RC 201

REPORT TO THE BOARD OF FISHERIES

UPPER COOK INLET

Upper Cook Inlet supports a complex set of fisheries comprised of four (4) user groups, commercial (drift & set net), sport (unguided and guided), personal use and subsistence and five (5) salmon species. Upper Cook Inlet is unique among all of the fisheries regulated by the Board of Fisheries. This situation exists nowhere else in Alaska. This unique complexity requires specific management plans to insure that both biological and allocative goals are met.

This complexity was first addressed by the Board of Fisheries in 1977 with the adoption Policy 77-27-FB. That policy allocated fish in upper Cook Inlet "primarily" to sport users prior to July 1st and to commercial users after that date. An additional requirement directed the department "minimize the non-recreational catch" of "Susitna coho", "Kenai king" and "Kenai coho". This policy was eventually put in regulation.

The term "minimize" was addressed in the later versions of the Upper Cook Inlet Salmon Management Plan by providing prescriptive directions for the in season management of Northern District coho, late run Kenai King and early run Kenai Coho. Now these prescriptive management directives are found in the various sockeye, king and coho management plans for various drainages.

Earlier Boards recognized that commercial users were primarily focused on sockeye while sport users were most interested in coho and king salmon. While this focus has not changed, the addition of the personal use fisheries coupled with the growth of our local and tourist populations, has added even more complexities to the management of these fisheries. Remember, Upper Cook Inlet is both complex and unique.

The complexity engendered by competing user groups, five species of fish and multiple drainages, presents any Board with difficult regulatory decisions. In an ongoing effort to achieve a balance, the various step down plans have, of necessity, become prescriptive. Over the decades since the adoption of the first "umbrella" plan, numerous "step down" plans addressing specific fisheries have been adopted and revised in an effort to balance competing biological goals and allocative interests.
The purpose of prescriptive "step down" management plans has been two fold. First to meet the constitutional mandate of "sustained yield" and second provide the "maximum benefit" to the people of Alaska. It is absolutely essential that Upper Cook Inlet fisheries be managed to insure minimum escapements for all species. Once that goal is achieved, to maximize the benefits to all Alaskans, the Board must afford all users a fair and equitable opportunity to harvest a common property resource.

Submitted by KRSA

The culmination of several regular and special board meetings over the course of six (6) years in the late 1990s and early 2000 addressing the complexities of Upper Cook Inlet achieved a balance which reflected both biological concerns for the Northern District and the competing demands of the various users.

However, as a result of the actions by the Board in 2005 and 2008, the "umbrella plan" and the various "step down" plans have been amended to expand commercial fishing opportunities. The balance which was achieved after several years of work has been upset. During the period when the primary allocation is to commercial users, Upper Cook Inlet is now managed actively and exclusively for sockeye salmon bound for the Kenai and Kasilof Rivers. All other sockeye runs throughout Upper Cook Inlet and every other species of salmon is managed passively, if at all, during this period of time.

This dominant or strong stock management system may work wherever there is only one major user group. However, it is a very poor management system for Upper Cook Inlet with its unique complexities of multiple species and users.

The result of this management approach has been diminished in river returns of sockeye and coho salmon to the Northern district. It has led to a reduction in opportunity for Alaskans to harvest kings and cohos in the Kenai and Kasilof rivers. Personal use fisheries on the Kenai and Kasilof rivers have become fisheries of necessity. No longer can Alaskans count on sport harvests to secure their fish for the winter. This increases the impacts associated with the personal use fisheries on the Kenai and Kasilof rivers.

The most blatant examples of the dominant stock management system occur when the department fails to follow the prescriptive measures in the various step-down plans. Justification for this practice is found in subsection (e) of the Upper Cook Inlet Salmon Management Plan (5 AAC 21.363) that was adopted in 2008. The provision can be used to override all of the prescriptive requirements of every other management plan.

It should be noted that this provision, while stated generally, applies only to Kenai and Kasilof sockeye fisheries. These rivers in Upper Cook Inlet have goals that can measured by sonar in season. That allows for in season management to achieve non-biological "in river goals" or "OEGs". This regulation, in practice, has never been applied to any other stock or river system in Upper Cook Inlet.

This provision allows the department to use emergency order authority to go outside of any other Upper Cook Inlet management plans in order to meet "escapement goal" that include "in river goals" and "OEGs". These goals are allocative, not biological goals.

With this regulation in place, it no longer matters what the Board of Fisheries requires in any management plan. The Department is permitted to use its emergency order authority to override specific and prescriptive management directives designed to protect all species of salmon and make allocations to all users in Upper Cook Inlet.

These management plans have been adopted and amended over many years in response to extensive public involvement in the Board of Fisheries process. These plans represent the collective wisdom and will of users, managers and Board members. They should never be ignored. All of the provisions should be used in every circumstance in order to address the biological and allocative competing demands on these complex fisheries. To do otherwise, is to denigrate the Board process.

Emergency order authority should only be used when there are no available tools in the various management plans and a circumstance exists which would make it impossible to meet minimum escapement goals. Emergency order authority should not be used to increase harvest of one species when doing so would have an adverse effect on other species or on other users.

The following suggestions are respectfully submitted for the Board's consideration.

1) Restore the language of the 1981 regulation to the Upper Cook Inlet Management Plan (Umbrella Plan-5 AAC 21.363). By using the dates of July 1 and August 5, coupled with the terms "primarily" and "minimize", so that the Board's intent as to appropriate allocation between users will be crystal clear. See attachment "A".

2) The terms "primarily" and "minimize" have been used consistently in the management of Upper Cook Inlet. In order to be understood as management directives, specific and prescriptive management plans are essential. See attachment "B".

These two suggestions are essential to restore a balance among competing users while achieving escapement goals for all species throughout Upper Cook Inlet.

Respectfully submitted this 28th day of February 2011 by the Kenai River Sportfishing Association.

ATTACHMENT "A"

SUBSTITUTE FOR PROPOSAL 159

5 AAC 21.363 Upper Cook Inlet Salmon Management Plan

(a) The department should receive long-term direction in management of upper Cook Inlet salmon stocks and salmon species. Divisions within the department must receive long-term direction in order to accomplish their missions and plan management, research, administrative, and other programs. Upper Cook Inlet stakeholders should be informed of the long-term management objectives of the Board of Fisheries (board). Therefore, the board establishes the following provisions for the management and conservation of upper Cook Inlet salmon stocks:

(1) consistent with the statutory priority for subsistence, the harvest of upper Cook Inlet salmon for customary and traditional subsistence uses will be provided for specific species in appropriate areas, seasons, and periods to satisfy subsistence needs; other beneficial uses, to the extent they are consistent with the public interest and overall benefit of the people of Alaska, will be allowed in order to maximize the benefits of these resources;

(2) to provide for the management and allocation of the upper Cook Inlet salmon resources, the harvest of the upper Cook Inlet salmon will be governed by specific and comprehensive management plans adopted by the board for salmon stocks and species, on a Cook Inlet basin wide basis, for different areas, and drainages and for different types of fisheries;

(3) in adopting the specific management plans described in (2) of this subsection the board will consider:

(A) the need for sustainable fisheries for all salmon stocks and salmon species throughout the Cook Inlet basin;

(B) the protection of the fisheries habitat both in the fresh water and the marine environment throughout the Cook Inlet basin; and

(C) the various needs and demands of the user groups of the salmon resources of upper Cook Inlet;

[(4) Consistent with the statutory subsistence priority and consistent with the specific requirements of the various management plans in this chapter, upper Cook Inlet salmon stocks will be managed generally as follows:

(A) Prior to July 1 salmon stocks which normally move in upper Cook Inlet will be managed primarily for sport and guided sport fisheries;

(B) From July 1 through August 5 salmon stocks which normally move in upper Cook Inlet will be managed primarily for commercial fisheries, except that

commercial fisheries will be managed to minimize the harvest of king and coho salmon and to provide personal use, sport, and guided sport users with a reasonable opportunity to harvest sockeye salmon; and

(C) After August 5 salmon stocks which normally move in upper Cook Inlet will be managed primarily for sport and guided sport fisheries.]

[(5) Guided by the general allocative mandates provided in subsections (a) (1) through (4) above,] the board may, as appropriate, address the following considerations:

(A) the need to allocate the harvestable surplus among commercial, sport, guided sport and personal use fisheries; and

(B) the need to allocate the harvestable surplus within user groups;

(6) in the absence of a specific management plan, it is the intent of the board that salmon be harvested in the fisheries that have historically harvested them, according to the methods, means, times, and locations of those fisheries;

(7) consistent with 5 AAC 39.220(b) , it is the intent of the board that, in the absence of a specific management plan, where there are known conservation problems, the burden of conservation shall, to the extent practicable, be shared among all user groups in close proportion to their respective harvest on the stock of concern.

