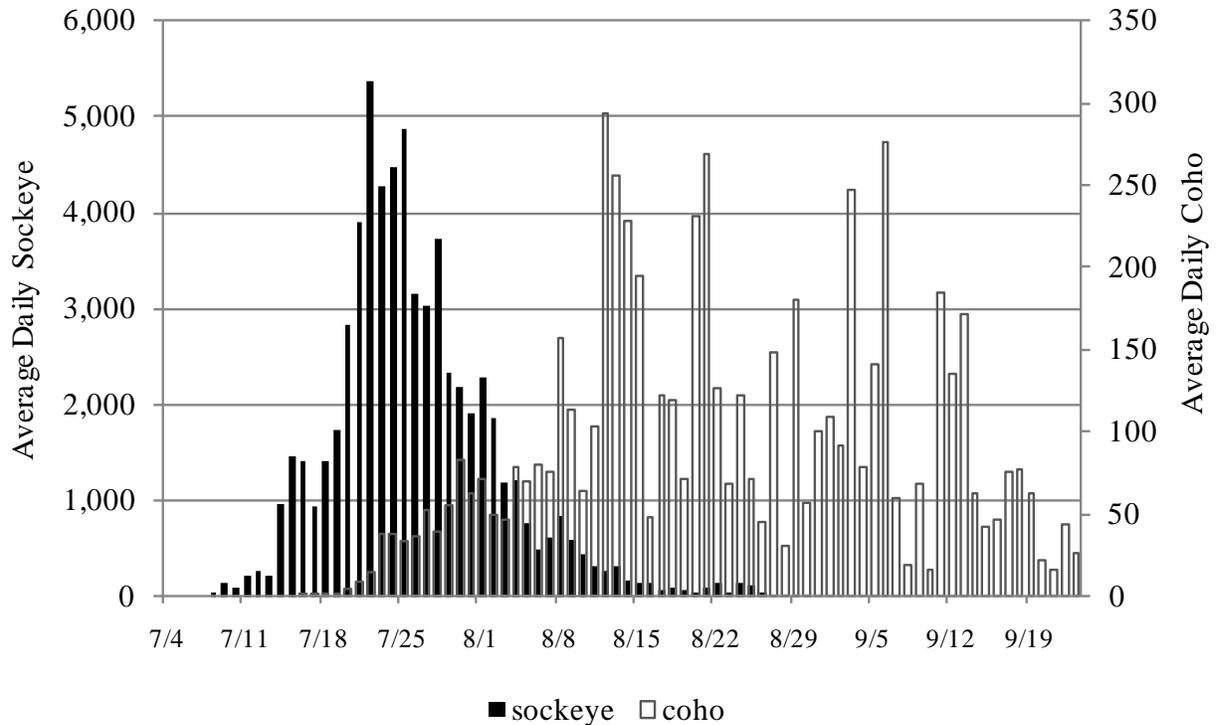


Figure 276-1. Average daily weir count of coho and sockeye salmon at Fish Creek.

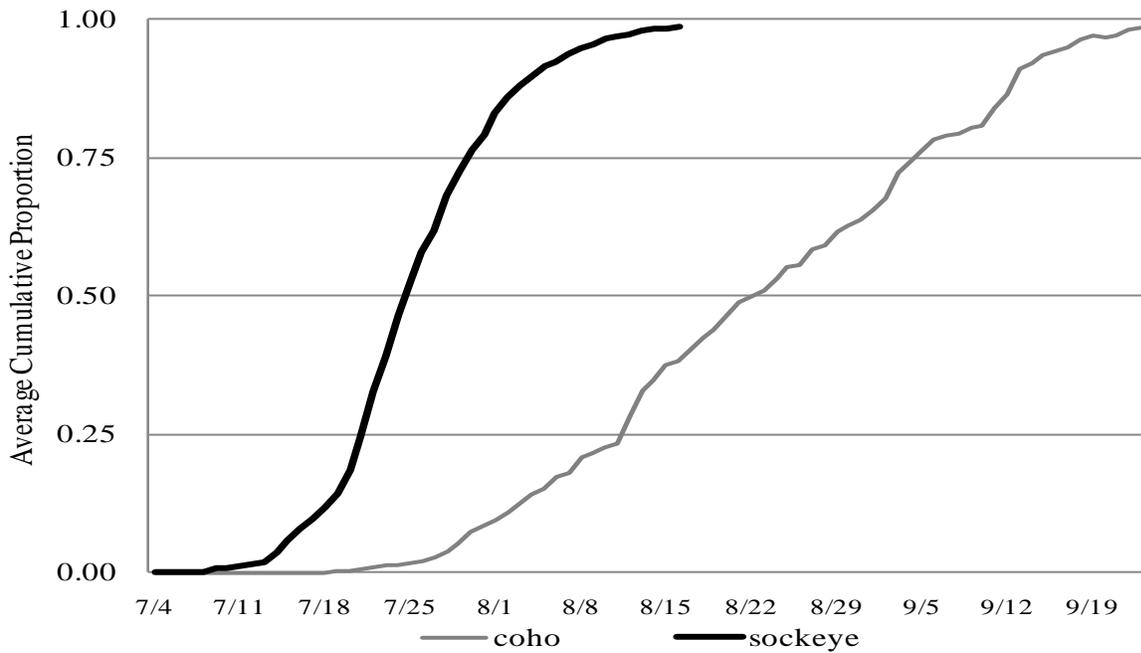


Figure 276-2. Average cumulative proportion of coho and sockeye salmon counted through the weir at Fish Creek.

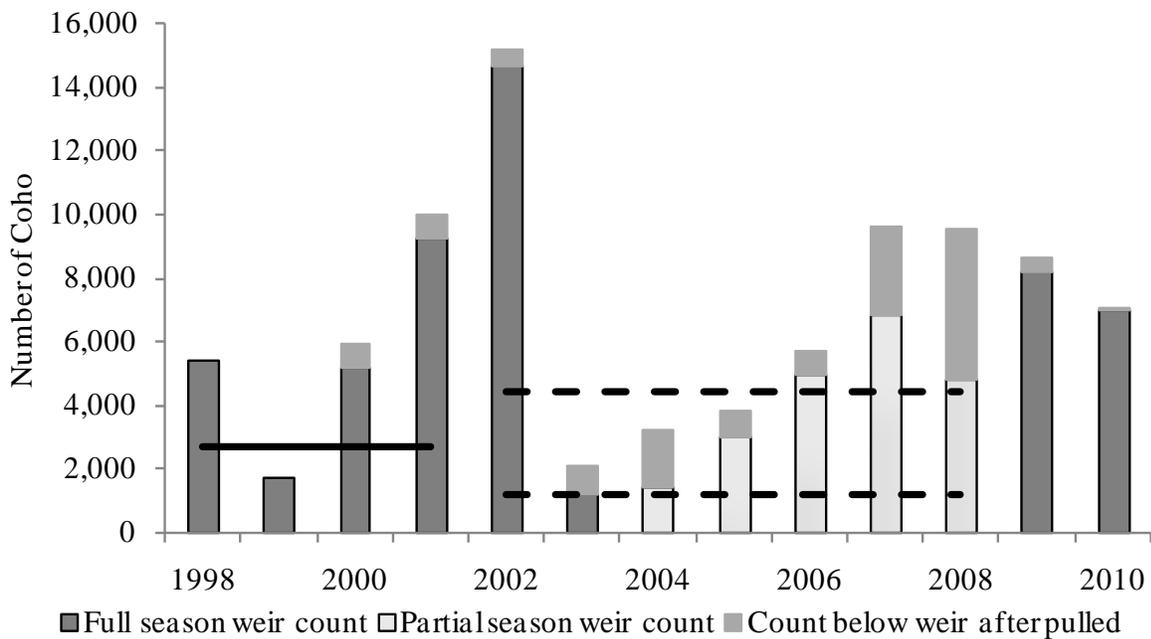


Table 276-3. Fish Creek coho salmon escapement, 1998–2010. Escapement goal was 2,700 fish prior to 2002 and 1,200–4,400 fish from 2002–2008.

Table 276-1. Fish Creek sport salmon harvest, 1985–2009.

Year	Coho	Sockeye	Pink	Chum	Chinook	Angler-days
1985	284	109	22	0	44	903
1986	364	39	646	66	0	2,641
1987	833	1,087	217	10	19	2,898
1988	1,637	2,037	255	564	0	3,110
1989	784	2,900	199	19	0	4,204
1990	398	2,238	127	34	0	3,936
1991	486	565	122	70	6	3,693
1992	526	1,241	55	0	0	4,534
1993	741	598	38	0	0	2,976
1994	492	476	68	0	0	3,496
1995	435	651	0	9	0	2,256
1996	607	68	49	11	0	934
1997	148	122	0	0	0	1,104
1998	1,334	154	44	15	0	2,256
1999	233	432	27	0	0	2,182
2000	470	21	10	12	0	1,408
2001	361	10	11	0	0	1,670
2002	1233	147	65	9	0	2,776
2003	112	57	0	0	0	1,182
2004	774	400	0	0	0	2,029
2005	535	79	0	0	0	1,461
2006	281	0	28	13	0	948
2007	120	289	48	16	0	907
2008	993	26	153	0	0	1,343
2009	1,178	647	0	22	0	2,092
2000–2009 average	606	168	32	7	0	1,582

PROPOSAL 277 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area.

PROPOSED BY: Steve Runyan.

WHAT WOULD THE PROPOSAL DO? This proposal would open sport fishing on Fish Creek the first weekend following July 15 on Saturdays and Sundays from 6:00 a.m. to 6:00 p.m. if the department projects that the upper range of the SEG will be met.

WHAT ARE THE CURRENT REGULATIONS? In the Fish Creek drainage, the waters from department regulatory markers located at its mouth upstream to a department regulatory marker located one-quarter mile upstream from the Knik-Goose Bay Road, are open to sport fishing beginning the second Saturday in August through December 31 on Saturdays and Sundays from 6:00 a.m. to 6:00 p.m., except that sport fishing for king salmon is closed. After taking a bag limit of salmon, a person may not sport fish that same day in waters open to salmon fishing. The waters from a department regulatory marker located one-quarter mile upstream from the Knik-Goose Bay Road upstream to a department regulatory marker located one-quarter mile upstream of the Lewis Road Bridge are closed to sport fishing. The waters upstream of a department regulatory marker located one-quarter mile upstream of the Lewis Road Bridge, including Meadow Creek, are closed to sport fishing for salmon.

The personal use fishery opens by emergency order between July 10 and July 31 if the department can project exceeding 70,000 sockeye salmon in the escapement as counted by weir.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal could increase the sockeye salmon sport fish harvest by a significant amount. On years of strong returns, there would be little to no problem achieving the escapement goal. However, on years of average to below average returns, the additional harvest could jeopardize the chance of attaining the escapement goal. This proposal would also cause gear conflicts between personal use fishermen using dip nets and those using a fishing rod while attempting to harvest fish in the same area when both fisheries are open.

BACKGROUND: The current opening date was selected to prevent conflict between personal use and sport anglers, and direct the sport harvest to coho salmon. Generally, by the time the sport fishery opens, over 90% of the sockeye salmon return has already passed upstream of the designated sport fishing area and the personal use fishery has been closed. The sport fishery on Fish Creek is structured primarily to harvest coho salmon, not sockeye salmon. The average sport harvest of sockeye salmon from Fish Creek is approximately 165 fish per year, while the average coho salmon harvest exceeds 600 fish (Table 277-1). A personal use fishery opens by emergency order between July 10 and July 31 if the department projects that the sockeye salmon escapement will exceed 70,000 fish. This has only occurred twice in the past decade and could possibly occur in 2011. The personal use fishery in Fish Creek is a high-use fishery where daily participation can be as high as 300 dipnetters. The area open to personal use and sport fishing is a relatively small area and the creek is very narrow. If both fisheries were to occur simultaneously, it is

highly likely that conflicts would occur between users. Once the personal use fishery is open, exploitation can often be greater than 95% of the daily inriver run. During years of high returns, the personal use fishery is a much more effective tool to ensure that fish in excess of the escapement goal are harvested.

Fish Creek has been stocked by the department, and later by Cook Inlet Aquaculture Association, since 1975. Sockeye salmon escapements at Fish Creek have been erratic over the past decade, with a low of 14,000 in 2005 to a high of 125,000 in 2010 (Table 277-2). The contribution of hatchery fish in the run to Fish Creek has been as high as 74%, with a more recent contribution of 36% in 2009 and 67% in 2010. The stocking program was discontinued in 2008 and the last year of hatchery fish returning to this system will be 2011. Without the return of hatchery fish it is likely there will be little opportunity to open Fish Creek to dipnetting.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. When the sport fish regulations were developed for Fish Creek, they were done so to create a regulatory date separation between the two user groups, to minimize harvest of coho salmon in the personal use fishery, and to avoid user conflicts.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 277-1. Fish Creek sport salmon harvest, 1985–2009.

Year	Coho	Sockeye	Pink	Chum	Chinook	Angler-days
1985	284	109	22	0	44	903
1986	364	39	646	66	0	2,641
1987	833	1,087	217	10	19	2,898
1988	1,637	2,037	255	564	0	3,110
1989	784	2,900	199	19	0	4,204
1990	398	2,238	127	34	0	3,936
1991	486	565	122	70	6	3,693
1992	526	1,241	55	0	0	4,534
1993	741	598	38	0	0	2,976
1994	492	476	68	0	0	3,496
1995	435	651	0	9	0	2,256
1996	607	68	49	11	0	934
1997	148	122	0	0	0	1,104
1998	1,334	154	44	15	0	2,256
1999	233	432	27	0	0	2,182
2000	470	21	10	12	0	1,408
2001	361	10	11	0	0	1,670
2002	1233	147	65	9	0	2,776
2003	112	57	0	0	0	1,182
2004	774	400	0	0	0	2,029
2005	535	79	0	0	0	1,461
2006	281	0	28	13	0	948
2007	120	289	48	16	0	907
2008	993	26	153	0	0	1,343
2009	1,178	647	0	22	0	2,092
2000–2009 average	606	168	32	7	0	1,582

Table 277-2. Contribution of hatchery fish to the Fish Creek sockeye salmon escapement, 2002–2010.

Year	Total Escapement	Hatchery Contribution		Total "Wild" Escapement
		Percent	Total	
2002	90,482	2%	1,810	88,672
2003	91,952	12%	11,034	80,918
2004	22,157	17%	3,767	18,390
2005	14,215	55%	7,818	6,397
2006	32,562	73%	23,770	8,792
2007	27,948	71%	19,843	8,105
2008	19,339	51%	9,863	9,476
2009	83,480	36%	30,053	53,427
2010	126,836	67%	84,980	41,856
Average	56,552	43%	21,438	35,115

PROPOSAL 278 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area.

PROPOSED BY: Steve Runyan.

WHAT WOULD THE PROPOSAL DO? This proposal would open sport fishing on Fish Creek on Saturdays and Sundays from 6:00 a.m. to 6:00 p.m. the weekend following achieving the upper range of the sockeye salmon sustainable escapement goal (SEG). If the SEG is not met, then the department would not allow sport fishing on this system until the third Saturday in August.

WHAT ARE THE CURRENT REGULATIONS? In the Fish Creek drainage, the waters from department regulatory markers located at its mouth upstream to a department regulatory marker located one-quarter mile upstream from the Knik-Goose Bay Road, are open to sport fishing beginning the second Saturday in August through December 31 on Saturdays and Sundays from 6:00 a.m. to 6:00 p.m., except that sport fishing for king salmon is closed. After taking a bag limit of salmon, a person may not sport fish that same day in waters open to salmon fishing. The waters from a department regulatory marker located one-quarter mile upstream from the Knik-Goose Bay Road upstream to a department regulatory marker located one-quarter mile upstream of the Lewis Road Bridge are closed to sport fishing. The waters upstream of a department regulatory marker located one-quarter mile upstream of the Lewis Road Bridge, including Meadow Creek, are closed to sport fishing for salmon.

The personal use fishery opens by emergency order between July 10 and July 31 if the department can project exceeding 70,000 sockeye salmon in the escapement as counted by weir.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted, it could increase the number of sockeye salmon harvested by the sport fishery in Fish Creek substantially on years of strong returns projected to be above the upper end of the escapement. This proposal would also result in conflicts between personal use and sport users.

BACKGROUND: The current opening date was selected to prevent conflict between personal use and sport anglers, and direct the sport harvest to coho salmon. Generally, by the time the sport fishery opens, over 90% of the sockeye salmon return has already passed upstream of the designated sport fishing area and the personal use fishery has been closed. The sport fishery on Fish Creek is structured primarily to harvest coho salmon, not sockeye salmon. The average sport harvest of sockeye salmon from Fish Creek is approximately 165 fish per year, while the average coho salmon harvest exceeds 600 fish (Table 277-1). A personal use fishery opens by emergency order between July 10 and July 31 if the department projects that the sockeye salmon escapement will exceed 70,000 fish. This has only occurred twice in the past decade and could possibly occur in 2011. The personal use fishery in Fish Creek is a high-use fishery where daily participation can be as high as 300 dipnetters. The area open to personal use and sport fishing is a relatively small area and the creek is very narrow. If both fisheries were to occur simultaneously, it is highly likely that conflicts would occur between users. Once the personal use fishery is open,

exploitation can often be greater than 95% of the daily inriver run. During years of high returns, the personal use fishery is a much more effective tool to ensure that fish in excess of the escapement goal are harvested.

Fish Creek has been stocked by the department, and later by Cook Inlet Aquaculture Association, since 1975. Sockeye salmon escapements at Fish Creek have been erratic over the past decade, with a low of 14,000 in 2005 to a high of 125,000 in 2010 (Table 277-2). The contribution of hatchery fish in the run to Fish Creek has been as high as 74%, with a more recent contribution of 36% in 2009 and 67% in 2010. The stocking program was discontinued in 2008 and the last year of hatchery fish returning to this system will be 2011. Without the return of hatchery fish it is likely there will be little opportunity to open Fish Creek to dipnetting.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. When the sport fish regulations were developed for Fish Creek, they were done so to create a regulatory date separation between the two user groups, to minimize harvest of coho salmon in the personal use fishery, and to avoid user conflicts.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 278-1. Fish Creek sport salmon harvest, 1985–2009.

Year	Coho	Sockeye	Pink	Chum	Chinook	Angler-days
1985	284	109	22	0	44	903
1986	364	39	646	66	0	2,641
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1990	398	2,238	127	34	0	3,936
1991	486	565	122	70	6	3,693
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1993	741	598	38	0	0	2,976
1994	492	476	68	0	0	3,496
1995	435	651	0	9	0	2,256
1996	607	68	49	11	0	934
1997	148	122	0	0	0	1,104
1998	1,334	154	44	15	0	2,256
1999	233	432	27	0	0	2,182
2000	470	21	10	12	0	1,408
2001	361	10	11	0	0	1,670
2002	1233	147	65	9	0	2,776
2003	112	57	0	0	0	1,182
2004	774	400	0	0	0	2,029
2005	535	79	0	0	0	1,461
2006	281	0	28	13	0	948
2007	120	289	48	16	0	907
2008	993	26	153	0	0	1,343
2009	1,178	647	0	22	0	2,092
2000–2009						
average	606	168	32	7	0	1,582

Table 278-2. Contribution of hatchery fish to the Fish Creek sockeye salmon escapement, 2002–2010.

Year	Total	Hatchery Contribution		Total "Wild"
	Escapement	Percent	Total	Escapement
2002	90,482	2%	1,810	88,672
2003	91,952	12%	11,034	80,918
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2006	32,562	73%	23,770	8,792
2007	27,948	71%	19,843	8,105
2008	19,339	51%	9,863	9,476
2009	83,480	36%	30,053	53,427
2010	126,836	67%	84,980	41,856
Average	56,552	43%	21,438	35,115

PROPOSALS 279 and 280 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Knik Arm Drainages Area.

PROPOSED BY: Matanuska Valley Advisory Committee (Proposal 279).
Anchorage Advisory committee (Proposal 280).

WHAT WOULD THESE PROPOSALS DO? These proposals would increase the area open to king salmon fishing at the Eklutna Tailrace, a terminal fishery. The boundaries would be extended to include all waters of the Knik River from the Glenn Highway bridge to one-half mile above the Tailrace and waters of the tailrace (Figure 279-1).

WHAT ARE THE CURRENT REGULATIONS? The Eklutna Tailrace is open to fishing for king salmon from its confluence with the Knik River upstream to an ADF&G regulatory marker located approximately 100 feet downstream of the Old Glenn Highway, and in the waters within a one-half mile radius of, and downstream two miles from, its confluence with the Knik River.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? These proposals would likely increase the effort and harvest of hatchery fish by an unknown, but likely small, amount. It would also increase the harvest of nontarget, wild king salmon migrating upstream in the Knik and Matanuska rivers. The increased harvest of wild king salmon stocks may jeopardize the sustainability of these fish.

BACKGROUND: The Eklutna Tailrace flows from the Eklutna Power Plant to the Knik River. The tailrace is approximately one-quarter mile long and empties into a side channel of the Knik River at river mile four. The Knik River is a glacial river. The Knik and Matanuska rivers intersect at Knik Arm, forming a web of interconnected channels. The two rivers do not fully separate from one another for the first four miles above Knik Arm.

A nonprofit hatchery was operated at this site from 1981 to 1998; however, this hatchery is no longer in operation. The department recently began a terminal king salmon fishery at this site, with the first king salmon smolt stocking in 2002. One of the main objectives of this program is to take pressure off wild king salmon through supplemental hatchery fish returning to a terminal harvest area. Therefore, the harvest area was chosen to maximize the potential for harvest of only stocked hatchery fish. Three annual objectives of this stocking program are to: 1) stock the tailrace with 200,000 king salmon smolt, 2) produce a run of 4,000 fish, and 3) provide for 10,000 angler days. The average harvest through 2009 was 575 fish. This is a relatively new fishery, having only received its first complement of all age classes in 2006.

King salmon stocks returning to the clearwater drainages of the Matanuska River are few and small. The most productive systems are Moose, King, and Granite creeks, and there are other clearwater tributaries that probably support a few king salmon. The long-term average number of king salmon returning to Moose Creek (1983–2008) is approximately 522 fish; a more recent average (2006–2010) is only about 250 fish. Because Moose Creek is a high gradient, high-velocity system with few holding areas for fish, most of the king salmon returning to this system hold for a few weeks at the confluence of Moose Creek and the Matanuska River until nearly

ready to spawn. This area is deemed a high priority enforcement area because any illegal harvest in this area could push this stock to levels that may not be sustainable. The department does not count king salmon on King River or Granite Creek; however, it is likely that king salmon returns to these systems probably amount to fewer than 100 fish each.

During the 2008 Upper Cook Inlet board meeting, the area open to sport fishing at the Eklutna Tailrace was extended downstream by an additional 1.5 miles, essentially opening the full side channel that leads to the mouth of the tailrace (Figure 279-1). The department assumes nearly all king salmon entering this side channel are hatchery fish destined for the tailrace. By increasing the area open to king salmon fishing on the Knik River, anglers were provided more opportunity to harvest hatchery-produced king salmon earlier in the year, while still minimizing the harvest of small wild king salmon stocks that occur in Matanuska and Knik river waters.

DEPARTMENT COMMENTS: The department **OPPOSES** these proposals because king salmon ascending the Matanuska and Knik rivers may be subject to overharvest given the limited abundance of salmon that occur in this system.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

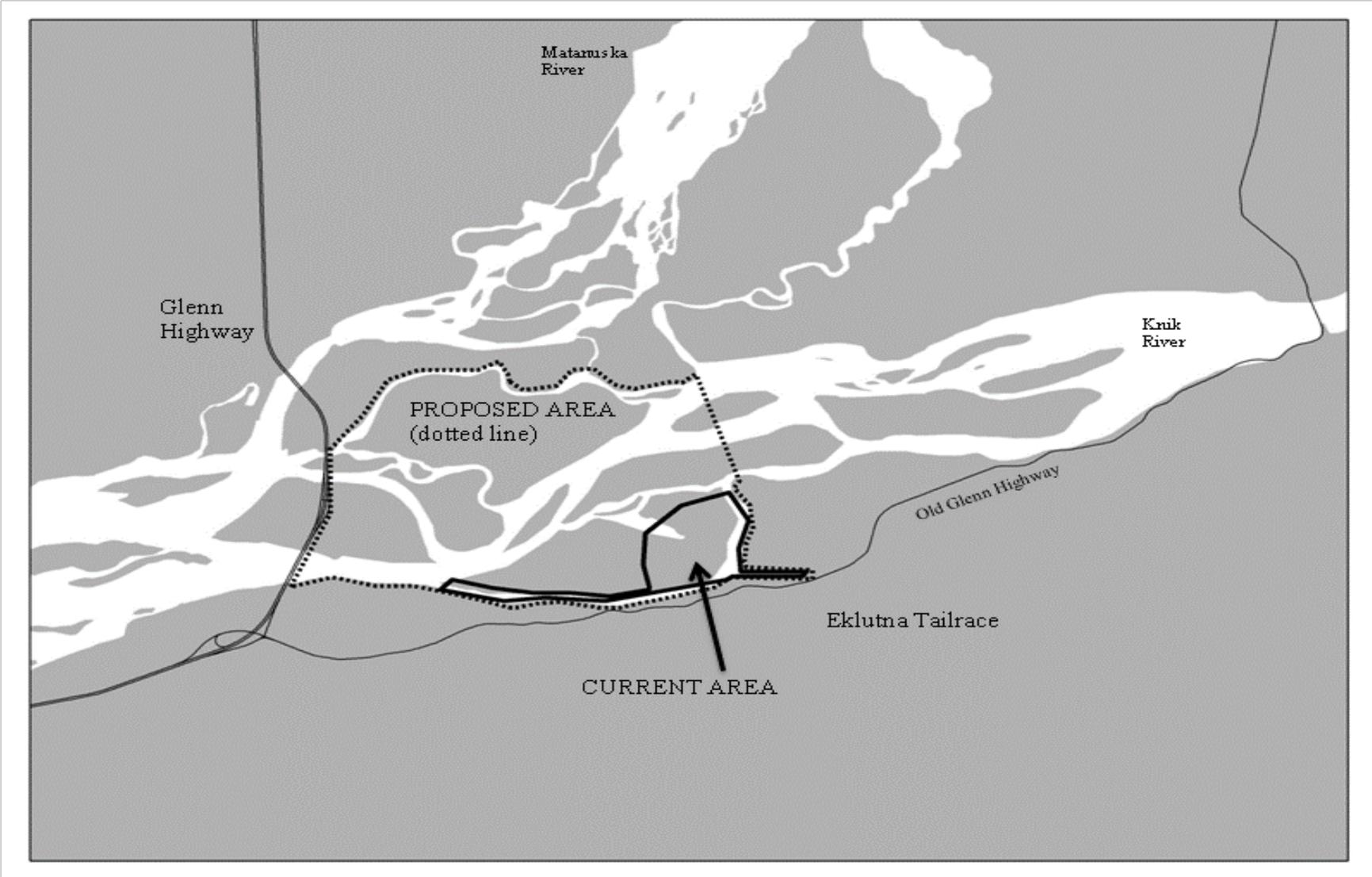


Figure 279-1. Proposed extension of the Eklutna Tailrace terminal king salmon fishery.

PROPOSAL 281 - 5 AAC 60.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area. *(This proposal was erroneously cited as 5 AAC 61.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 6 of the Susitna River Drainage Area.)*

PROPOSED BY: Matanuska Valley Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would open the Matanuska River to sport fishing for king salmon.

WHAT ARE THE CURRENT REGULATIONS? Sport fishing for king salmon is prohibited on the Matanuska River. King salmon may not be retained or possessed; a king salmon that is caught must be released immediately; a person may not remove a king salmon from the water before releasing the fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely jeopardize the sustainability of Matanuska River king salmon.