(b) Repealed 6/13/99.

(c) In this section "upper Cook Inlet salmon stocks" means those salmon that move through the Northern and Central Districts as defined in 5 AAC 21.200(a) and (b) and spawn in waters draining into those districts.

(d) Repealed 6/11/2005.

(e) Notwithstanding any other provision of this chapter, it is the intent of the board that, while in most circumstances the department will adhere to the management plans in this chapter, no provision within a specific management plan is intended to limit the commissioner's use of emergency order authority under AS 16.05.060; ~~to achieve established escapement goals for the management plans as the primary management objective. For the purpose of this subsection, "escapement goals" includes inriver goal, biological escapement goal, sustainable escapement goal, and optimal escapement goal as defined in 5 AAC 39.222.~~, provided, however, in the period from July 1 through August 5, emergency order authority related to Kenai and Kasilof sockeye shall only be exercised when there are no other available management options in the various management plans and circumstances exist which make it impossible to meet minimum sockeye escapement goals.

ATTACHMENT "B"

The purpose of this attachment is to discuss the terms "primarily" and "minimize".

The term "primarily" is defined by dates that establish general, but not exclusive, allocation between competing users. Use of this term responds to the Constitution mandate of providing maximum benefits to the people of Alaska. This term has never engendered the confusion created by the second term in this paper, "minimize".

The term "minimize" can only be defined by the prescriptive management directives in the various step-down management plans. Each of these plans include various "tools" that provide management with methods for dealing with the unique and complex fisheries. These are the tools to "minimize" the harvest of species other than sockeye during the period when stocks are allocated "primarily" to commercial users.

Examples of these tools of Upper Cook Inlet are as follows:

a) the use of corridors (time and area restrictions) for the drift fleet to allow either fish passage to the Northern District or to target additional harvest of Kenai and Kasilof bound sockeye; and

b) the use of windows (time and area closures) in the set net fishery to allow kings and sockeye to enter the Kenai and Kasilof rivers and to allow reasonable opportunity for personal use and sport harvest; and

c) decoupling drift and set net fisheries in the Central District to allow either fish passage to the Northern District or to target additional harvest of Kenai and Kasilof bound sockeye;

d) the use of the 1% closure rule for the set net fisheries to define the end of the sockeye fishery and to allow passage of coho.

These prescriptive management directives are necessary to meet the Constitutional mandates of sustained yield and maximum benefit to the people of Alaska. The tools in the various "step down" management plans are the only way in which to maintain both the biological and the allocative balance. If management fails to use all of these tools to their fullest extent to achieve the goals of the management plans, then the department is, in essence, re-allocating fish. This re-allocation should only occur in Upper Cook Inlet when there is an event that makes it impossible to meet minimum escapement goals.

RC 202

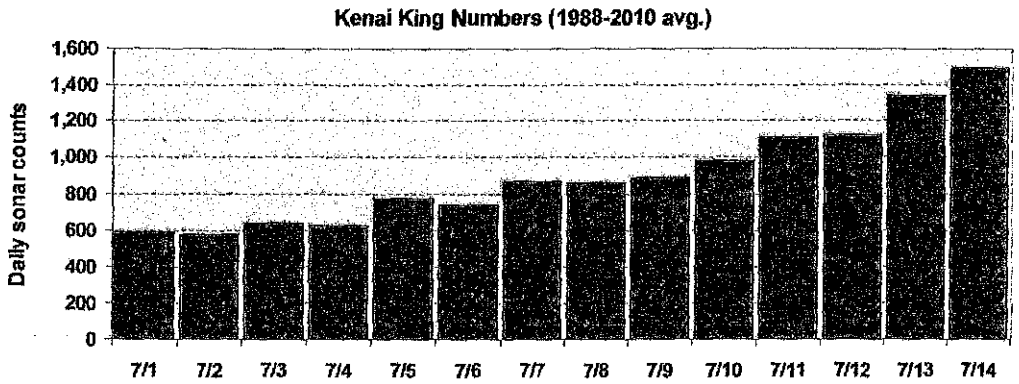
Comments on Committee A Report

These comments highlight questions or concerns in the Committee A report around three potential actions:

Earlier Set Net Opener South of the Kenai (Proposals 109, 105, 106 & 167)

These proposals allow for earlier harvest of sockeye salmon in the east side set net fishery in the area south of the mouth of the Kenai River on North Kalifonsky Beach (stat area 244-32). The Board committee was in consensus to support with substitute language opening the area "south of the mouth of the Kenai River and the Kasilof section from July 1 ~~[JUNE 25]~~ through August 15."

- ✓ *The substitute language is confusing and in conflict with other regulatory language. The Kasilof section is opened in [5 AAC 21.310 (b)(2)(C)(i)] on June 25. The substitute language identifies a different opening date (July 1).*
- ✓ *The change effectively increases allocation of kings to the commercial fishery from the sport fishery stemming from an intent to redistribute harvest of Kasilof sockeye between Kenai and Kasilof area set netters.*
- ✓ *Significant numbers of late-run Kenai kings are moving through the area of this fishery during early July.*



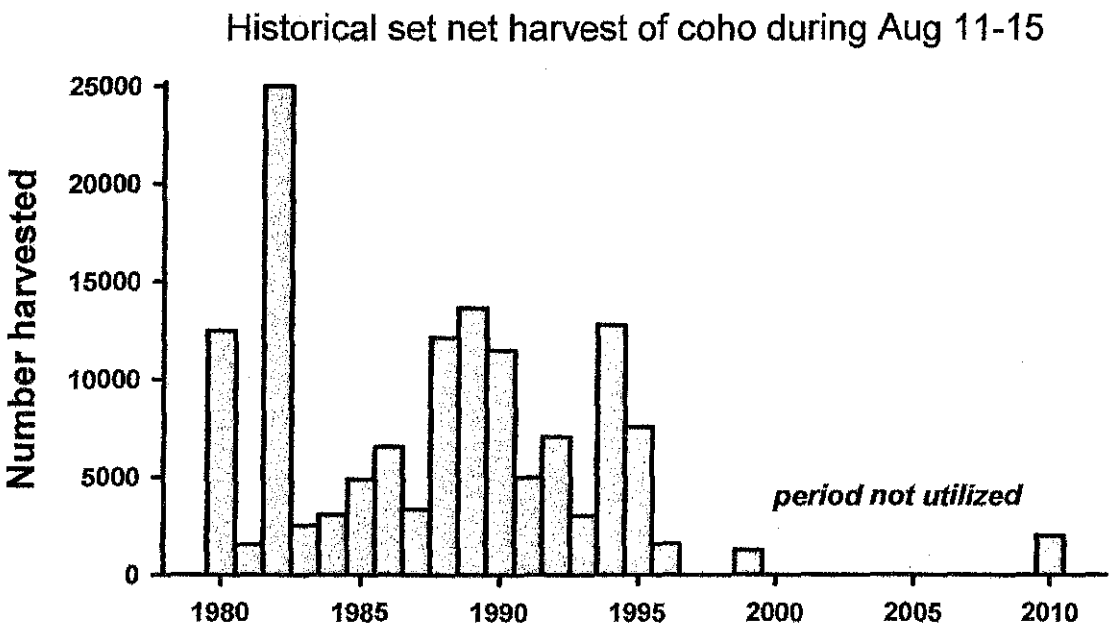
- ✓ *Additional harvest of Kenai king salmon associated with this earlier opener would be contrary to explicit direction in the Kenai Late-run Sockeye Management Plan [5 AAC 21.360 (a)] that the department shall manage the commercial fisheries to minimize the harvest of late-run Kenai king stocks.*
- ✓ *The commercial harvest share of late-run Kenai kings already approaches or exceeds 50% of the combined sport and commercial harvest in most years – this change would exacerbate this imbalance.*
- ✓ *The increased harvest of Kenai Chinook with earlier opening of the Kenai beaches will reduce early sonar counts making it more difficult to assess run strength and increase the risk of commercial and sport fishery restrictions in poor run years like 2011.*
- ✓ *The increased harvest of Kenai sockeye associated with earlier opening of the Kenai beaches will reduce early sonar counts making it more difficult to assess run strength and to meet minimum goals during poor run years.*
- ✓ *KRSA is adamantly opposed to opening the set net fishery north of the Blanchard Line prior to July 8 as identified in the current plan.*

Submitted by: Kenai River Sportfishing Association

Pink Salmon Management Plan (Proposal 321)

This proposal seeks to extend the set net season in the Kenai, Kasilof and East Forelands sections through August 15 in order to provide an opportunity to harvest pink salmon in years when they are abundant. The Board committee was in consensus to support establishing a Pink Salmon Management Plan for one or two periods between August 11-15 opened by EO based pink salmon and coho harvest triggers.