BACKGROUND: The Matanuska River is a large glacial system that supports numerous short, high-velocity, clearwater tributaries. King salmon returning to the clearwater drainages of the Matanuska River are few and small. The most productive tributaries are Moose, King, and Granite creeks; other clearwater tributaries support few king salmon. The long-term average number of king salmon returning to Moose Creek (1983–2008) is approximately 522 fish, and a more recent average (2006–2010) is only about 250 fish. Because Moose Creek is a high gradient, high-velocity system with few holding areas for fish, most of the king salmon returning to this system hold for a few weeks at the confluence of Moose Creek and the Matanuska River until nearly ready to spawn. This area is deemed a high priority enforcement area because any illegal harvest in this area could push this stock to levels that may not be sustainable. The department does not count king salmon on King River or Granite Creek; however, it is likely that king salmon returns to these systems probably amount to fewer than 100 fish each.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Matanuska king salmon stocks are limited and a fishery on these stocks could jeopardize their sustainability.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 282 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would correct an inconsistency that exists in regulations governing motor boat use during a weekend-only fishery on Wasilla Creek and Rabbit Slough by repealing a subsection within sport fishing regulations. Outboard motor use in Wasilla Creek and Rabbit Slough would then be governed by the *Palmer Hay Flats State Game Refuge* (PHFSGR) regulation (5 AAC 95.505) which allows for the use of motor boats during the weekend-only fishery as long as the motorized watercraft is incapable of producing more than 42 pounds of thrust or three horsepower.

WHAT ARE THE CURRENT REGULATIONS? The sport fishing regulation states that, in Wasilla Creek and Rabbit Slough, motor boat use is prohibited on weekends from July 15 through August 15; the PHFSGR regulation, 5AAC 95.505, states that motorized watercraft incapable of producing more than 42 pounds of thrust or three horsepower are allowed during the weekend-only sport fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would make it clear to recreational users and enforcement personnel that motorized watercraft capable of producing no more than 42 pounds of thrust or three horsepower would be allowed during the weekend-only fishery on Wasilla Creek and Rabbit Slough. It would eliminate an inconsistency that currently exists between sport fishing and PHFSGR regulations, and thereby alleviate the confusion and disparity that exists for both recreational users and wildlife enforcement personnel.

BACKGROUND: Wasilla Creek is a narrow, convoluted, slow-moving creek that drains into Knik Arm. It is navigable only by small watercraft, such as motor-driven or paddled canoes and jon boat-style boats equipped with outboards. Coho salmon are targeted in a weekend-only fishery from mid July to mid August. In 1986, the PHFSGR management plan restricted use of motors from July 15 to August 15 to reduce the potential for accidents during a period of high congestion during the coho fishery. The board followed suit in 1987, implementing the same action under sport fishing regulations. In 2000, the refuge management plan was revised to allow motorized watercraft with low horsepower. No subsequent change was made to sport fish regulations. Each year more anglers are choosing to use motor-driven boats under the PHFSGR regulation. Limiting motor boat use to all users and not just anglers is considered to be more under the authority of the Palmer Hay Flats refuge regulation.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. This proposal is viewed as housekeeping in nature because it seeks to remove an inconsistency in regulation which is confusing to the public.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 283 – 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits, and methods and means for the Susitna River Drainage Area. *(This proposal was erroneously cited as 5 AAC 61.114. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for Unit 2 of the Susitna River Drainage Area.)*

PROPOSED BY: Jason Jordet.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit the retention of rainbow trout in Little Willow Creek upstream of the Parks Highway bridge.

WHAT ARE THE CURRENT REGULATIONS? The bag and possession limit for rainbow trout in Little Willow Creek is two fish, only one of which can be 20 inches or longer in length, with an annual limit for rainbow trout 20 inches or longer of two per year. Anglers are not allowed to retain rainbow trout during the spawning closure from April 15 through June 14. Gear allowed in the area upstream of the Parks Highway Bridge is limited to a single hook, artificial lure year-round. Downstream of the Parks Highway bridge, bait is not allowed between September 1 and July 13.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce harvest opportunity for rainbow trout in Little Willow Creek. It would likely have little impact on Little Willow rainbow trout abundance and age and size structure. The sport harvest of rainbow trout from this system is very small (averages about 63 per year), the majority of which is likely harvested downstream of the area affected by this proposal.

BACKGROUND: Little Willow Creek is currently managed conservatively for rainbow trout in accordance to the standard established in the *Statewide management standards for wild trout* (5 AAC 75.220). Bag, possession, and annual limits mirror the regulatory standard. The spawning season closure and gear restrictions deviate from the standard and provide additional protection to Little Willow Creek rainbow trout.

Angler effort on Little Willow River Creek averages approximately 6,400 days per year (Table 283-1), with most of the effort likely directed at fishing for king, coho, and other salmon species downstream of the Parks Highway bridge. The average rainbow trout catch and harvest for the entire Little Willow Creek drainage is approximately 2,400 and 75 fish, respectively. Given the number of fish that are caught and released, it is likely that a large part of the harvest may be due to the retention of mortally-hooked fish that would otherwise have been released. It is also likely that most of the rainbow trout harvest occurs downstream of the Parks Highway bridge, where the majority of effort occurs.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Little Willow Creek rainbow trout are already managed conservatively in accordance to the standard established in the *Statewide management standards for wild trout* and by additional regulations more restrictive than the standard. There are currently no biological concerns for rainbow trout on this system. It is likely that very little harvest of rainbow trout occurs in Little Willow Creek upstream of the Parks Highway bridge.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 283-1. Effort, catch, and harvest of rainbow trout on Little Willow Creek, 1990–2009.

Little Willow Creek Rainbow Trout			
Year	Catch	Harvest	Effort
1990	689	286	6,505
1991	1,230	430	7,792
1992	1,124	293	9,240
1993	829	264	6,422
1994	2,024	337	6,744
1995	730	250	6,386
1996	1,077	113	5,890
1997	1,415	182	5,829
1998	1,259	113	4,987
1999	2,484	77	8,596
2000	1,920	48	9,028
2001	1,414	42	7,059
2002	2,821	54	7,189
2003	3,576	65	4,815
2004	2,293	23	5,031
2005	2,878	64	6,566
2006	1,744	94	4,536
2007	2,800	71	7,126
2008	2,597	210	8,213
2009	1,707	96	4,105
1990–2009			
Average	1,831	156	6,603
2000–2009			
Average	2,375	77	6,367

PROPOSAL 284 - 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits and methods and means for the Susitna River Drainage Area, and 5 AAC 61.112. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits and methods and means for Unit 1 of the Susitna River Drainage Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would eliminate size and gear restrictions and bag limits for northern pike harvested in Alexander Lake. This proposal would also allow the use of spears and bow and arrow to take northern pike in Alexander Lake.

WHAT ARE THE CURRENT REGULATIONS? In Alexander Lake, there is no bag and possession limit for northern pike less than 27 inches in length. For northern pike 27 inches or greater in length, the limit is one per day/one in possession. Spears and bow and arrow are not allowed. Five lines are allowed while fishing for pike under the ice.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of northern pike larger than 27 inches in length in the short term and likely reduce the number of large-sized pike available for harvest over time.

BACKGROUND: Northern pike are not indigenous to the Northern and Western Cook Inlet management areas, and were likely established through a series of illegal introductions in the early 1950s. Since pike have colonized nearly all of the Susitna River drainage, salmon production has declined significantly in some of its major tributaries, particularly the Alexander Creek drainage. Aerial indices of escapement have shown a downward trend in king salmon spawners over the past decade, with a dramatic drop in the past four years (Table 284-1). The sustainable escapement goal (SEG) for king salmon is 2,100–6,000 fish. Escapement indices were 885, 440, 185, 275, and 177 fish, respectively, for 2006–2010. The king salmon sport fishery was closed by regulation beginning in 2008. Aerial surveys have also shown a change in the distribution of spawners. Since approximately 1992, king salmon spawners have disappeared from the tributaries upstream of the lake, and since about 1998, from the upper mainstem between Sucker Creek and the lake. In the past four years, few lower mainstem spawners have been observed. Presently, spawning is mostly isolated to Sucker Creek and the Wolverine Creek branch of Sucker Creek. Harvest of coho salmon has been below the historical average of 1,683 since 2004, ranging from 757 fish in 2005 to 10 fish reported in 2008 (Table 284-1). The rainbow trout and Arctic grayling fisheries were closed to harvest in 1996. Despite these fisheries becoming catch-and-release, catch rates have declined precipitously over the past 20 years for both species.

The department's sport fishing harvest management strategy for northern pike in all Cook Inlet waters is considered very liberal. There are no bag or possession limits, spears and bow and arrows are allowed, and on many lakes, anglers are allowed to use up to five lines when fishing through the ice. The only lake in the entire area that deviates from these regulations is Alexander Lake. On Alexander Lake, a slot limit was instituted by the board in 1998 (Table 284-2) in an effort to investigate potential management strategies that would provide opportunities for anglers to harvest large-sized pike (> 30 inches), but at the same time, reduce the number of small-sized

pike which are primarily responsible for decimating salmonid populations. This scenario maintained angler interest by continuing to provide the opportunity to catch a large pike, while at the same time allowing anglers to keep as many small pike as they desired. Without the opportunity to catch large pike, anglers typically lose interest in fishing this remote area and pike populations continue to increase. At higher densities and in the absence of large-sized pike, pike growth tends to become stunted. The result is a large population of small, undesirable pike that few anglers want to fish for. In 2009, the board liberalized the harvest for northern pike on Alexander Lake by eliminating the bag limit on northern pike less than 27 inches and allowing the use of five lines when fishing through the ice on the lake and in the creek.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Changes to the management strategy employed to control northern pike abundance in Alexander Creek are warranted to reduce the immediate impact of pike predation on juvenile salmon. The department plans to implement a control netting program on Alexander Creek in spring 2011. Suppression of pike in Alexander Lake will likely follow efforts directed at the creek within the next two years. A change in the current management strategy to liberalize regulations governing pike harvest in the lake will allow anglers the opportunity to harvest large-sized pike prior to suppression efforts by the department.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 284-1. King salmon harvest and escapement, coho harvest, and effort on Alexander Creek, 1990–2010.

Year	King salmon		Coho salmon	Effort
	Harvest	Escapement	Harvest	
1990	5,119	2,596	1,973	19,863
1991	6,548	2,727	2,296	26,235
1992	4,124	3,710	834	18,085
1993	5,154	2,763	1,719	21,660
1994	3,070	1,514	2,188	25,608
1995	1,217	2,090	2,692	10,648
1996	1,005	2,319	803	6,062
1997	1,470	5,598	1,307	7,514
1998	1,275	2,807	1,158	6,538
1999	2,241	3,974	1,418	11,187
2000	2,721	2,331	2,695	11,733
2001	2,313	2,282	1,972	9,360
2002	1,992	1,936	1,191	10,169
2003	2,293	2,012	1,071	6,855
2004	1,294	2,215	1,827	5,679
2005	1,052	2,140	757	3,907
2006	1,396	885	119	4,337
2007	412	480	328	2,666
2008	0	150	10	299
2009	0	275	501	2,660
1990–2000				
Average	2,235	2,240	1,343	10,553
2005–2009				
Average	572	786	343	2,774
2010	N/A	177	N/A	N/A

NA = Data not available.

Table 284-2. Northern pike regulatory history for Alexander Creek/Lake.

Year	Regulatory change
1989	Bag/Possession limit 10/10
1997	May use 5 lines in lake Bag/Possession limit 10/10 repealed (no bag/possession limit)
1998	Slot limit implemented- Pike 22-30 inches may not be retained; < 22 inches, no limit; >30 inches, 1 per day/1 in possession Number of lines through the ice reduced to 2. Spears, bow/arrows prohibited.
2009	Slot limit revised – Pike <27 inches, no limit; 27 inches or greater in length, 1 per day/1 in possession Number of lines through the ice increased to 5

PROPOSAL 285 - 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits and methods and means for the Susitna River Drainage Area, and 5 AAC 61.112. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits and methods and means for Unit 1 of the Susitna River Drainage Area. *(This proposal erroneously cited only 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits, and methods and means for the Susitna River Drainage Area.)*

PROPOSED BY: Anchorage Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would eliminate size and gear restrictions and bag limits for northern pike harvested on Alexander Lake. In addition, this proposal would liberalize allowable gear in the Alexander Creek drainage to allow use of gillnets and pond nets from October 15–May 31, and allow waste of pike provided they are disposed in either flowing waters or on land at least one mile from a dwelling.

WHAT ARE THE CURRENT REGULATIONS? In Alexander Lake, there is no bag and possession limit for northern pike less than 27 inches in length. For northern pike 27 inches or greater in length, the limit is one per day/one in possession. Spears and bow and arrow are not allowed. Five lines are allowed while fishing for pike under the ice.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of northern pike larger than 27 inches in length in the short term and reduce the number of large-sized pike available for harvest over time. Netting would likely increase mortality of nontarget species such as rainbow trout, Arctic grayling, white fish, juvenile salmon, furbearers, and waterfowl.

BACKGROUND: Northern pike are not indigenous to the Northern and Western Cook Inlet management areas, and were likely established through a series of illegal introductions in the early 1950s. Since pike have colonized nearly all of the Susitna River drainage, salmon production has declined significantly in some of its major tributaries, particularly the Alexander Creek drainage. Aerial indices of escapement have shown a downward trend in king salmon spawners over the past decade with a dramatic drop in the past four years (Table 285-1). The sustainable escapement goal (SEG) for king salmon is 2,100–6,000 fish. Escapement indices were 885, 440, 185, 275, and 177 fish, respectively, for 2006–2010. The king salmon sport fishery was closed by regulation beginning in 2008. Aerial surveys have also shown a change in the distribution of spawners. Since approximately 1992, king salmon spawners have disappeared from the tributaries upstream of the lake, and since about 1998, from the upper mainstem between Sucker Creek and the lake. In the past four years, few lower mainstem spawners have been observed. Presently, spawning is mostly isolated to Sucker Creek and the Wolverine Creek branch of Sucker Creek. Harvest of coho salmon has been below the historical average of 1,683 since 2004, ranging from 757 fish in 2005 to 10 fish reported in 2008 (Table 285-1). The rainbow trout and Arctic grayling fisheries were closed to harvest in 1996. Despite these fisheries becoming catch-and-release, catch rates have declined precipitously over the past 20 years for both species.

The department's sport fish harvest management strategy for northern pike in all Cook Inlet waters is considered very liberal. There are no bag or possession limits, spears and bow and arrows are allowed, and on many lakes, anglers are allowed to use up to five lines when fishing through the ice. The only lake in the entire area that deviates from these regulations is Alexander Lake. On Alexander Lake, a slot limit was instituted by the board in 1998 (Table 285-2) in an effort to investigate potential management strategies that would provide opportunities for anglers to harvest large- sized pike (> 30 inches), but at the same time reduce the number of small-sized pike which are primarily responsible for decimating salmonid populations. This scenario maintained angler interest by continuing to provide the opportunity to catch a large pike, while at the same time allowing anglers to keep as many small pike as they desired. Without the opportunity to catch large pike, anglers typically lose interest in fishing this remote area and pike populations continue to increase. At higher densities and in the absence of large-sized pike, pike growth tends to become stunted. The result is a large population of small, undesirable pike that few anglers want to fish for. In 2009, the board liberalized the harvest for northern pike on Alexander Lake by eliminating the bag limit on northern pike less than 27 inches and allowing the use of five lines when fishing through the ice on the lake and in the creek.

The department operated a netting program in the creek during the past two years, in which side channel slough habitat has been targeted in a systematic manner. Nonstructured netting efforts could jeopardize the department's science-based approach at intensively suppressing pike within the creek. The department is also exploring options in addition to netting for drastically reducing pike numbers in the lake.

DEPARTMENT COMMENTS: The department **SUPPORTS** the aspects of this proposal that would eliminate size and gear restrictions and bag limits for northern pike on Alexander Lake, but **OPPOSES** allowing nets of any type for use in capturing northern pike in the Alexander Creek drainage. Netting would likely increase mortality of nontarget species such as rainbow trout, Arctic grayling, white fish, juvenile salmon, furbearers, and waterfowl. Alexander Lake provides extensive waterfowl nesting and a respite for migratory birds. The department also **OPPOSES** the provision that would allow anglers to discard their catch of northern pike. The prohibition of wanton waste of sport-caught fish was adopted by the board prior to 1988 and is a cornerstone of sport fishing in Alaska. Although the department supports efforts to reduce the number of northern pike or to eliminate them entirely from the Alexander Creek drainage, we oppose sanctioning wanton waste as a means to do so.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 285-1. King salmon harvest and escapement, coho harvest, and effort on Alexander Creek, 1990–2010.

Year	King salmon		Coho salmon	Effort
	Harvest	Escapement	Harvest	
1990	5,119	2,596	1,973	19,863
1991	6,548	2,727	2,296	26,235
1992	4,124	3,710	834	18,085
1993	5,154	2,763	1,719	21,660
1994	3,070	1,514	2,188	25,608
1995	1,217	2,090	2,692	10,648
1996	1,005	2,319	803	6,062
1997	1,470	5,598	1,307	7,514
1998	1,275	2,807	1,158	6,538
1999	2,241	3,974	1,418	11,187
2000	2,721	2,331	2,695	11,733
2001	2,313	2,282	1,972	9,360
2002	1,992	1,936	1,191	10,169
2003	2,293	2,012	1,071	6,855
2004	1,294	2,215	1,827	5,679
2005	1,052	2,140	757	3,907
2006	1,396	885	119	4,337
2007	412	480	328	2,666
2008	0	150	10	299
2009	0	275	501	2,660
1990–2000				
Average	2,235	2,240	1,343	10,553
2005–2009				
Average	572	786	343	2,774
2010	N/A	177	N/A	N/A

NA = Data not available.

Table 285-2. Northern pike regulatory history for Alexander Creek/Lake.

Year	Regulatory change
1989	Bag/Possession limit 10/10
1997	May use 5 lines in lake Bag/Possession limit 10/10 repealed (no bag/possession limit)
1998	Slot limit implemented- Pike 22-30 inches may not be retained; < 22 inches, no limit; >30 inches, 1 per day/1 in possession Number of lines through the ice reduced to 2. Spears, bow/arrows prohibited.
2009	Slot limit revised – Pike <27 inches, no limit; 27 inches or greater in length, 1 per day/1 in possession Number of lines through the ice increased to 5

PROPOSAL 286 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Susitna Valley Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would liberalize methods and means for taking northern pike in Big Lake as follows: allow five lines and the use of bait when fishing through the ice for northern pike; fishing for northern pike with five lines and bait would be allowed only during daylight hours, which would be one-half hour before sunrise to one-half hour after sunset; the only bait that would be allowed would be herring, hooligan, white fish, or northern pike parts; allow only single hooks with a gap of greater than three-quarter inches or larger, or “Swedish”-style hooks or a double-hook set up; any species other than northern pike would have to be released immediately; and once a northern pike was caught, it could not be released back in the water alive. Fishing under these regulations would be allowed May 16–March 14.

WHAT ARE THE CURRENT REGULATIONS? On Big Lake, anglers are allowed to use only two lines when fishing through the ice; only one, single hook is allowed on each line, and bait is not allowed from November 1 through April 30.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely increase the sport harvest of northern pike on Big Lake by an unknown amount. In addition, it would likely increase the hook-and-release mortality of burbot by an unknown, but presumed small, amount.

BACKGROUND: Northern pike are not indigenous to the Northern and West Cook Inlet Management Area (N&WCIMA). Having been illegally introduced during the 1950s, their proliferation and subsequent impact on area fish stocks was not measurably noticeable until about the mid 1980s when harvest rates began to increase. Over the past 25 years, harvest of northern pike in the N&WCIMA has increased from just over 100 fish in 1981 to nearly 12,800 pike in 2001 (Table 286-1). Growth in the fishery during the mid 1980s to mid 1990s indicated a period of rapid range expansion by northern pike throughout the Westside Susitna area waters. In response, the department began gathering baseline data to describe population structure and to determine impacts on salmonid productivity during the mid 1990s. Recommendations stemming from this research prompted the board, in 1996, to liberalize northern pike regulations throughout the N&WCIMA by increasing the bag and possession limit from 10 fish to no bag limit. Additional action taken provided for the use of five lines through the ice in select N&WCIMA lakes where northern pike were prolific. Prior to 1996, before liberalizations were in effect, about 24% of the catch was harvested. After 1996 and to present day, approximately 30% of the catch is harvested.

During the 2002 board meeting, seven lakes were added to the list of lakes selected for liberal harvest (fishing through the ice using five lines) and during the 2008 board meeting, eight lakes and four more streams were added. Currently, all lakes and streams designated for use of five

lines contain nearly only pike. The use of five lines over the past 10 years on select lakes has demonstrated increased harvest, but not obvious widespread stunting of northern pike.

Big Lake is the most popular sport fishing lake in the N&WCIMA. Historically, anglers expended more than 10,000 angler days of effort to harvest 5,000 Arctic char; 4,300 rainbow trout; and 120 burbot (Table 286-2). Very few lakes within the Matanuska Susitna Valley support burbot populations. Consequently, Big Lake receives a substantial amount of sport fishing pressure: approximately 50% of the burbot harvested in the N&WCIMA are from Big Lake. Fishing for northern pike has only recently become popular on Big Lake as fishable numbers have increased. Northern pike harvest on Big Lake has increased over the past five years: 923 were harvested in 2009 (Table 286-2).

In Southcentral Alaska, overexploitation of burbot in lakes by sport fishing was documented in the early 1990s. Subsequently, restrictive measures were implemented to protect burbot from overexploitation. In 1993, regulations prohibited the use of set lines, lines had to be closely attended, and the number of lines and hooks used for burbot could not exceed the daily bag limit. Additionally, Nancy Lake was closed to the harvest of burbot. In 1998, the use of bait was restricted and single-hook, artificial lures only regulations went into effect on Big Lake during the winter fishery (November 1–April 30). This measure was taken to reduce harvest and mortality associated with catch-and-release of burbot, Arctic char, and rainbow trout stocks in Big Lake. In 2008, the board again took action on Big Lake to restrict the burbot fishery by reducing the bag limit and fishing season. With the spread of northern pike in Big Lake, it is assumed pike have impacted all finfish species through predation by an unknown amount.

DEPARTMENT COMMENTS: The department supports activities to reduce northern pike numbers where northern pike are impacting resident and anadromous fish stocks. The department **SUPPORTS** provisions in the proposal that would: restrict additional gear and bait to daylight hours; implement a seasonal spawning closure period to protect burbot; allow the use of five lines when fishing through the ice, and; allow only hooks with gap greater than three-quarter inch and a double-hook set-up. Should the board adopt this proposal, the department would also recommend the following measures be included:

- allow anglers to use only a whole fish with legally-defined uses as bait, such as herring or smelt, and which would be suspended above the bottom to minimize the incidental catch of burbot, Arctic char and rainbow trout;
- define “fishing during daylight hours” from 8:00 a.m. to 5:00 p.m. to reduce the complexity involved with determining true daylight hours throughout the winter;
- allow pike fishing under these provisions only through the ice, to be consistent with other lakes where five lines are allowed for northern pike, and;
- end on March 15 each year for further consistency with regulations currently in place on Big Lake to protect spawning burbot. Essentially, the open season for these provisions should be November 1 through March 15.

The department is **NEUTRAL** on the portion of this proposal that would make it illegal to return a live northern pike to the water.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 286-1. Catch and harvest of northern pike in the Northern and West Cook Inlet management areas, 1977–2009.

Year	Northern Pike	
	Catch	Harvest
1977		132
1978		316
1979		382
1980		232
1981		125
1982		607
1983		944
1984		1,821
1985		1,404
1986		1,977
1987		2,464
1988		3,473
1989		3,120
1990	17,058	2,842
1991	18,214	6,640
1992	20,925	5,382
1993	34,237	5,721
1994	8,270	3,893
1995	16,239	3,546
1996	30,245	7,934
1997	26,273	9,024
1998	28,602	8,180
1999	29,354	10,824
2000	44,640	9,577
2001	42,422	12,739
2002	32,460	12,318
2003	29,278	8,024
2004	33,880	12,171
2005	37,894	11,306
2006	31,550	11,404
2007	21,711	8,156
2008	24,367	7,999
2009	29,880	10,207
2005–2009 Average	29,080	9,814

Table 286-2. Harvest of rainbow trout, burbot, Arctic char, and northern pike and effort in Big Lake, 1977–2009.

Year	Harvest				Effort
	Rainbow trout	Burbot	Arctic Char	Northern pike	
1977	3,906	73	4,953	0	11,869
1978	4,845	18	5,433	0	9,865
1979	2,882	0	4,227	0	8,300
1980	5,398	43	7,585	0	12,195
1981	9,810	0	7,741	0	14,568
1982	9,369	461	8,793	0	15,371
1983	4,102	94	6,126	0	15,989
1984	4,938	75	3,866	0	12,916
1985	6,953	70	8,096	0	16,299
1986	5,105	335	7,406	0	14,559
1987	2,476	36	8,638	0	17,693
1988	4,220	55	5,930	0	10,077
1989	5,402	163	4,467	0	12,748
1990	3,282	82	4,907	0	11,798
1991	4,883	66	4,162	0	13,759
1992	2,090	110	2,597	0	11,545
1993	2,073	278	1,812	0	8,446
1994	2,260	279	1,489	0	9,987
1995	1,371	110	1,228	0	6,979
1996	2,260	41	2,328	13	7,290
1997	2,083	696	1,408	0	9,644
1998	1,358	121	1,139	270	6,143
1999	1,501	331	747	226	8,418
2000	1,475	0	818	601	7,587
2001	905	202	612	110	5,555
2002	1,521	765	322	0	5,176
2003	884	394	586	24	5,226
2004	626	171	213	0	4,430
2005	752	598	295	12	6,481
2006	1,005	514	103	71	5,616
2007	332	165	158	236	5,261
2008	785	892	273	98	7,326
2009	299	17	22	923	3,415
1977–1996					
Average	4,381	119	5,089	-	12,113
2005–2009					
Average	635	437	170	268	5,620

PROPOSAL 287 - 5 AAC 60.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Susitna Valley Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would liberalize methods and means for taking northern pike in Nancy Lake as follows: allow five lines and the use of bait when fishing through the ice for northern pike; allow fishing for northern pike with five lines and bait only during daylight hours, which would be one-half hour before sunrise to one-half hour after sunset; the only bait that would be allowed would be herring, hooligan, white fish, or northern pike “parts”; allow only single hooks with a gap of greater than three-quarter inches or larger, or “Swedish style”-hooks or a double-hook set up; any species other than northern pike would have to be released immediately; and once a northern pike was caught, it could not be released back in the water alive.

WHAT ARE THE CURRENT REGULATIONS? On Nancy Lake, anglers are allowed to use only two lines when fishing through the ice, provided only one hook or artificial lure is used on each line, bait is allowed. Nancy Lake is closed year-round to burbot fishing.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely increase the sport harvest of northern pike on Nancy Lake by an unknown amount. In addition, it would likely increase the hook-and-release mortality of burbot by an unknown, but presumed small, amount.

BACKGROUND: Northern pike are not indigenous to the Northern and West Cook Inlet Management Area (N&WCIMA). Having been illegally introduced during the 1950s, their proliferation and subsequent impact on area fish stocks was not measurably noticeable until about the mid 1980s when harvest rates began to increase. Over the past 25 years, harvest of northern pike in the N&WCIMA has increased from just over 100 fish in 1981 to nearly 12,800 pike in 2001 (Table 287-1). Growth in the fishery during the mid 1980s to mid 1990s indicated a period of rapid range expansion by northern pike throughout Westside Susitna area waters. In response, the department began gathering baseline data to describe population structure and to determine impacts on salmonid productivity during the mid 1990s. Recommendations stemming from this research prompted the board, in 1996, to liberalize northern pike regulations throughout the N&WCIMA by increasing the bag and possession limit from 10 fish to no bag limit. Additional action taken provided for the use of five lines through the ice in select N&WCIMA lakes where northern pike were prolific. Prior to 1996, before liberalizations were in effect, about 24% of the catch was harvested. After 1996 and to present day, approximately 30% of the catch is harvested (Table 287-1).

During the 2002 board meeting, seven lakes were added to the list of lakes selected for liberal harvest (fishing through the ice using five lines) and during the 2008 board meeting, eight lakes and four more streams were added. Currently, all lakes and streams designated for use of five lines contain nearly only pike. The use of five lines over the past 10 years on select lakes has demonstrated increased harvest, but not obvious widespread stunting of northern pike.