- ✓ *The substitute language does not provide clear direction for the relative priority of the 1% sockeye season closure trigger and this pink salmon plan. The meaning of the phrase "notwithstanding 5 AAC 21.310(b)(2)(C)(iii) (1 percent rule)" is unclear.*
- ✓ *Harvest caps like those identified in the substitute language for coho are potentially dangerous and ineffective in cases where they encourage underreporting of harvest. This is why the end of the sockeye season is triggered by the 1% sockeye harvest rule rather than a coho harvest number.*
- ✓ *The department lacks the tools to determine whether "coho salmon run strength is sufficient to withstand additional harvest" as specified in the proposed pink salmon management plan.*
- ✓ *Significant numbers of Kenai coho are likely to be harvested during this time frame (see figure below). An average of 1 coho was harvested for every 6 pink salmon in this historical data.*
- ✓ *Increased commercial harvest of the sport-priority coho resulting from this action will extend the period of little or no significant coho availability in the Kenai River through most of August. The practical effect will be to eliminate benefits of increasing the sport bag limit for coho from 2 to 3 in the Kenai.*
- ✓ *KRSA is strongly opposed to a set net fishery during this time frame.*



Data from Table 321-1 in Committee A staff comments

Stack Permits in the East Side Set Net Fishery (Proposals 117, 118 & 324)

This proposal seeks to modify the amount of gear used by CFEC set net permit holders. The Board committee was in consensus to support with substitute language directing that a CFEC permit holder who holds two Cook Inlet set net permits may not operate more than an aggregate length of set net gillnets not to exceed 210 fathoms.

- ✓ *It is unclear if the substitute language is consistent with Committee testimony to the effect that stacked permits should be registered and operated in the same area.*
- ✓ *Opposition comments are incomplete. The comments note that this change could put more gear in the water harvesting more fish. They do not identify the related impacts including an effective increase in allocation of kings, sockeye and coho to the commercial fishery at the expense of the sport and personal use fisheries in the Kenai and Kasilof.*
- ✓ *If this provision passes, fishery windows and other provisions identified in proposal 147 will be essential to avoid unintended allocation effects of this action.*

RC 203

LFS

851 Coho Way, Bellingham, WA 98225 • Phone: 800-426-8860 or 360-734-3336 • Fax: 360-734-4058 • www.lfsinc.com

February 28, 2011

Board of Fisheries
Alaska Dept of Fish and Game
Vince Webster, Chair
PO Box 115526
Juneau, AK 99811

Re: Herring Web Petition

Dear Vince Webster, Chair and Board of Fish Committee Members,

Lummi Fisheries Supply, Inc (LFSI) is a major supplier of fishing web and gear to Alaska with our main store in Bellingham, WA.

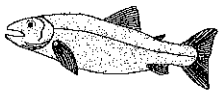
We were contacted by one of our dealers, Kathy Hansen of Kathy's Net Loft and Gear Supplies in late November/early December about ordering 2-1/4" herring web for the West Behm Canal fishery for one of her customers. We quoted her at that time a late April ex-factory date. It is approximately 3 weeks or more from the ex-factory date to delivery in Alaska, if the net is not hung for the customer. At that time we had not ordered any 2-1/4" herring web or larger and to date we have not had any orders for those sizes.

While typically special order gear are shipped from the factory 60 to 90 days (ex-factory date), this was not the situation this fall, the Gulf of Mexico oil spill had the factories busy making replacement net for the Gulf fisherman, the factory was quoting 120 to 150 day ex-factory dates. We have not stocked 2-1/4" gear for many years since no fisheries had been conducted requiring this size. A November 5th fishery announcement date was not sufficient time for us to consider stocking gear for availability for this fishery. To have gear on the shelf available for shipping to customers and giving them time to hang the gear, we would have had to be notified of the fishery in September or earlier.

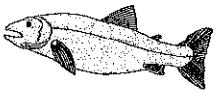
Sincerely,

Steve Ayers
Commercial Salesman

RC 204



Kathy's Net Loft & Gear Supplies
Kathy & Ed Hansen
9369 North Douglas Highway
Juneau, AK 99801
(907) 586-6652 Fax: (907) 523-1168
E-mail: gillnet@ak.net



February 28, 2011

Alaska Dept of Fish and Game – Board Support
Board of Fisheries
Vince Webster, Chair
PO Box 115526
Juneau, AK 99811

Dear Vince Webster, Chair and Board Members,

RE: Herring Web Size Petition

We reviewed the Dept's response to the herring petition submitted by SEAFA and would like to offer the following comments. Based on the information in the petition, there is very good biological basis as well as the issue of fairness and foregone harvest opportunities in 2011 to consider.

We don't fully agree with the information about nets and dates of order gathered by ADFG. For example, Kathy's Net Loft sells gear to ADFG sport fish division for mark and recapture programs in Southeast Alaska. The gear was ordered Nov 30th and the ex-factory delivery date given at the time of order is mid-April. This was consistent with gear orders from both Redden Marine and LFSI at that time. Since the customers who called and asked about gear availability in late November and early December were members of Southeast Alaska Fishermen's Alliance, SEAFA called and talked to ADFG in December and submitted a petition as follow up in January.

There is stock gear available that is less than 2-1/4" in size. **After making follow up phone calls today we have not found any 2-1/4" gear that was ordered AFTER the fishery announcement was made on Nov. 5th, 2010.**

While the Dept. is correct that the normal manufacturing time is between 60 to 90 days that was untrue this year with the Gulf of Mexico oil spill which generated a lot of new web to be manufactured for that region. This extended the time frame for ordering to 90-120 days + time for shipping, clearing customs and shipping to Alaska plus the time to hang the web.

At this point we believe that more than 60% of the herring permit holders would be unable to participate in this fishery as there is not any 2-1/4" gear or larger that has been ordered for the fishery after the announcement was made on November 5th, 2010 after

checking with both Redden and LFSI. Seattle Marine (SEAMAR) had the same ex-factory dates when we checked with them in December and did not double check today.

We believe that with the gillnet fishery only scheduled for alternate years, lack of adequate notice to order gear and now with the biological information provided in the petition response and the concern that the Dept. stated today on the phone for the fleet to harvest the quota with 2-1/4" legal gear that the criteria for an unforeseen circumstance does exist and it would be appropriate for the Board of Fish to allow the state standard for herring mesh of 2-1/8" for the West Behm Canal fishery this year.

Sincerely,

Kathy Hansen

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

RC 205

Clarification to RC 99 Committee E Report.

RC 99, Proposal 204, General subheading, last sentence on page 10 of 36.

The sentence reads: "On federal waters there is a 4 fish limit, but would change outside federal jurisdiction to reflect state regulations."

Clarification: Federal regulations apply only on Federal public lands and waters.

Specifically for proposal 204 (also applies to 205 and 23)

If this proposal is adopted, the Federal daily harvest limit for coho salmon 16 inches and longer, for Federally qualified subsistence users fishing in Federally managed waters of the Kenai Peninsula District, north of but excluding the Kenai River drainage, within the Kenai National Wildlife Refuge and the Chugach National Forest, would be the same as the State sport fishing regulations and be increased from 2 to 3 coho salmon per day.

However, the Federally managed waters of the Kasilof and Kenai River drainages within the Kenai National Wildlife Refuge and the Chugach National Forest have specific regulations, including harvest and possession limits, which would not change. Federally qualified subsistence users would still be allowed a daily harvest and possession limit of 4 coho salmon, 16 inches and longer, except for the Sanctuary Area at the confluence of the Kenai and Russian rivers and Russian River, for which no more than 2 per day and 2 in possession may be coho salmon.

Submitted by Rod Campbell for the U.S. Fish and Wildlife Service/Office of Subsistence Management on March 1, 2011

RC 206

Committee B Comments & Amended Proposal 126

These comments and an amended proposal reflect changes to drift net fishing periods from July 9-15 as adopted by the Board under RC 200 to address the Susitna Sockeye stock of concern, and the outcome of Committee C.