Nancy Lake supports approximately 2,000 angler days of effort per year. The harvest of rainbow trout has trended downward from an average harvest of 564 fish from 1990–1999 to an average of 262 fish from 2000–2009 (Table 287-2). A negligible number of burbot (fewer than 50) are caught annually and none are harvested because harvest is prohibited. Northern pike fishing has only recently become popular on Nancy Lake as fishable numbers have increased. The average harvest on Nancy Lake is 289 pike; 479 were harvested in 2009 (Table 287-2).

In Southcentral Alaska, overexploitation of burbot in lakes by sport fishing was documented in the early 1990s. Subsequently, restrictive measures were taken to protect burbot from overexploitation. In 1993, regulations prohibited the use of set lines, lines had to be closely attended, and the number of lines and hooks used for burbot could not exceed the daily bag limit. Additionally, Nancy Lake was closed to the harvest of burbot. With the arrival of northern pike in Nancy Lake, it is assumed northern pike have impacted all finfish species through predation by an unknown amount.

DEPARTMENT COMMENTS: The department supports activities to reduce northern pike numbers where northern pike are impacting resident and anadromous fish stocks. The department **SUPPORTS** provisions in the proposal that would: restrict additional gear and bait to daylight hours; implement a seasonal spawning closure period to protect burbot; allow the use of five lines when fishing through the ice, and; allow only hooks with gap greater than three-quarter inch and a double-hook set-up. Should the board adopt this proposal, the department would also recommend the following measures be included:

- allow anglers to use only a whole fish with legally-defined uses as bait, such as herring or smelt, and which would be suspended above the bottom to minimize the incidental catch of burbot, Arctic char and rainbow trout;
- define “fishing during daylight hours” from 8:00 a.m. to 5:00 p.m. to reduce the complexity involved with determining true daylight hours throughout the winter;
- allow pike fishing under these provisions only through the ice, to be consistent with other lakes where five lines are allowed for northern pike, and;
- end on March 15 each year for further consistency with regulations currently in place on Big Lake to protect spawning burbot. Essentially, the open season for these provisions should be November 1 through March 15.

The department is **NEUTRAL** on the portion of this proposal that would make it illegal to return a live northern pike to the water.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 287-1. Catch and harvest of northern pike in the Northern and West Cook Inlet management areas, 1977–2009.

Year	Northern Pike	
	Catch	Harvest
1977		132
1978		316
1979		382
1980		232
1981		125
1982		607
1983		944
1984		1,821
1985		1,404
1986		1,977
1987		2,464
1988		3,473
1989		3,120
1990	17,058	2,842
1991	18,214	6,640
1992	20,925	5,382
1993	34,237	5,721
1994	8,270	3,893
1995	16,239	3,546
1996	30,245	7,934
1997	26,273	9,024
1998	28,602	8,180
1999	29,354	10,824
2000	44,640	9,577
2001	42,422	12,739
2002	32,460	12,318
2003	29,278	8,024
2004	33,880	12,171
2005	37,894	11,306
2006	31,550	11,404
2007	21,711	8,156
2008	24,367	7,999
2009	29,880	10,207
2005–2009 Average	29,080	9,814

Table 287-2. Harvest of rainbow trout and northern pike and effort in Nancy Lake, 1990–2009.

Year	Harvest		Effort
	Rainbow trout	Northern pike	
1990	377	131	4,881
1991	1,451	0	3,951
1992	966	0	4,343
1993	1,127	0	3,049
1994	413	0	3,040
1995	358	0	3,007
1996	184	199	1,593
1997	429	84	2,825
1998	144	201	1,472
1999	189	192	1,165
2000	1,002	164	3,120
2001	534	168	2,104
2002	222	259	1,621
2003	354	21	2,767
2004	93	78	1,814
2005	87	167	1,262
2006	146	319	1,819
2007	44	684	1,686
2008	57	558	2,105
2009	79	472	1,722
1990–1999 Average	564	81	2,933
2000–2009 Average	262	289	2,002

PROPOSAL 288 - 5 AAC 60.122. Special Provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainage Area.

PROPOSED BY: Anchorage Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would liberalize methods and means for taking northern pike in Big Lake and Nancy Lake as follows: allow five lines when fishing through the ice for northern pike; fishing for pike with five lines would be allowed only during daylight hours, which would be one-half hour before sunrise to one-half hour after sunset; the only bait that would be allowed would be herring, hooligan, white fish, or pike “parts”; allow only single hooks with a gap of three-quarter inches or larger, or “Swedish style”-hooks or a double-hook set up; any species other than pike would have to be released immediately; and once a pike was caught it could not be released back in the water alive.

WHAT ARE THE CURRENT REGULATIONS? On Nancy and Big lakes, anglers are allowed to use only two lines when fishing through the ice. In Big Lake, only one single hook is allowed on each line and bait is not allowed from November 1 through April 30. Nancy Lake is closed year-round to burbot fishing.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the sport harvest of northern pike from Big and Nancy lakes. In addition, it would likely increase the hook-and-release mortality of burbot by some small but unknown number.

BACKGROUND: Northern pike are not indigenous to the Northern and Western Cook Inlet Management Area (N&WCIMA). Having been illegally introduced during the 1950s, their proliferation and subsequent impact on area fish stocks was not measurably noticeable until about the mid 1980s when harvest rates began to increase. Over the past 25 years, harvest of northern pike in the N&WCIMA has increased from just over 100 fish in 1981 to nearly 12,800 pike in 2001 (Table 288-1). Growth in the fishery during the mid 1980s to mid 1990s indicated a period of rapid range expansion by northern pike throughout the Westside Susitna area waters. In response, the department began gathering baseline data to describe population structure and to determine impact on salmonid productivity during the mid 1990s. Recommendations stemming from this research prompted the board, in 1996, to liberalize northern pike regulations throughout the N&WCIMA by increasing the bag and possession limit from 10 fish to no bag limit. Additional action taken provided for the use of five lines through the ice in select N&WCIMA lakes where northern pike were prolific. Prior to 1996, before liberalizations were in effect, about 24% of the catch was harvested. After 1996 and to present day, approximately 30% of the catch is harvested (Table 288-1).

During the 2002 board meeting, seven lakes were added to the list of lakes selected for liberal harvest (fishing through the ice using five lines) and during the 2008 board meeting, eight lakes and four streams were added. Currently, all lakes and streams designated for use of five lines contain nearly only pike. The use of five lines over the past 10 years on select lakes has demonstrated increased harvest, but not obvious widespread stunting of northern pike.

Big Lake is the most popular sport fishing lake in the Northern Cook Inlet Management Area (NCIMA). Historically, anglers expended more than 10,000 angler days of effort to harvest 5,000 Arctic char; 4,300 rainbow trout; and 120 burbot (Table 288-2). Very few lakes within the Matanuska Susitna Valley support burbot populations. Consequently, Big Lake receives a substantial amount of sport fishing pressure: about 50% of the burbot harvested in the NCIMA are from Big Lake. Nancy Lake supports about 2,000 angler days of effort; about 260 rainbow trout are harvested annually (Table 288-3). Northern pike fishing has only recently become popular on these two lakes as fishable numbers have increased. Northern pike harvest on Big Lake has increased over the past five years: 923 were harvested in 2009. The average harvest on Nancy Lake is 289 pike; 479 were harvested in 2009.

In Southcentral Alaska overexploitation of burbot in lakes by sport fishing was documented in the early 1990s. Subsequently, restrictive measures were taken to protect burbot from overexploitation. In 1993, regulations prohibited the use of set lines. Lines had to be closely attended and the number of lines and hooks used for burbot could not exceed the daily bag limit. Additionally, Nancy Lake was closed to the harvest of burbot. In 1998, bait was restricted and single-hook, artificial-only regulations went into effect on Big Lake during the winter fishery (November 1–April 30). This measure was taken to reduce harvest and catch-and-release associated mortality on burbot, Arctic char, and rainbow trout stocks in Big Lake. In 2008, the board again took action on Big Lake to restrict the burbot fishery by reducing the bag limit and fishing season. With the spread of northern pike in Big and Nancy lakes, it is assumed pike have impacted all finfish species through predation by an unknown amount.

DEPARTMENT COMMENTS: The department supports activities to reduce northern pike numbers where northern pike are impacting resident and anadromous fish stocks. The department **SUPPORTS** provisions in the proposal that would: restrict additional gear and bait to daylight hours; implement a seasonal spawning closure period to protect burbot; allow the use of five lines when fishing through the ice, and; allow only hooks with gap greater than three-quarter inch and a double-hook set-up. Should the board adopt this proposal, the department would also recommend the following measures be included:

- allow anglers to use only a whole fish with legally-defined uses as bait, such as herring or smelt, and which would be suspended above the bottom to minimize the incidental catch of burbot, Arctic char and rainbow trout;
- define “fishing during daylight hours” from 8:00 a.m. to 5:00 p.m. to reduce the complexity involved with determining true daylight hours throughout the winter;
- allow pike fishing under these provisions only through the ice, to be consistent with other lakes where five lines are allowed for northern pike, and;
- end on March 15 each year for further consistency with regulations currently in place on Big Lake to protect spawning burbot. Essentially, the open season for these provisions should be November 1 through March 15.

The department is **NEUTRAL** on the portion of this proposal that would make it illegal to return a live northern pike to the water.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 288-1. Catch and harvest of northern pike in the Northern and West Cook Inlet management areas, 1977–2009.

Year	Northern Pike	
	Catch	Harvest
1977		132
1978		316
1979		382
1980		232
1981		125
1982		607
1983		944
1984		1,821
1985		1,404
1986		1,977
1987		2,464
1988		3,473
1989		3,120
1990	17,058	2,842
1991	18,214	6,640
1992	20,925	5,382
1993	34,237	5,721
1994	8,270	3,893
1995	16,239	3,546
1996	30,245	7,934
1997	26,273	9,024
1998	28,602	8,180
1999	29,354	10,824
2000	44,640	9,577
2001	42,422	12,739
2002	32,460	12,318
2003	29,278	8,024
2004	33,880	12,171
2005	37,894	11,306
2006	31,550	11,404
2007	21,711	8,156
2008	24,367	7,999
2009	29,880	10,207
2005–2009		
Average	29,080	9,814

Table 288-2. Harvest of rainbow trout, burbot, Arctic char, and northern pike and effort in Big Lake, 1977–2009.

Year	Harvest				Effort
	Rainbow trout	Burbot	Arctic Char	Northern pike	
1977	3,906	73	4,953	0	11,869
1978	4,845	18	5,433	0	9,865
1979	2,882	0	4,227	0	8,300
1980	5,398	43	7,585	0	12,195
1981	9,810	0	7,741	0	14,568
1982	9,369	461	8,793	0	15,371
1983	4,102	94	6,126	0	15,989
1984	4,938	75	3,866	0	12,916
1985	6,953	70	8,096	0	16,299
1986	5,105	335	7,406	0	14,559
1987	2,476	36	8,638	0	17,693
1988	4,220	55	5,930	0	10,077
1989	5,402	163	4,467	0	12,748
1990	3,282	82	4,907	0	11,798
1991	4,883	66	4,162	0	13,759
1992	2,090	110	2,597	0	11,545
1993	2,073	278	1,812	0	8,446
1994	2,260	279	1,489	0	9,987
1995	1,371	110	1,228	0	6,979
1996	2,260	41	2,328	13	7,290
1997	2,083	696	1,408	0	9,644
1998	1,358	121	1,139	270	6,143
1999	1,501	331	747	226	8,418
2000	1,475	0	818	601	7,587
2001	905	202	612	110	5,555
2002	1,521	765	322	0	5,176
2003	884	394	586	24	5,226
2004	626	171	213	0	4,430
2005	752	598	295	12	6,481
2006	1,005	514	103	71	5,616
2007	332	165	158	236	5,261
2008	785	892	273	98	7,326
2009	299	17	22	923	3,415
1977–1996					
Average	4,381	119	5,089	-	12,113
2005–2009					
Average	635	437	170	268	5,620

Table 288-3. Harvest of rainbow trout and northern pike and effort in Nancy Lake, 1990–2009.

Year	Harvest		Effort
	Rainbow trout	Northern pike	
1990	377	131	4,881
1991	1,451	0	3,951
1992	966	0	4,343
1993	1,127	0	3,049
1994	413	0	3,040
1995	358	0	3,007
1996	184	199	1,593
1997	429	84	2,825
1998	144	201	1,472
1999	189	192	1,165
2000	1,002	164	3,120
2001	534	168	2,104
2002	222	259	1,621
2003	354	21	2,767
2004	93	78	1,814
2005	87	167	1,262
2006	146	319	1,819
2007	44	684	1,686
2008	57	558	2,105
2009	79	472	1,722
1990–1999			
Average	564	81	2,933
2000–2009			
Average	262	289	2,002

PROPOSAL 289 - 5 AAC 62.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the West Cook Inlet Area.

PROPOSED BY: Duane T. Gluth.

WHAT WOULD THE PROPOSAL DO? This proposal would liberalize methods and means for taking northern pike in Threemile/Tukhalla and Chuitbuna lakes as follows: allow five lines set beneath floats, such as jugs, when fishing during the open water period, and allow the use of nets to fish for northern pike.

WHAT ARE THE CURRENT REGULATIONS? On Threemile/Tukhalla and Chuitbuna lakes, anglers are allowed to use standard fishing gear constituting one line with no more than two hooks during the open-water season. Sport fishing through the ice for northern pike on these lakes is allowed using five lines.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the harvest of northern pike by an unknown amount due to netting. In addition, netting would likely increase the mortality of nontarget species such as rainbow trout, juvenile salmonids, furbearers, and waterfowl.

BACKGROUND: Northern pike are not indigenous to the Northern and West Cook Inlet Management Area (N&WCIMA). Having been illegally introduced during the 1950s, their proliferation and subsequent impact on area fish stocks was not measurably noticeable until about the mid 1980s when harvest rates began to increase. Over the past 25 years, harvest of northern pike in the N&WCIMA has increased from just over 100 fish in 1981 to nearly 12,023 pike in 2001 (Table 289-1). Growth in the fishery during the mid 1980s to mid 1990s indicated a period of rapid range expansion by northern pike throughout Westside Susitna area waters. In response, the department began gathering baseline data to describe population structure and to determine impact on salmonid productivity during the mid 1990s. Recommendations stemming from this research prompted the board, in 1996, to liberalize northern pike regulations throughout the N&WCIMA by increasing the bag and possession limit from 10 fish to no bag limit. Additional action taken provided for the use of five lines through the ice in select N&WCIMA lakes where northern pike were prolific. Prior to 1996, before liberalizations were in effect, about 24% of the catch was harvested. After 1996 and to present day, approximately 30% of the catch is harvested.