Current recommendations include:

A. Intent language: Intent language in this amended proposal is the same as in the original proposal 126. It reflects the intent to ensure adequate escapement of Susitna sockeye consistent with Board action in RC 200 to restrict one drift period and expand the corridor during the 2nd week of July. The proposed intent language also recognizes the need to regulate coho harvest in the drift fishery.

B. Conflicting language due to RC 200: This amendment proposes, based on action taken in RC 200, to delete language in (a)(2)(A)(iii) authorizing an additional fishing period that includes Drift Area 1 at Kenai run strengths over 2 million. Allowing a second Area 1 opening under average or greater Kenai runs would offset the benefits of the first period restriction. The purpose of this clause is already met by language adopted under RC 200 allowing additional fishing in the expanded corridor.

C. Additional area restrictions from July 16-31 to regulate coho harvest: Intent language in this amended proposal is the same as in the original proposal 126. It proposes to

- *limit two regular periods to the original corridor at Kenai run strengths under 2 million* (drops area 1).
- Limit one regular period per week to drift area 1 and/or the original corridor at run strengths of 2-4 million (drops Area 2).

This restriction provides both coho and Susitna sockeye benefits. The abundance-based approach continues to provide access to large Kenai sockeye runs while protecting other stocks during smaller Kenai sockeye runs.

D. Increased Corridor use in July 16-31: Explicit direction as per proposal 126 to utilize additional corridor openings in late July to offset reduced harvest due to additional area restrictions. This refers to the original corridor. We oppose use of the expanded corridor during the July 16-31 period because it includes a significant portion of drift area 2 and use would counteract the intended effects of the proposed change.

E. August 8 closure date: Earlier end-of-season closure date as per proposal 126 in order to avoid excessive harvest of coho at the tail end of the sockeye run. Intent might also be achieved by definition of fishing period under the 1% rule as not more than 24 hours to end the practice of extending continuous openers over several days to avoid the 1% trigger.

F. EO authority: We deleted language in the original proposal 126 limiting circumstances when out-of-plan actions may be taken from this amendment based on committee discussion.

Submitted by: Kenai River Sportfishing Association

5 AAC 21.353 Central District Drift Gillnet Fishery Management Plan

(a) [THE PURPOSES OF THIS MANAGEMENT PLAN ARE TO ENSURE ADEQUATE ESCAPEMENTS OF SALMON INTO NORTHERN DISTRICT DRAINAGES AND TO PROVIDE MANAGEMENT GUIDELINES TO THE DEPARTMENT. THE DEPARTMENT IS FURTHER DIRECTED TO MANAGE THE COMMERCIAL DRIFT GILLNET FISHERY TO MINIMIZE THE HARVEST OF NORTHERN DISTRICT AND KENAI RIVER COHO SALMON IN ORDER TO PROVIDE SPORT AND GUIDED SPORT FISHERMEN A REASONABLE OPPORTUNITY TO HARVEST THESE SALMON STOCKS OVER THE ENTIRE RUN, AS MEASURED BY THE FREQUENCY OF IN RIVER RESTRICTIONS.

[(b)] The department shall manage the Central District commercial drift gillnet fishery as follows:

(1) weekly fishing periods are as described in 5 AAC 21.320(b) ;

(2) the fishing season will open the third Monday in June or June 19, whichever is later, and

(A) from July 9 through July 15,

(i) fishing during the [FIRST TWO] regular fishing period[S] is restricted to the **extended** Kenai and **expanded** Kasilof Sections [AND DRIFT GILLNET AREA 1.] Additional fishing time between the first restricted period and the second period during this time frame may be allowed in the expanded Kenai and expanded Kasilof sections

(ii) fishing during the second regular fishing period is restricted to the Kenai and Kasilof Sections and Drift gillnet Areas.

~~[(II) AT RUN STRENGTHS GREATER THAN 2,000,000 SOCKEYE SALMON TO THE KENAI RIVER, THE COMMISSIONER MAY, BY EMERGENCY ORDER, OPEN ONE ADDITIONAL 12-HOUR FISHING PERIOD IN THE KENAI AND KASILOF SECTIONS OF THE UPPER SUBDISTRICT AND DRIFT GILLNET AREA 1;]~~

(B) from July 16 through July 31,

(i) at run strengths of less than 2,000,000 sockeye salmon to the Kenai River, fishing during two regular 12-hour fishing periods will be restricted to the Kenai and Kasilof Sections of the Upper Subdistrict [AND ~~DRIFT GILLNET AREA 1~~];

(ii) at run strengths of 2,000,000 to 4,000,000 sockeye salmon to the Kenai River, fishing during [~~TWO~~] **one** regular 12-hour fishing period[S] **per week** will be restricted to **either or both of** the Kenai and Kasilof Sections of the Upper Subdistrict [~~AND~~] **or** Drift Gillnet Area[~~S~~] 1 [~~AND 2~~];

ITEM A

Intent language as proposed in Proposal 126 recognizing the need to:

- ✓ *ensure Northern district escapements, and*
- ✓ *regulate coho harvest*

Revisions by the Board as per RC 200.

ITEM B

This amendment proposes to strike this language based on revisions adopted under part of RC 200. Additional fishing authority in the expanded corridor was adopted in RC 200. Allowing a second Area 1 opening under average or greater Kenai runs would offset the benefits of the first period restriction.

ITEM C

Additional restrictions during late July to protect northern-bound coho as per proposal 126.

(iii) at run strengths of less than 4,000,000 sockeye salmon to the Kenai River, the commissioner may, by emergency order, open additional fishing periods in the Kenai and Kasilof Sections of the Upper Subdistrict and additional periods may be authorized independent of the Upper Subdistrict set gill net fishery; [iv] at run strengths greater than 4,000,000 sockeye salmon to the Kenai River, there will be no mandatory restrictions during regular fishing periods; (C) The upper subdistrict will close on or before august 7, except that from [AUGUST 16] August 8 until closed by emergency order, Drift Gillnet Areas 3 and 4 are open for fishing during regular fishing periods; (D) from [AUGUST 11 THROUGH AUGUST 15] [August 1 though August 7, there are no mandatory area restrictions to regular periods, except that if the Upper Subdistrict set gillnet fishery is closed under 5 AAC 21.310(b) (2)(C)(iii), regular fishing periods will be restricted to Drift Gillnet Areas 3 and 4. [bc] For the purposes of this section, (1) "Drift Gillnet Area 1" means those waters of the Central District south of Kalgin Island at 60ø 20.43' N. lat.; (2) "Drift Gillnet Area 2" means those waters of the Central District enclosed by a line from 60ø 20.43' N. lat., 151ø 54.83' W. long. to a point at 60ø 41.08' N. lat., 151ø 39.00' W. long. to a point at 60ø 41.08' N. lat., 151ø 24.00' W. long. to a point at 60ø 27.10' N. lat., 151ø 25.70' W. long. to a point at 60ø 20.43' N. lat., 151ø 28.55' W. long.; (3) "Drift Gillnet Area 3" means those waters of the Central District within one mile of mean lower low water (zero tide) south of a point on the West Foreland at 60ø 42.70' N. lat., 151ø 42.30' W. long.; (4) "Drift Gillnet Area 4" means those waters of the Central District enclosed by a line from 60ø 04.70' N. lat., 152ø 34.74' W. long. to the Kalgin Buoy at 60ø 04.70' N. lat., 152ø 09.90' W. long. to a point at 59ø 46.15' N. lat., 152ø 18.62' W. long. to a point on the western shore at 59ø 46.15' N. lat., 153ø 00.20' W. long., not including the waters of the Chinitna Bay Subdistrict. [cd] The commissioner may depart from the provisions of the management plan under this section as provided in 5 AAC 21.363(e)	***ITEM D*** *Explicit direction as per proposal 126 to utilize additional corridor openings in late July to offset harvest reduced* ***ITEM E*** *Earlier end-of-season closure date as per proposal 126 in order to avoid excessive harvest of coho at the tail end of the sockeye run.* ***ITEM F*** *Language in proposal 126 limiting circumstances when out-of-plan actions may be taken deleted from this amendment based on committee discussion.*

SOUTH K BEACH INDEPENDENT

FISHERMEN'S ASSOCIATION

P.O. Box 1632 Kenai, Alaska 99611-1632 (907) 283-5098

Protecting and Preserving the Kasilof River Aquarian System

RC207

February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Proposals 109,105,106 and 167

Attention: Chairman Vince Webster

SOKI is adamantly opposed to opening 244-32 earlier then what is proscribed in current regulation.

Discussions with permit holders within this area estimate that they could suffer up to 33% in a loss of production if the area north of the Blanchard Line was opened earlier than the 8th of July.

This area has been sectioned off as part of the Kasilof sub-district since approximately 1983. That means that when there was an abundance of Kasilof bound sockeye surplus to escapement this area was allowed to open by emergency order (EO). Established approximately 27 years ago!

This area has traditionally for decades noted for targeting Kasilof sockeye and pink salmon. The original demarcation line for this area was the Shadura Trap site which is located approximately 3.5 miles from the north shore of the Kasilof River. The Board changed the line in 1985 at the request of the fisherman where the line is now at 4.5 miles north of the Kasilof River.

The approximate distance from the south point for the entrance to the Kenai River to the north point of the Kasilof River is 11 miles. About one mile north and south of the Kasilof is not open for fishing; so the area in question is about 3.5 statute miles long. Rarely do fishermen in this area set their nets further out then ¾ of a mile during this time of year. The Kasilof sockeye tend to move in and around the mud flats which are quite extensive in the area out to 3.5 miles north of the river. This is a 75% ebb fishery and many fishermen use small mesh gear to target Kasilof stocks versus larger mesh gear that is used to harvest Kenai sockeye.

The Kenai run is not a factor for many of the nets that fish within the ½ mile area from mean high water (17.6 ft) out. Net locations further out at about 1.25 nautical miles out to the 1.5 mile range target more Kenai bound stocks. Many of these fishermen do not fish these locations until after the first week in July.

We would ask the board to review the genetics information that is supplied with this RC.

Please note that on page 108, titled the *Kenai Section set gillnet fishery* at no time is there a sampling where Kasilof fish are dominant or even significant. This fishery in these selected years from 2005, 2006, 2007 and 2008 never started before the 9th of July. The table that corresponds to this is on pages 52 & 53 sub note (c). It should be noted that on some days only one day out of a range of days were tested, the other days not tested were estimated. Error factors could be as high as 50% in some instances.

We now would request that you review the bar graphs on page 107, titled the *Kasilof Section set gillnet fishery* at no time up to the 9th of July do you see any significant harvests of Kenai bound sockeye in the approximately 30 miles of beach of the Kasilof section. The tables on pages 50, 51 and 52 further specify the (b) sub note as representing samples for south K-Beach.

On page 32, paragraph four talks about the relationship of dominate stocks to the mouths of the Kasilof River, *more Kasilof fish were captured in subsections bordering the Kasilof River* and, *In 2008, the proportion of Kasilof fish in South K. Beach ...were higher than in previous years.*

The kings that are harvested in the stat area (244-31) are not all bound for the Kenai as some are destined for the Kasilof River. Sports division recent study indicates that the escapements of kings to the Kasilof are at sustainable levels.

With issues surrounding the achievement of the minimum goals for Kenai sockeye we question whether an earlier opening on north K-Beach could possibly delay attaining the minimum escapement goals in this system on a less than stellar year. This scenario may interfere with regular openings for not only north K-Beach but also for Salamantof and the north Salamantof beaches.

South K-Beach is in an odd area, it is historically a Kasilof fishery. North K-Beach is targeting Kenai bound fish. Catches drop of significantly in the South K-Beach area near the last week of July while the catch rates (cpue) are still very vibrant for the North K-Beach area. When the rate of escapement winds down in the Kasilof, so does the commercial catch in the 244 – 31 stat area.

When the KRSHA is utilized the fishermen in the South K-Beach area lose their traditional fishery which has cost many families a large part of their fishing income. They have had to sit by and watch as their historical time to fish has been denied in order to attain the minimal goal in the Kenai River. Their harvest opportunity will never be regained.

The main run to the Kasilof hits the midpoint at the counter by the bridge at the Sterling highway on or about July 14th. This is the peak of the run and that is approximately one week after the area 244-32 opens.

We feel that after a decade, an equilibrium has been established and we ask the board to not make any changes that would change the balance between setnet fishermen on K - Beach.

We are a small area and are vulnerable to the competitive voices of others. Many of our area fishermen are elderly and cannot make it to this meeting. We sign on as just a few of the affected.

the Shadura Family the Brandt Family the Koski Family the Smith Family

abnormal run entry patterns discussed in the "Description of Fishery 2005–2008" section of the Introduction.

Within the KRSHA drift and set gillnet fisheries, the estimated stock composition of sockeye salmon harvested was dominated by Kasilof fish. The high proportions of Kasilof fish in this fishery were expected based on the proximity of the fishery to the mouth of the Kasilof River. Kenai sockeye salmon comprised a higher percentage of the set (6%) than drift (4%) gillnet harvests in this area (Table 11). A model based upon size and age data estimated a slightly lower percentage of Kenai sockeye salmon in the set (1%) and drift (3%) gillnet harvests in this area during this same time period (T. M. Willette, Commercial Fisheries Biologist, ADF&G, Soldotna; personal communication).

Within the East Side Subdistrict (Central District) set gillnet fishery, we did not observe a consistent pattern of decreasing proportions of Kasilof River and increasing proportions of Kenai sockeye salmon in July as described by Bethe et al. (1980) using scale pattern analysis (SPA). Such a pattern is somewhat evident in Kenai Section in 2006 and 2008 and in Kasilof Section in 2005, 2007 and 2008, but was not evident in Kenai Section in 2005 and 2007 or in Kasilof Section in 2006. There are 3 potential explanations for this lack of a consistent pattern: 1) differences in Kenai and Kasilof run sizes and timings among years; 2) the inefficacy of the SPA for estimating stock compositions of UCI sockeye salmon due to the highly variable freshwater rearing environments occupied by sockeye salmon in this area that results in inconsistent stock-specific growth patterns (Waltemyer 1995; Waltemyer et al. 1996); and 3) changes in fishing patterns between the 1970s and 2000s.

SusYen and JCL sockeye salmon contributed to East Side Subdistrict set gillnet harvests (Tables 12 and 13) at lower fractions (0–4%, except for one estimate of 9% for July 21–28, 2007 period in Kenai Section) than estimated using SPA (i.e., 0–28%; Bethe et al. 1980; Cross et al. 1986). Our estimates are more similar to previous MSA estimates based on allozymes that indicated that SusYen and JCL sockeye salmon comprised 1–6% of East Side Subdistrict set gillnet harvests (Seeb et al. 2000). In the one year we examined stock composition by subsection (2005), most of the SusYen and JCL sockeye salmon were harvested in the subsections farthest from the Kenai and Kasilof river mouths (Table 14). Since the estimated harvests of SusYen and JCL sockeye salmon in the East Side Subdistrict set gillnet fishery were highly variable over time, it is difficult to predict how this stock may be harvested in this fishery in the future.

Within East Side Subdistrict, most of the catch was comprised of either Kenai or Kasilof fish (Table 15; Figure 10). Higher proportions of Kenai fish were captured in subsections bordering the Kenai River mouth (North K. Beach and Salamatof) and more Kasilof fish were captured in subsections bordering the Kasilof River mouth (Cohoe/Ninilchik and South K. Beach). The most southern and northern subsections (Cohoe/Ninilchik and Salamatof) contained higher proportions of non-Kenai and non-Kasilof fish. In 2008, the proportion of Kasilof fish on South K. Beach and the proportion of Kenai fish on Salamatof beach were higher than in previous years (Table 15; Figure 10) suggesting a different run entry pattern with more fish moving toward their home stream from the north. Continued sampling will help us to determine whether such patterns are consistent and if so under what conditions.

Table 3.–Page 4 of 11.