During the 2002 board meeting, seven lakes were added to the list of lakes selected for liberal harvest (fishing through the ice using five lines) and during the 2008 board meeting, eight lakes and four more streams were added. Currently, all lakes and streams designated for use of five lines contain nearly only pike. The use of five lines over the past 10 years on select lakes has demonstrated increased harvest, but not obvious widespread stunting of northern pike. The board recognized the need to increase pike harvest on these two systems at the 2008 meeting and liberalized gear to allow five lines while fishing through the ice.

Threemile and Chuitbuna lakes both support wild rainbow trout stocks, which are mostly targeted by residents of the Tyonek area. In addition to rainbow trout, Threemile Lake and Creek have

historically supported a relatively small run of both sockeye and coho salmon. It is assumed northern pike are responsible for the decline within these small fisheries.

DEPARTMENT COMMENTS: The department **OPPOSES** the use of multiple jug set lines and nets for targeting northern pike. While jug set lines have been known to be somewhat effective for catching burbot, they are mostly ineffective in catching northern pike and could result in lost gear and mortality of nontarget fish species. The department does support activities to reduce northern pike numbers where northern pike are impacting resident and anadromous fish stocks, as long as other species are not impaired in the process. However, netting would likely increase mortality of nontarget species such as rainbow trout, juvenile salmon, furbearers, and waterfowl.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 289-1. Catch and harvest of northern pike in the Northern and West Cook Inlet management areas, 1977–2009.

Year	Northern Pike	
	Catch	Harvest
1977		132
1978		316
1979		382
1980		232
1981		125
1982		607
1983		944
1984		1,821
1985		1,404
1986		1,977
1987		2,464
1988		3,473
1989		3,120
1990	17,058	2,842
1991	18,214	6,640
1992	20,925	5,382
1993	34,237	5,721
1994	8,270	3,893
1995	16,239	3,546
1996	30,245	7,934
1997	26,273	9,024
1998	28,602	8,180
1999	29,354	10,824
2000	44,640	9,577
2001	42,422	12,739
2002	32,460	12,318
2003	29,278	8,024
2004	33,880	12,171
2005	37,894	11,306
2006	31,550	11,404
2007	21,711	8,156
2008	24,367	7,999
2009	29,880	10,207
2005–2009 Average	29,080	9,814

PROPOSAL 290 - 5 AAC 75.020. Sport fishing Gear. *(This proposal was erroneously cited as 5 AAC 56.xxx. New section; 5 AAC 57.xxx. New section; 5 AAC 59.xxx. New section; 5 AAC 60.xxx. New section; 5 AAC 61.xxx. New section; and 5 AAC 62.xxx. New section.)*

PROPOSED BY: Bob Andres.

WHAT WOULD THE PROPOSAL DO? This proposal would allow an angler fishing alone from a vessel to use two lines. It is not clear whether the proposal would apply to single anglers fishing from single-person craft only, or single anglers fishing from any vessel.

WHAT ARE THE CURRENT REGULATIONS? Sport fishing may only be conducted by the use of a single line having attached to it not more than one plug, spoon or spinner, or series of spinners, or two flies, or two hooks. The line must be closely attended.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may increase the catch and harvest of fish in area lakes by an unknown amount, and would create disparity between bank anglers and boat anglers. This proposal would also increase the complexity of enforcement.

BACKGROUND: Since 1960, sport fishing in open freshwaters for trout, Arcticgrayling, or salmon has only been allowed with the use of a single line.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The current regulations for sport fishing gear during open water periods are consistent across the state. Adoption of this proposal would create inconsistency and confusion in the regulations and would add unnecessary complexity to state sport fishing regulations.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 291 - 5 AAC 75.XXX. Statewide Provisions. *(This proposal was erroneously cited as 5 AAC 56.xxx. New section; 5 AAC 57.xxx. New section; 5 AAC 59.xxx. New section; 5 AAC 60.xxx. New section; 5 AAC 61.xxx. New section; and 5 AAC 62.xxx. New section.)*

PROPOSED BY: Bob Andres.

WHAT WOULD THE PROPOSAL DO? This proposal would have more rainbow trout than coho salmon stocked into Alaska's stocked lakes.

WHAT ARE THE CURRENT REGULATIONS? Under AS 16.05.251. *Regulations of the Board of Fisheries.* the board may adopt regulations it considers advisable in accordance with AS 44.62 (Administrative Procedures Act) for watershed and habitat improvement, and management, conservation, protection, use, disposal, and stocking of fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would likely have little to no effect because the department already stocks lakes with more (by a factor of four) rainbow trout than coho salmon.

BACKGROUND: The department annually stocks Alaska's lakes with 1,235,020 rainbow trout; 306,320 coho salmon; 77,320 Arctic grayling; 127,450 king salmon; and 40,253 Arctic char. Different species are stocked in Alaskan waters for a variety of reasons: cost to rear fish, survivability in the hatchery, to provide diversity in sport fishing opportunities, to increase catchability of stocked products, and to ensure suitability to lake conditions for optimum survival and growth. The department reviews its stocking strategies and policies on an annual basis by updating its Statewide Stocking Plan (SWSP). This process is open to the public, and the public are encouraged to participate in the process. The annual review of the SWSP generally occurs in October and November and all stocking requests either from the public or the department are considered.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The department already supports a stocking program where more than four times the number of rainbow trout than coho salmon is stocked into Alaska's lakes. The issue raised in this proposal may be better addressed as part of the public process during the annual review of the SWSP.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 292 - 5 AAC 59.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Anchorage Bowl drainages Area, and 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would remove Symphony Lake from the list of Anchorage Area stocked lakes and ponds, and would reduce the bag limit for Arctic grayling from five per day to two per day, with only one greater than 12 inches in length. It would also establish a spawning season closure for Arctic grayling.

WHAT ARE THE CURRENT REGULATIONS? Symphony Lake is designated as a stocked lake. Bag limits for Arctic grayling in stocked lakes within the Anchorage Management Area are five fish per day, five in possession, no size restrictions, and no closed season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce the harvest of Arctic grayling and reduce mortality during the spawning season.

BACKGROUND: Symphony Lake is one of two alpine lakes that are listed as a stocked lake in the Anchorage Management Area. There were no fish in Symphony Lake prior to stocking by the department. Symphony Lake was stocked with 2,900 catchable-sized Arctic grayling in 2001 and 4,200 fingerling-size Arctic grayling in 2003. No subsequent stocking has occurred since 2003, yet angler catch and harvest of Arctic grayling has continued through 2009, which suggests natural reproduction of the 2001 and 2003 stocked fish (Table 292-1).

In summer 2010, the department conducted a stock assessment of the Symphony Lake Arctic grayling population. This project found the abundance of Arctic grayling in Symphony Lake is substantially higher than originally expected, and that there was a small proportion of the population greater than 12 inches in length. The high abundance of small grayling in Symphony Lake suggests that the existing liberal bag and possession limits are necessary to prevent stunting of the population. However, because a relatively small proportion of the population is comprised of individuals greater than 12 inches in length, harvest of the larger, sexually mature segment of the population should be minimized.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal, but recommends a more liberal bag limit of five per day for grayling less than 12 inches in length. The department submitted this proposal prior to completion of the stock assessment project in summer 2010. Because new information is available, the department recommends amending this proposal to keep more liberal bag limits for smaller Arctic grayling and to create a size limit to minimize the harvest of larger grayling.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 292-1. Symphony Lake Arctic grayling sport effort, catch, and harvest, 2003–2009.

Year	Effort	Catch	Harvest
2003	53	233	0
2004	41	193	11
2005	NR	NR	NR
2006	17	97	0
2007	403	1,318	376
2008	572	3,045	292
2009	533	1,124	194

NR = no reports for this year

PROPOSAL 293 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl drainages Area.

PROPOSED BY: Kenton Nichols.

WHAT WOULD THE PROPOSAL DO? Close Upper and Lower Sixmile lakes, stocked rainbow trout lakes, to the retention of rainbow trout and limit legal angling gear to one unbaited, single-hook, artificial lure.

WHAT ARE THE CURRENT REGULATIONS? Bag and possession limit for rainbow trout in Anchorage Area stocked lakes is five fish, of which one per day and two per year may be 20 inches or greater in length.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would eliminate the harvest of rainbow trout and likely reduce effort in these lakes. Prohibiting the use of bait would likely reduce release mortality by an unknown amount. Prohibiting the harvest of rainbow trout in regulation would prohibit anglers from harvesting fish once the Sixmile lakes were stocked again.

BACKGROUND: Sixmile Creek on Joint Base Elmendorf-Richardson was dammed during the 1950s, which created Sixmile Lake. A subsequent roadbed causeway divided the lake into upper and lower portions. A culvert allows fish passage under the roadbed causeway. Upper Sixmile Lake was first stocked with catchable-sized rainbow trout in 1974. The stocked lakes on Joint Base Elmendorf-Richardson provide military personnel and the public with the opportunity to fish on base and these lakes are some of the most heavily fished lakes in the Anchorage Management Area. Many of the catchable-sized rainbow trout stocked into the Sixmile Creek drainage are caught and released several times each year. These lakes can be fished by active and retired military and the general public, once they receive a Joint Base permit.

The Joint Base Elmendorf-Richardson decommissioned two power plants in 2005. Department hatcheries relied on the warm water effluent from cooling power plant turbines to grow out catchable-sized fish in just one year. With loss of this hot water, the hatcheries had to change production schedules and move to a program that reared catchable-sized fish in two years, which reduced hatchery production. In 2007, pathology concerns at the department's Elmendorf Hatchery, where the catchable-sized stocking program was based, curtailed all catchable fish stocking into open water systems, which included Sixmile Lake. The Jack Hernandez State Fish Hatchery, a new facility that uses only well water, will come on line in 2012 and provide catchable sized rainbow trout to all 30 lakes and streams in the Anchorage Area, the first time all systems will be stocked since 2007. The rainbow trout stocking goal for Upper Sixmile Lake, is 2,000 catchable-size fish annually.

The rainbow trout stocking reduction imposed in 2007 resulted in a series of emergency orders restricting area streams, including the Sixmile Creek drainage, to no retention of rainbow trout and prohibited the use of bait. The emergency orders were needed to protect wild rainbow trout stocks which are not capable of supporting the effort that stocked fisheries had previously

supported, and to provide angling opportunity through catch-and-release even though the streams were not being stocked. The department will begin stocking these systems in 2012, and use its emergency order authority to prohibit the use of bait and harvest of rainbow trout in these streams until then.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Due to the lack of hatchery-produced rainbow trout, the department will continue to prohibit use of bait and retention of rainbow trout in Sixmile Creek and other area drainages by emergency order. If this proposal is adopted and the closure entered into regulation, then a harvest fishery could not occur even after the drainage is stocked in 2012.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

PROPOSAL 294 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would establish rainbow trout spawning closures by closing Chester and Campbell creek drainages to all sport fishing April 15 to June 14.

WHAT ARE THE CURRENT REGULATIONS? Campbell and Chester creeks are open year-round to fishing for rainbow trout and Dolly Varden char. Both streams are stocked with rainbow trout and fall under “stocked waters” regulations for rainbow trout with a bag limit of five per day, only one of which can be 20 inches or greater in length. Anglers are allowed a bag limit of five Dolly Varden per day, of which only one may be more than 12 inches in length.

The Chester Creek drainage, including University Lake, Eastchester Lagoon, and Westchester Lagoon, is open to fishing with bait or artificial lures for both rainbow trout and Dolly Varden. The harvest of Dolly Varden from these two tributaries of Campbell Creek is allowed year-round.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce harvest by an unknown amount. Anglers who like to target rainbow trout and Dolly Varden will be displaced during the two month fishing closure.

BACKGROUND: Chester Creek was first stocked with rainbow trout in 1972. Campbell Creek was first stocked with rainbow trout in 1984. The department’s stocking policy only allows triploid rainbow trout, which cannot spawn, to be stocked in streams and open lakes. Chester and Campbell creeks have been stocked with triploid rainbow trout since 1999; therefore, all spawning rainbow trout in the Campbell and Chester Creek drainages are wild fish or the progeny of stocked fish that successfully spawned prior to 2000. Rainbow trout are more vulnerable to anglers as they gather to spawn in the spring. Spawning trout congregate in preferred spawning habitat rather than dispersing throughout the stream as they do other times of the year. Due to pathology concerns, Campbell and Chester creeks have not been stocked with rainbow trout since 2007 (Table 294-1) and have been closed to harvest of rainbow trout by emergency order. The most recent emergency order closed both streams to all fishing during the rainbow trout spawning period, prohibited the use of bait, and prohibited the retention of rainbow trout the remainder of the year.

The Jack Hernandez State Fish Hatchery is scheduled to release its first rainbow trout in 2012. At that time, Chester and Campbell creeks will once again be stocked with catchable-sized triploid rainbow trout. In 2012, Chester Creek is scheduled to get 1,000 fish, while Campbell Creek is due to get 3,000 fish. Until the stocking programs in Chester and Campbell creeks can be reinstated, the department will continue to use its emergency order authority to close these waters to all fishing during the spring spawning season, and prohibit the use of bait and retention the rest of the year.

Both creeks meander through Anchorage and have developed bicycle trail access along long portions of their urban reaches, making them popular spring and summer fisheries (Figure 294-1). Spawning

rainbow trout, more than 20 inches in length, can easily be seen from bike paths, making them particularly vulnerable to anglers.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. It will protect wild spawning rainbow trout in the spring and allow for a sustainable fishery in Anchorage streams that can experience significant fishing effort throughout much of the open water fishing season.