Restrictions[a] / Subsection[b]	Date(s) sampled	Harvest on sample date	Represented date(s)	Harvest represented	Mixture date(s)	Sample Size	
						Analyzed	Collected
11	8/4	3,670	8/2-5	21,282	8/2-7	340	460
11	8/7	1,943	8/6-7	4,067		60	150
Kasilof River Special Harvest Area set gillnet (Central District, East Side Subdistrict)							
2006							
11	7/24	68,098	7/24	68,098	7/24-29	182	200
11	7/25	51,199	7/25	51,199		93	200
11	7/26	24,510	7/26	24,510		51	100
11	7/27	21,393	7/27-29	38,619		74	200
Kasilof Section set gillnet (Central District, East Side Subdistrict)							
2005							
1a	7/4	17,375	6/20-7/4	267,398	6/20-7/9	50	50
1b	7/4	11,033	6/20-7/4	127,378		50	50
1a	7/7	19,433	7/6-9	58,873		50	50
1b	7/7	9,763	7/6-9	26,398		50	50
1a	7/11	26,345	7/10-15	71,035	7/10-15	50	50
1b	7/11	12,692	7/10-12	27,858		200	200
1b	7/14	2,011	7/13-15	15,253		156	156
1a	7/18	19,241	7/16-7/21	63,369	7/16-21	50	50
1b	7/18	27,504	7/16-19	61,013		200	200
1b	7/21	7,111	7/20-23	26,392	7/20-23	200	200
1a	7/25	14,331	7/23-7/28	154,327	7/23-8/10	50	50
1b	7/25	8,860	7/24-26	32,114		50	50
1b	7/28	11,564	7/27-8/1	50,846		50	50
1a	8/1	27,344	7/30-8/10	110,472		50	50
1b	8/4	6,635	8/3-10	46,409		50	50
2006							
1a	6/26	19,285	6/26	19,285	6/26-7/1	66	200
1b	6/26	8,270	6/26	8,270		81	100
1a	6/29	26,514	6/29-7/1	57,440		193	200
1b	6/29	10,371	6/29-7/1	29,772		60	60
1a	7/3	13,625	7/2-3	17,752	7/2-8	67	200
1b	7/3	5,951	7/2-3	6,992		44	130
1a	7/6	16,563	7/6-8	45,909		169	200
1b	7/6	7,642	7/6-8	31,858		120	120
1a	7/10	13,979	7/10	13,979	7/10-13	142	200
1b	7/10	3,290	7/10	3,290		34	200
1a	7/13	5,056	7/12-13	15,984		200	200
1b	7/13	806	7/12-13	2,840		24	67

-continued-

Table 3.–Page 5 of 11.

Restrictions[a] / Subsection[b]	Date(s) sampled	Harvest on sample date	Represented date(s)	Harvest represented	Mixture date(s)	Sample Size	
						Analyzed	Collected
12a	7/15	80,250	7/15	80,250		177	300
12b	7/15	34,416	7/15-16	63,467	7/15-16	131	250
12a	7/16	45,690	7/16	45,690		92	200
1a	7/17	17,110	7/17	17,110		50	200
1b	7/17	10,701	7/17	10,701	7/17-22	27	200
12a	7/20	17,700	7/19-22	54,600		179	200
12b	7/20	21,888	7/19-22	52,781		144	210
1a	7/31	6,901	7/30-8/1	9,906		55	130
1b	7/31	6,955	7/30-8/1	10,461		53	130
1a	8/2	3,826	8/2-5	14,334	7/30-8/9	89	130
1b	8/2	6,662	8/2-5	26,145		126	130
1a	8/7	1,440	8/6-9	4,707		24	200
1b	8/7	3,970	8/6-9	11,767		53	130
			2007				
1a	6/25	6,471	6/25	6,471		23	200
1b	6/25	1,901	6/25	1,901		7	118
1a	6/28	19,838	6/28-30	45,747		160	200
1b	6/28	3,233	6/28-30	8,934	6/25-7/5	35	130
1a	7/2	16,957	7/2	16,957		58	200
1b	7/2	2,533	7/2	2,533		9	130
1a	7/5	13,060	7/4-5	28,557		93	200
1b	7/5	2,068	7/4-5	4,215		15	130
1a	7/9	28,581	7/9-11	77,980		170	200
1b	7/9	3,531	7/9-11	7,935	7/9-14	17	188
1a	7/12	16,504	7/12-14	43,486		95	200
1b	7/12	1,127	7/12-14	8,240		18	200
1a	7/16	19,128	7/16-18	58,137		97	250
1b	7/16	3,776	7/16-18	27,115	7/16-21	46	187
1a	7/19	54,885	7/19-21	120,095		193	250
1b	7/19	7,533	7/19-21	40,469		64	200
1a	7/23	11,052	7/22-25	46,831		151	250
1b	7/23	5,320	7/22-25	23,309	7/22-28	78	200
1a	7/26	12,551	7/26-28	29,334		93	200
1b	7/26	14,085	7/26-28	22,980		78	200
1a	7/30	9,521	7/30-8/1	27,385		83	130
1b	7/30	6,610	7/30-8/1	16,758		56	130
1a	8/2	5,492	8/2-5	13,438		50	130
1b	8/2	1,883	8/2-5	3,249	7/30-8/9	21	130
1a	8/6	6,567	8/6-7	10,655		73	130
1b	8/6	4,211	8/6-7	7,119		30	130
1a	8/9	8,271	8/8-9	10,435		47	130
1b	8/9	7,169	8/8-9	8,607		40	130

-continued-

Table 3.–Page 6 of 11.

Restrictions[a] / Subsection[b]	Date(s) sampled	Harvest on sample date	Represented date(s)	Harvest represented	Mixture date(s)	Sample Size	
						Analyzed	Collected
			2008				
1a	6/26	41,691	6/26-28	81,474		111	200
1b	6/26	19,504	6/26-28	43,188		59	100
1a	6/30	20,652	6/29-7/1	69,857	6/26-7/5	94	300
1b	6/30	9,839	6/29-7/1	28,942		40	130
1a	7/3	13,318	7/2-5	50,461		79	264
1b	7/3	2,748	7/2-5	12,786		17	130
1a	7/7	27,013	7/7-9	57,160		202	299
1b	7/7	7,284	7/7-9	11,656	7/7-12	42	130
1a	7/10	9,354	7/10-12	34,188		117	300
1b	7/10	2,877	7/10-12	11,048		39	100
1a	7/14	59,621	7/13-16	121,671		148	300
1b	7/14	70,952	7/13-16	138,886	7/13-19	162	200
1,12a	7/17	22,262	7/17-19	38,467		50	250
1,12b	7/17	21,388	7/17-19	32,923		40	250
1,12a	7/21	23,402	7/20-23	58,223		156	250
1,12b	7/21	21,055	7/20-23	54,144	7/20-26	140	247
1,12a	7/24	18,145	7/24-26	24,985		71	247
1,12b	7/24	4,638	7/24-26	11,720		33	91
			Kenai Section set gillnet (Central District, East Side Subdistrict)				
			2005				
1c	7/11	26,686	7/11-12	40,134	7/11-12	200	200
1d	7/11	42,926	7/11-12	100,348		50	50
1c	7/14	4,818	7/13-15	14,712	7/13-15	200	200
1d	7/14	12,084	7/13-15	27,137		50	50
1c	7/18	48,613	7/16-19	92,841	7/16-19	200	200
1d	7/18	69,180	7/16-19	129,636		50	50
1c	7/21	7,947	7/20-23	27,702		200	200
1d	7/21	45,865	7/20-23	169,488	7/20-26	50	50
1c	7/25	7,574	7/24-26	22,676		50	50
1c	7/28	14,849	7/27-30	27,630		50	50
1d	7/28	26,615	7/24-30	218,506		50	50
1c	8/1	9,718	7/31-8/2	25,298	7/27-8/10	50	50
1c	8/4	10,805	8/3-10	60,552		50	50
1d	8/4	39,832	7/31-8/10	360,139		50	50
			2006				
1c	7/10	2,833	7/10	2,833		67	200
1d	7/10	6,960	7/10	6,960	7/10-13	165	403
1c	7/13	975	7/13	975		25	106
1d	7/13	6,058	7/13	6,058		143	272

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Table 3.–Page 7 of 11.

Restrictions[a] / Subsection[b]	Date(s) sampled	Harvest on sample date	Represented date(s)	Harvest represented	Mixture date(s)	Sample Size	
						Analyzed	Collected
1c	7/17	7,939	7/17	7,939	7/17	97	200
1d	7/17	21,789	7/17	21,789		303	400
1c	7/31	12,393	7/31-8/1	18,026	7/31-8/9	31	130
1d	7/31	52,147	7/31-8/1	82,070		129	130
1c	8/2	7,406	8/2-5	29,492		38	130
1d	8/2	39,187	8/2-5	77,670		117	130
1c	8/7	4,272	8/6-9	12,468		19	130
1d	8/7	12,698	8/6-9	41,550		65	200
			2007				
1c	7/9	1,712	7/9	1,712	7/9-12	62	100
1d	7/9	5,104	7/9	5,104		193	300
1c	7/12	783	7/12	783		30	100
1d	7/12	3,026	7/12	3,026		115	300
1c	7/16	1,380	7/16	1,380	7/16-19	10	100
1d	7/16	8,169	7/16	8,169		64	300
1c	7/19	5,390	7/19	5,390		40	100
1d	7/19	36,684	7/19	36,684		286	300
1c	7/23	6,955	7/21-24	32,268	7/21-28	30	100
1d	7/23	40,087	7/21-24	189,781		215	350
1c	7/26	22,463	7/26-28	25,831		31	100
1d	7/26	54,290	7/26-28	91,105		124	300
1c	7/30	8,504	7/30-31	13,670	7/30-8/9	27	130
1d	7/30	35,469	7/30-31	52,598		104	130
1c	8/2	1,655	8/1-2	5,534		8	130
1d	8/2	14,102	8/1-2	44,726		83	130
1c	8/6	4,033	8/5-7	9,027		19	130
1d	8/6	25,351	8/5-7	51,955		84	130
1c	8/9	8,243	8/8-9	9,585		11	130
1d	8/9	20,669	8/8-9	30,576		51	130
			2008				
1c	7/10	1,067	7/10	1,067	7/10-17	2	100
1d	7/10	3,347	7/10	3,347		5	299
1c	7/14	61,879	7/14	61,879		93	100
1d	7/14	78,558	7/14	78,558		125	299
1c	7/17	20,743	7/17	20,743		39	100
1d	7/17	86,418	7/17	86,418		136	300
1c	7/21	20,680	7/21	20,680	7/21-24	76	100
1d	7/21	64,899	7/21	64,899		238	299
1c	7/24	4,050	7/24	4,050		15	50
1d	7/24	19,317	7/24	19,317		71	300

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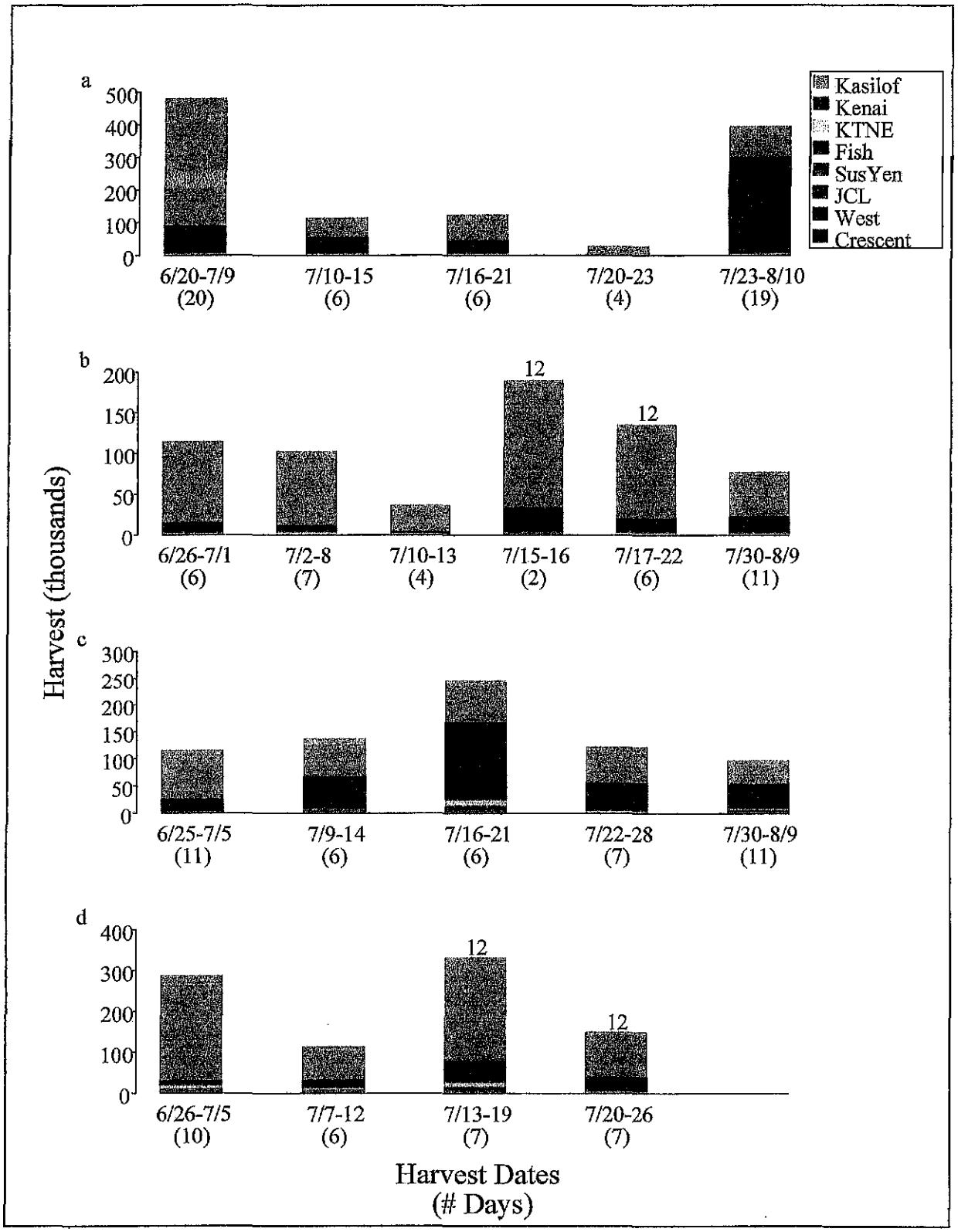

Figure 8.–Estimates of harvest by stock for the Kasilof Section set gillnet fishery (Central District, East Side Subdistrict) from a) 2005, b) 2006, c) 2007, and d) 2008. Numbers above the bars indicate that fishery restrictions during openings (see Table 1).

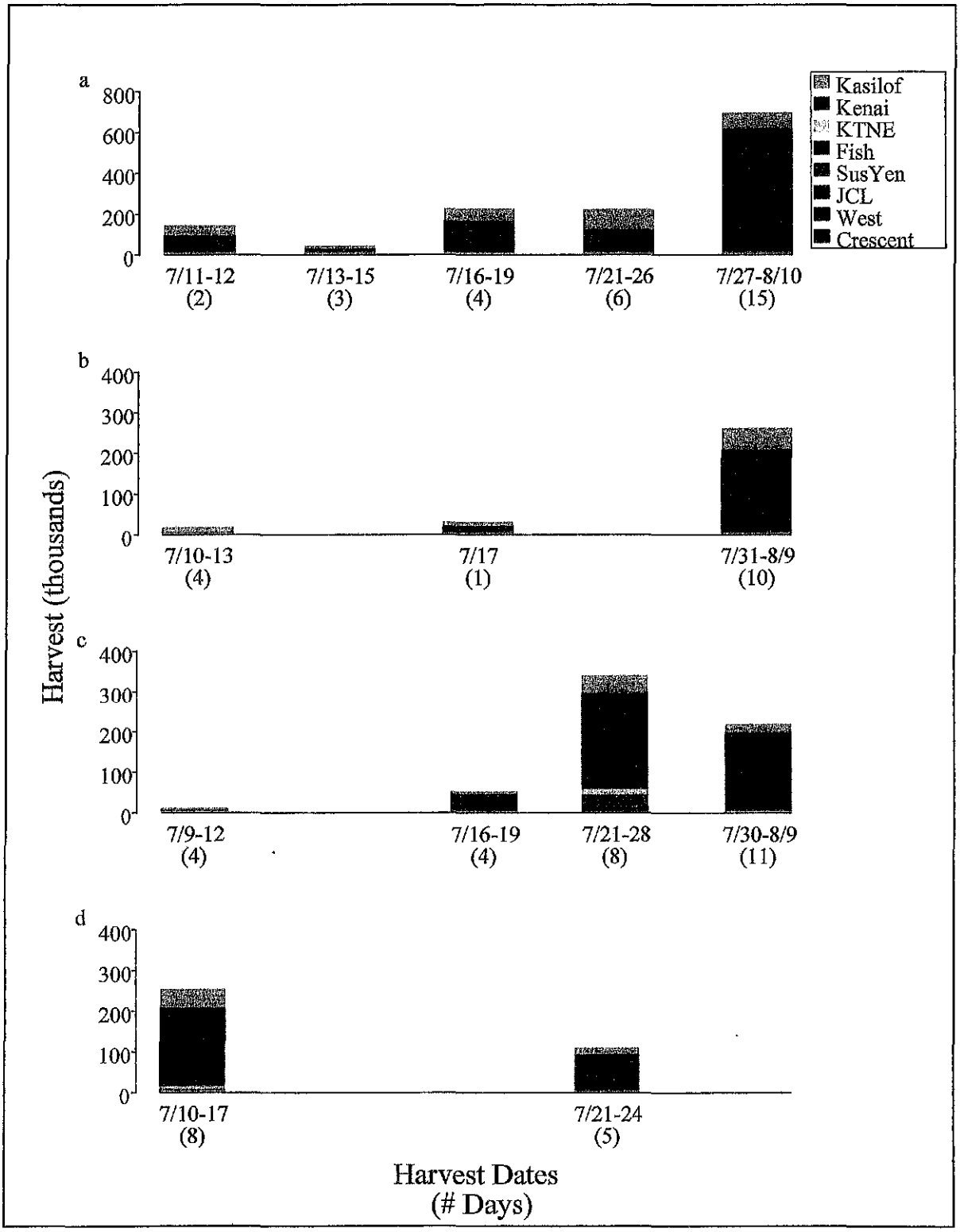

Figure 9.–Estimates of harvest by stock for the Kenai Section set gillnet fishery (Central District, East Side Subdistrict) from a) 2005, b) 2006, c) 2007, and d) 2008.