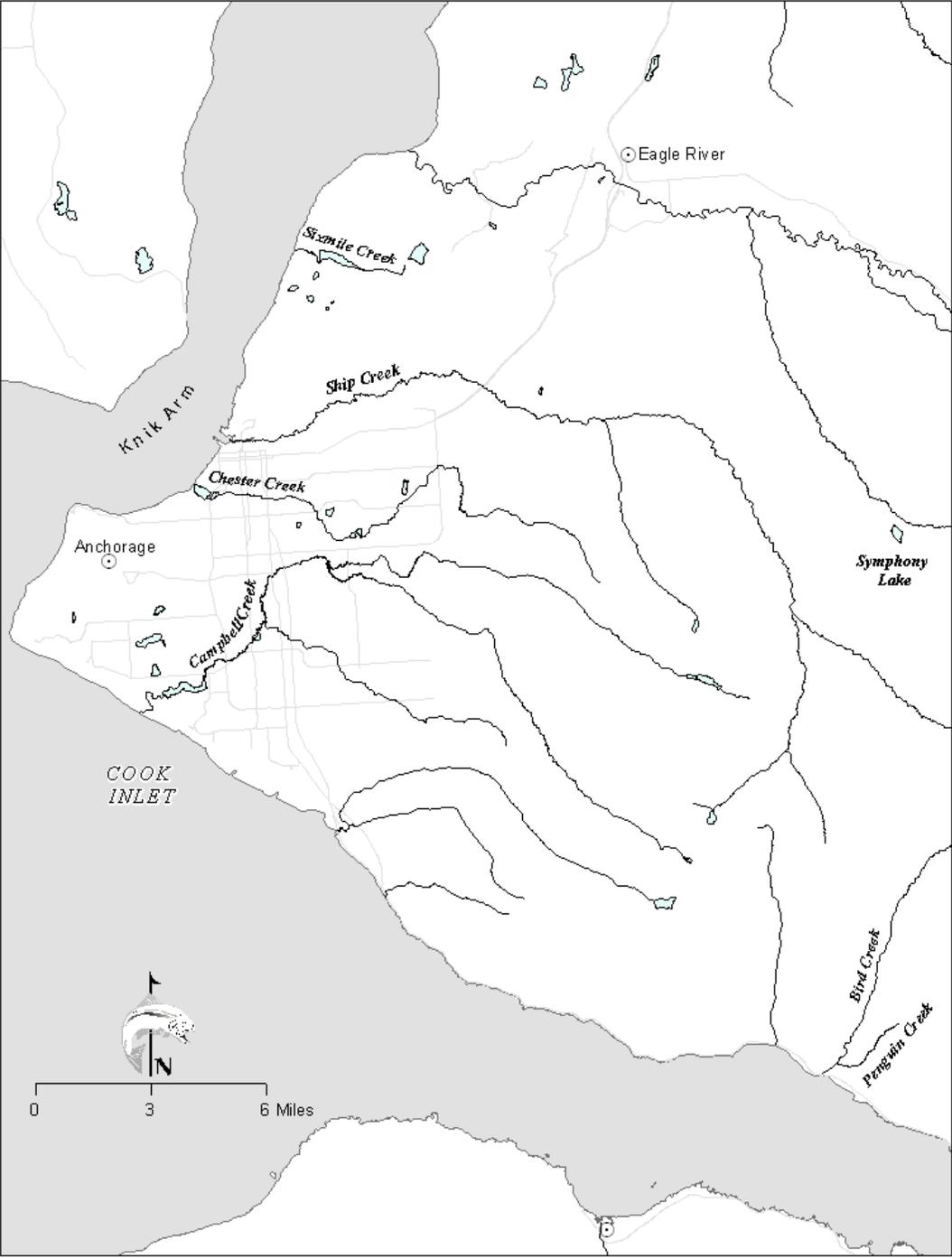
COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 294-1. Fishing effort, harvest, catch and rainbow trout stocking data for the Campbell and Chester creek drainages, 2000–2009.

Campbell Creek (Includes Little Campbell Creek)				
Year	Effort	Stocking	Harvest	Catch
2000	3,918	5,452	216	4,766
2001	6,222	5,047	369	14,952
2002	4,561	2,561	418	2,950
2003	4,937	2,456	257	3,177
2004	5,674	5,829	117	2,032
2005	6,933	1,442	99	1,455
2006	6,235	1,522	24	720
2007	5,779	0	11	888
2008	6,267	0	0	740
2009	2,774	0	0	310

Chester Creek (includes Westchester Lagoon and University Lake)				
Year	Effort	Stocking	Harvest	Catch
2000	327	852	85	182
2001	304	2,335	75	715
2002	410	2,036	108	516
2003	905	1,779	365	1631
2004	1,089	976	269	514
2005	658	613	342	585
2006	2,626	326	503	773
2007	218	0	0	862
2008	826	0	0	933
2009	101	0	0	181

Figure 294-1. The Anchorage Bowl with Bird Creek, Chester Creek, Campbell Creek, Ship Creek, Symphony Lake, and Sixmile Creek drainage.



PROPOSAL 295 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would close Ship Creek to all fishing from 100 yards upstream of the Chugach power plant dam to Reeve Boulevard from April 15–June 14.

WHAT ARE THE CURRENT REGULATIONS? This section of Ship Creek is open all year to fishing for rainbow trout and Dolly Varden. Only one unbaited, single-hook artificial lure may be used. Rainbow trout may not be retained, but the bag limit for Dolly Varden is five per day, only one of which may be over 12 inches in length.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would close about two miles of Ship Creek to all fishing between April 15 and June 14, affording protection to spawning rainbow trout. This proposal would reduce the mortality of rainbow trout and reduce the harvest of Dolly Varden by an unknown amount. A total closure of this section of stream to fishing would provide enforcement officers the tools they need to enforce the prohibitions of retaining rainbow trout and fishing for salmon. Anglers who like to target rainbow trout and Dolly Varden will be displaced during the two month fishing closure.

BACKGROUND: Ship Creek is the most fished stream in the Anchorage Area, providing anglers with an average of more than 36,000 angler days of effort annually (Table 295-1). This stream is located next to downtown Anchorage (Figure 295-1). Salmon fishing is only allowed from its mouth upstream to 100 feet below the Chugach power plant dam. All water upstream of the dam is closed to salmon fishing. The department's hatcheries are located on Ship Creek upstream of Reeve Blvd., and are where the broodstock for many Southcentral king and coho salmon stocking programs are collected.

Ship Creek has never been stocked with rainbow trout, so all fish spawning within the proposed closure are wild fish. Rainbow trout are more vulnerable to anglers as they gather to spawn in the spring. Spawning trout congregate in preferred spawning habitat rather than dispersing throughout the stream as they do other times of the year. A fishery targeting these spawning fish developed sometime in the 1990s. Anglers reported good catches of large (greater than 20 inches) rainbow trout. However, catch rates of these larger fish started to decline, as did the estimated catch of rainbow trout in Ship Creek (Table 295-1).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. This action will protect wild rainbow trout during the spawning season. Closing Ship Creek only to fishing for rainbow trout is unenforceable if fishing for Dolly Varden is still allowed. Angler opportunity will be provided when the spawning fish have dispersed and the nonretention fishery resumes.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

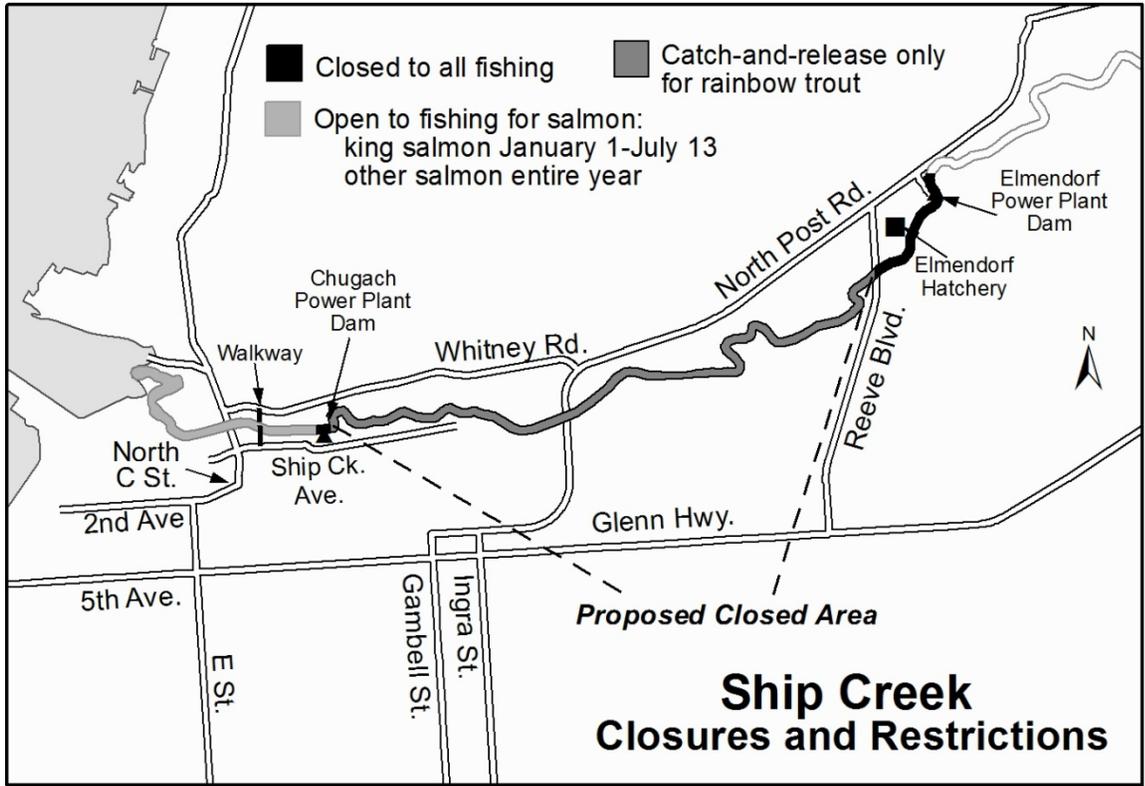


Figure 295-1. Map of Ship Creek with closures and restrictions.

Table 295-1. Fishing effort, harvest, catch and rainbow trout stocking data for the Ship Creek drainage, 2000–2009.

Ship Creek				
Year	Effort	Stocking	Harvest	Catch
2000	62,101	0	85	1,106
2001	56,402	0	0	1,094
2002	46,955	0	0	1,245
2003	40,380	0	0	2,359
2004	35,524	0	0	937
2005	38,610	0	0	1,312
2006	34,557	0	0	334
2007	30,676	0	0	231
2008	40,605	0	0	215
2009	23,663	0	0	105

PROPOSAL 296 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal will replace two opening dates for coho salmon fishing with one date in the waters of Campbell Creek open to coho salmon fishing.

WHAT ARE THE CURRENT REGULATIONS? In the Campbell Creek drainage:

- From July 25–October 1, the waters between ADF&G regulatory markers located under the Dimond Blvd Bridge upstream to an ADF&G regulatory marker located at the downstream side of the C Street bridge are open to sport fishing for coho salmon 16 inches or greater in length; bag and possession limit of three fish;
- From August 5–October 1, the waters between ADF&G regulatory markers located at the downstream side of the C Street Bridge upstream to ADF&G markers located near Shelikof Street and between ADF&G markers located on the upstream side of the Lake Otis Parkway Bridge upstream to ADF&G markers located near Piper Street are open sport fishing for coho salmon 16 inches or greater in length; bag and possession limits of three fish;

Campbell Creek is closed to fishing for king salmon except for the youth-only fishery which occurs in specified waters of Campbell Creek the last Saturday and Sunday in June. Sport fishing for Dolly Varden is open year-round with a bag limit of five fish per day, only one greater than 12 inches in length. Fishing for rainbow trout is open year-round with a bag of only fish, only one per day may be 20 inches or greater in length. Upstream of the forks near Piper Street, only unbaited single-hook artificial lures are allowed and there is no retention of rainbow trout.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would standardize the opening date for coho salmon fishing in Campbell Creek. It would replace the current two opening dates (July 25 downstream of Shelikof Street, and August 5 upstream of Shelikof Street) with one date (July 14). This will reduce the confusion caused by a two-date opener on the same stream, and July 14 is a date currently used throughout the Anchorage Management Area as a regulatory date for sport fisheries. This proposal will simplify a regulation and make it easier for management, enforcement, and coho salmon anglers.

BACKGROUND: Campbell Creek was first stocked with coho salmon in 1992 (Table 296-1) and has developed into a popular local sport fishery in Anchorage. It has an annual stocking goal of 75,000 coho salmon smolt. Coho salmon start to enter Campbell Creek in mid July and continue to enter this system throughout September. The early portion of this run is typically seen during king salmon surveys conducted in mid July. Coho salmon move out of Campbell Lake and into the creek from the end of July into September.

The intent of the staggered opening dates for the coho salmon fishery was to protect king salmon as they moved upstream to spawn. Given the variability in run timing of Campbell Creek king salmon, the effectiveness of the staggered dates is questionable. With the exception of the youth-only fishery for king salmon held the last weekend in June, Campbell Creek is closed to sport

fishing for king salmon. By the time the coho salmon fishery would open on July 14, king salmon are red in color and spawning, while coho salmon are chrome bright and quickly moving through the waters of Campbell Creek open to salmon fishing. Rainbow trout and Dolly Varden fisheries are open year-round throughout Campbell Creek (Figure 296-1).

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal which will standardize season dates in the Anchorage area and simplify coho salmon sport fishing regulations on Campbell Creek, making it easier for the public and law enforcement.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

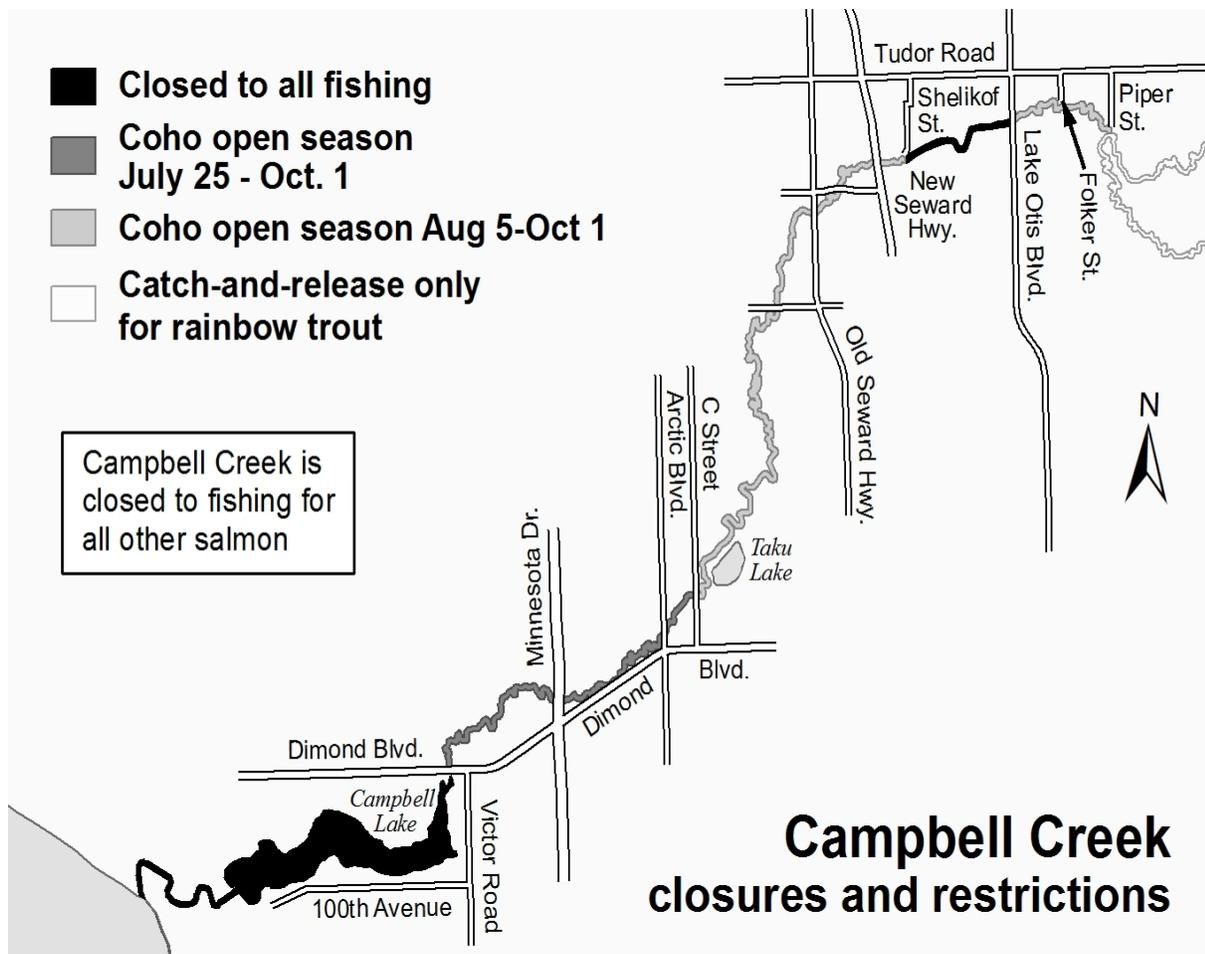


Figure 296-1. Map of Campbell Creek with fishing closures and restrictions.

Table 296.1. Effort, catch, harvest and stocking data for Campbell Creek rainbow trout and coho salmon (1989–2009).

Campbell Creek								
Year	Angler Effort	Rainbow Trout			Coho Salmon			
		Catch	Harvest	Stocking	Catch	Harvest	Stocking	Escapement
1986	2,217		815	4,073		0		99
1987	1,485		408	10,281		0		132
1988	4,729		1,637	6,303		0		b
1989	1,942		732	9,235		28		b
1990	3,983	5,801	1,697	7,277	0	0		126
1991	1,977	2,417	199	5,428	89	25		282
1992	1,515	982	277	8,010	24	8	97,076	157
1993	9,073	1,673	267	6,071	6,894	3,942	140,797	2,312
1994	8,036	1,809	271	6,634	4,725	1,256	87,686	3,054
1995	10,457	2,416	300	5,058	4,910	1,947	157,241	1,423
1996	5,225	2,622	531	5,104	3,474	1,458	75,943	1,612
1997	5,897	2,988	215	2,686	3,006	1,651	71,519	1,007
1998	4,834	3,603	272	0	2,624	1,167	83,317	2,968
1999	4,446	2,874	711	3,030	1,880	1,341	42,046	537
2000	3,918	4,766	216	4,563	1,873	555	63,730	3,196
2001	6,222	14,952	369	3,909	2,748	813	69,836	2,377
2002	4,561	2,950	418	2,291	2,998	1,144	69,836	7,574
2003	4,937	3,177	257	4,264	2,873	1,457	78,576	1,799
2004	5,674	2,032	117	1,560	3,468	1,056	85,790	713
2005	6,933	1,455	99	1,697	4,552	1,989	60,387	1,130
2006	6,235	720	24	1,522	3,622	1,767	78,805	542
2007	5,779	888	11	0	1,051	758	82,138	^a
2008	6,267	740	0	0	2,164	1,155	83,421	403
2009	2,774	310	0	0	577	364	15,400	766
2000–2009								
Average	5,330	3,199	151	1,981	2,593	1,106	68,792	2,056
2005–2009								
Average	5,598	823	27	644	2,393	1,207	64,030	710

^a No counts were conducted

PROPOSAL 297 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl Drainages Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would close the Bird Creek drainage to all sport fishing between January 1 and July 13.

WHAT ARE THE CURRENT REGULATIONS? Bird Creek is closed to fishing for king salmon. It is open to sport fishing for salmon, other than king salmon, all year-round from its mouth upstream 500 yards to an ADF&G regulatory marker. The bag and possession limit for salmon, other than king salmon, 16 inches or greater in length is three fish. The Bird Creek drainage is closed to salmon fishing upstream of the regulatory marker, but open to sport fishing for resident species, such as Dolly Varden.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would protect a small run of Bird Creek wild king salmon. The proposed early season closure with an opening date of July 14 would give enforcement officers the tools they need to enforce the king salmon fishing closure, and still allow anglers to target the pink salmon and enhanced coho salmon returns to Bird Creek.

BACKGROUND: Bird Creek, located just south of Anchorage (Figure 297-1), has a small run of wild king salmon and is closed to fishing for king salmon because the run is too small to sustain a fishery. These king salmon have early run timing and escapement surveys typically take place during the third week of July before coho salmon return to Bird Creek. The average king salmon escapement since 2000, is 128 fish (Table 297-1). These salmon are vulnerable to anglers as they congregate in schools in the estuary prior to moving to the spawning grounds upstream. Anglers are frequently seen fishing in the estuary and tell biologists and enforcement officers they are fishing for Dolly Varden. The average annual catch of Dolly Varden from Bird Creek since 2005 is 89, with an average annual harvest of 12 (Table 297-2). Rainbow trout are rarely, if ever, caught in this drainage.

Bird Creek is stocked each year with approximately 100,000 coho salmon smolt. Coho begin to return during the later part of July, after the king salmon have left the estuary and moved upstream. Bird Creek also has a large run of pink salmon that are targeted by anglers starting early to mid July. The proposed season closure is consistent with other Upper Cook Inlet streams that open for salmon fishing (other than king salmon) on July 14. In 2010, the department issued an emergency order to close the entire Bird Creek drainage to sport fishing through July 13, 2010, in order to protect the king salmon return.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. This small run of Bird Creek king salmon has continued to decrease despite the king salmon fishing closure. These salmon hold in the Bird Creek estuary and are easily seen from the Seward Highway Bridge that crosses this stream. The king salmon fishing closure is difficult to enforce

because anglers can claim to be targeting Dolly Varden. A season closure would benefit law enforcement efforts without significantly impacting anglers.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

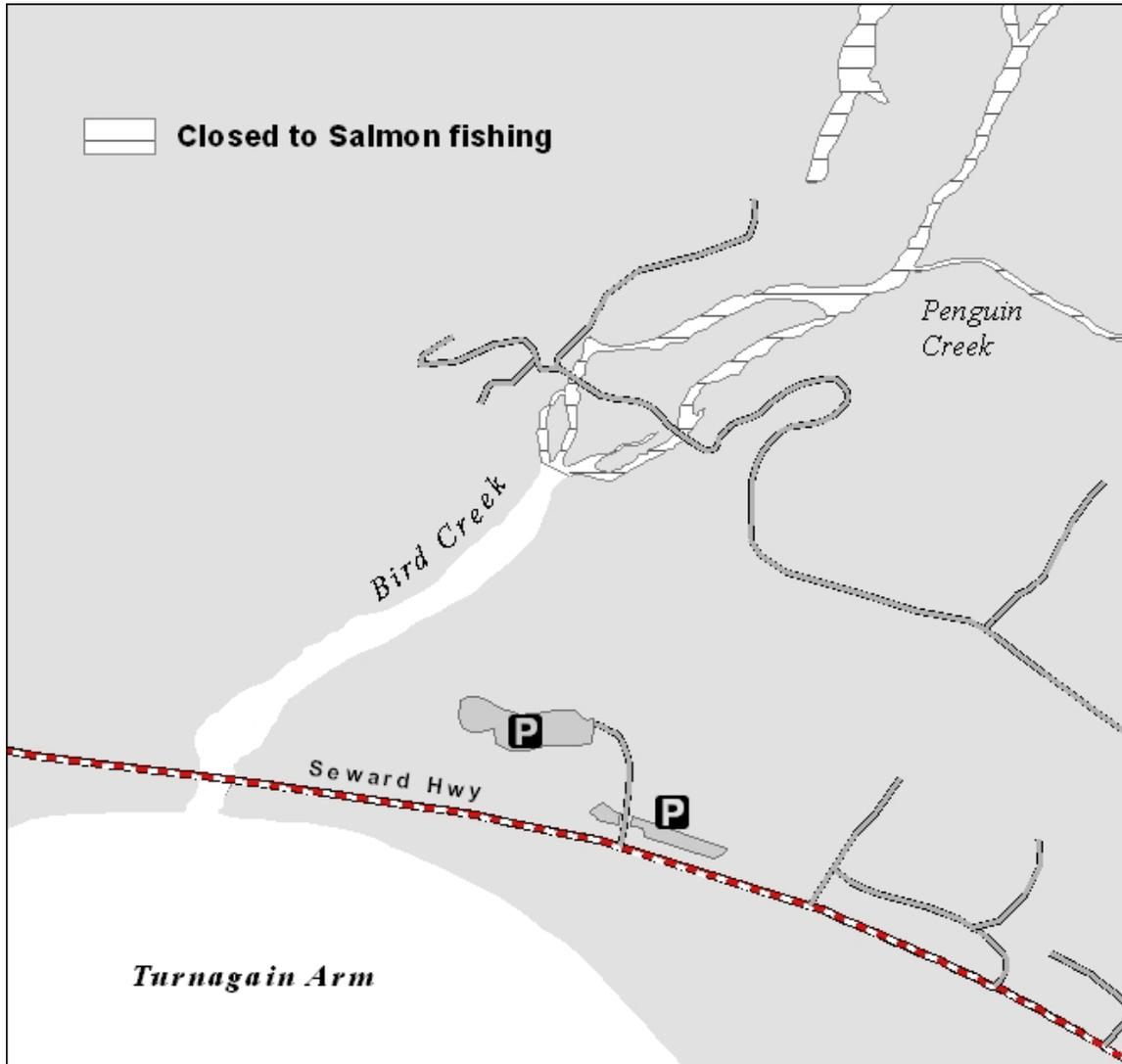


Figure 297-1. The Bird Creek drainage location near Anchorage.

Table 297-1. Bird Creek king salmon escapements, 2000–2010.

Year	King Escapement
2000	117
2001	88
2002	48
2003	140
2004	307
2005	29
2006	^a
2007	173
2008	106
2009	148
2010 ^b	12
5-Yr Average	110

^a No survey conducted.

^b Poor survey conditions.

Table 297-2. Bird Creek effort, catch, harvest and stocking data for coho salmon, pink salmon, and Dolly Varden, 2000–2009.

Bird Creek								
Year	Effort	Coho Salmon			Pink Salmon		Dolly Varden	
		Catch	Harvest	Stocking	Catch	Harvest	Catch	Harvest
2000	17,550	15,799	10,741	97,409	20,055	1,335	137	0
2001	13,662	11,563	8,449	0	7,662	333	22	0
2002	5,540	1,504	1,053	0	5,931	758	81	0
2003	3,691	1,117	776	0	6,152	1,033	70	50
2004	2,239	1,064	611	109,949	2,667	751	27	13
2005	8,365	5,331	3,281	100,605	8,624	433	39	13
2006	15,220	9,530	5,889	104,974	16,182	1,574	177	14
2007	13,247	7,461	3,287	104,979	25,861	1,717	59	0
2008	10,866	3,817	3,030	113,035	16,205	1,088	92	0
2009	13,605	6,020	3,296	113,300	37,299	3,812	79	33
Average								
2005-2009	12,261	6,432	3,757	107,379	20,834	1,725	89	12

PROPOSAL 298 - 5 AAC 59.122. Special provisions and localized additions and exceptions to the seasons, bag, possession and size limits, and methods and means for the Anchorage Bowl Drainage Area.

PROPOSED BY: Wayne “Penguin” Smartwood.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit wading in Ship Creek one and one-half hours prior to high and low tides. Crossing the creek or standing on the side would still be allowed.

WHAT ARE THE CURRENT REGULATIONS? Regulations for Ship Creek do not restrict anglers from wading in the creek while fishing.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal may make it easier for anglers who drift eggs or use bobbers to fish without other anglers interfering with their drift. It would create regulatory confusion and enforceability issues since it could not prevent people who are not fishing from wading through the stream.

BACKGROUND: Ship Creek is the most popular angling location in the Anchorage area, providing an annual average of more than 36,000 angler days of effort each year. This stream is stocked with king and coho salmon smolt. Annual stocking goals are 315,000 king salmon smolt and 240,000 coho salmon smolt. According to an economic survey conducted by Northern Economics in 2004, Ship Creek provides the City of Anchorage with approximately \$7.2 million of economic benefit each year. Ship Creek is managed to provide brood-stock for king and coho salmon stocking programs. Current broodstock requirements call for 750 king salmon and 1,000 coho salmon as counted by foot survey. All king and coho salmon in excess of these needs are either harvested by sport anglers or allowed to spawn in the waters of Ship Creek upstream of the salmon fishery.

DEPARTMENT COMMENTS: The department **OPPOSES** creating regulations that are difficult to enforce and would have limited benefit to anglers. By prohibiting wading in the creek, the proposal seeks to regulate a nonfishing activity, which may be outside the board’s authority.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.