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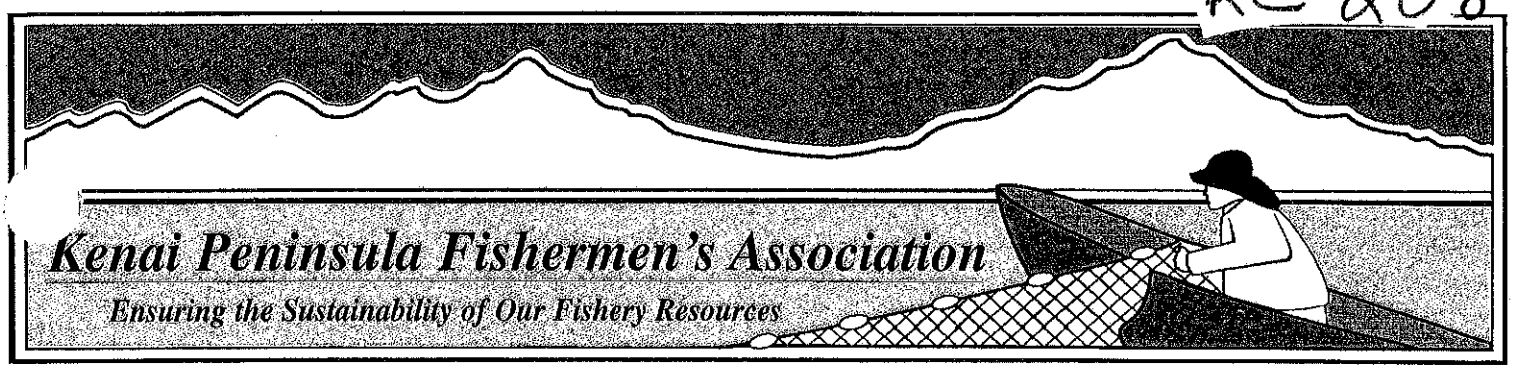

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February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Update to Assessment of Sockeye Salmon Returns to the Kenai River
Part One – In River Fisheries and Scenarios

Attention: Chairman Vince Webster

KPFA continues to assist the Board with complex decisions it must make to ensure a *reasonable opportunity* to harvest a given resource while maintaining Maximum Sustained Yield (MSY). An efficient decision that minimizes the risk of lost opportunity.

Thank You,

Jeff Beaudoin
Research Analyst

Note: This is part one, part two contains the updated DIDSON tables.

Jim B.

ASSESSMENT OF SOCKEYE SALMON RETURNS TO THE KENAI RIVER:

ESTIMATION OF TOTAL RETURN;
PROJECTION OF INRIVER FISHING POWER;
AND
EVALUATION OF MANAGEMENT OPTIONS

by:

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94/95 RM

INTRODUCTION

Allocation of Kenai River sockeye remains one of the most contentious fishery issues facing the state of Alaska. Of recent concern is fallout from decisions made during the 1992 Board of Fisheries meeting. At that meeting, the Board considered, but did not alter, a key provision in the Kenai River Sockeye Salmon Management Plan that caps the inriver sport fishery at no more than 10% of the 400,000 to 700,000 inriver goal (as measured by sonar at rm 19). At that meeting, sport fishery managers testified that the current sport fishery had grown beyond that allocation and that some combination of time/area and method/means restrictions would be necessary to limit sport harvest within the 10% allocation. The management plan remained unchanged at the 1992 meeting. To meet this allocative objective for the 1993 season, managers restricted the sport fishery preseason via Emergency Order by: reducing the bag and possession limit to two fish/day (down from three); and restricting the time for sport fishing for sockeye to 0600 to 1100 hrs (a reduction of seven hours/day). Last year, the Board considered a request to take evaluation of the Kenai River Sockeye Salmon Management Plan out of cycle. In response, they empowered several representatives of selected users of this resource into the Kenai River Sockeye Salmon Task Force and charged them with the task of exploring revisions to the Kenai River Sockeye Salmon Management Plan. The department agreed to support this process and, among other services, provided technical support.

During a series of meetings during the spring, summer, and fall of 1994; department staff provided Task Force members with:

- A finalized data set of Kenai River sockeye returns to Upper Cook Inlet (UCI);
- Analysis of expected inriver harvest levels under the current management plan.

Task Force members were urged to provide department staff with descriptions of their respective visions for inriver fisheries in the Kenai River. During this process, their requests ranged from scenarios that were incremental changes from the *status quo* that could be encompassed by the structure of the current management plan to significant deviations from the current regulatory strategy. Department staff then provided:

- Analysis of expected inriver harvest levels, and revised management objectives where appropriate, for these proposed fisheries.

A summary of these analyses is presented in this report.

In addition, department staff provided Task Force members with a current analysis of the Biological Escapement Goal (BEG) for Kenai River sockeye which is presented in another report.

ASSESSMENT OF KENAI RIVER SOCKEYE RETURNS TO UPPER COOK INLET

The Department's Stock Assessment Program

Estimation of Harvest:

Sockeye returning to UCI are first available to the area's commercial fisheries (Figure 1) and these harvests are estimated from sales receipts (fish tickets). Fish from the commercial harvest are also sampled for age composition. The contribution of Kenai-origin sockeye to these mixed-stock harvests has been estimated by scale patterns and age composition models. The largest harvesters of Kenai River sockeye are the drift gillnet fleet and the set gillnet fishery along the east side of the Central District.

At the mouth of the Kenai River, returning sockeye are next harvested in subsistence and/or personal use (PU) dip net fisheries (Figure 1). This fishery occurs in tidewater from the river mouth upstream to the Warren Ames Bridge. Subsistence harvests are estimated from permit returns and PU harvests are estimated from post season postal surveys (PU participants are required to have a resident sport fishing license and these users are sampled via postal questionnaire, commonly referred to as the Statewide Harvest Survey or SWHS).

Sport fishing for Kenai River sockeye occurs in two fisheries (Figure 1): (1) the Kenai River sport fishery which occurs throughout virtually the entire mainstem from the river mouth to the outlet of Kenai Lake; and the Russian River sport fishery which occurs in the lower two miles of the Russian River and in approximately 1,800 yards of the Kenai River mainstem immediately below the confluence with the Russian River. Harvests in both fisheries are estimated from the SWHS. Harvest in the Russian River fishery is also estimated from onsite creel surveys and agreement with the SWHS is very good. Reporting areas for the SWHS are: the river mouth to the Soldotna Bridge; the Soldotna Bridge to the Moose River; Moose River to the outlet of Skilak Lake; the inlet of Skilak Lake to the outlet of Kenai Lake (excluding the Russian River fishery); and the Russian River fishery. Harvested fish from the Russian River fishery are sampled for age composition.

Estimation of Inriver Return and Spawning Escapement:

Inriver return is estimated via sonar at river mile (rm) 19 which is approximately 1 mile below the Soldotna Bridge. Migrating fish are sampled in fishwheels for species and age composition.

Spawning escapement is estimated via subtraction:

Spawning Escapement = Inriver Return - Inriver Harvest above Soldotna Bridge

One flaw in the department's data base is that the SWHS reporting area does not perfectly match the location of the sonar. The Soldotna Bridge is approximately 2 miles upstream of the rm 19 sonar site. Therefore, we have systematically underestimated spawning escapement by including sport harvest from that 2-mile section of river from the sonar to the bridge as part of the estimation of spawning escapement. In our opinion, that bias has not compromised our ability to assess spawning escapement. Never-the-less, we recognize this as a problem that needs to be fixed and in 1994, fielded an on-site creel survey to estimate sport harvest from the river mouth to the rm 19 sonar site, and from the sonar to the Soldotna Bridge. In 1994, sport harvest between the sonar and bridge was estimated at nearly 12,000 sockeye or approximately 50% of the total sport harvest from the mouth to the bridge. Our creel survey will be in place during 1994 and we will continue to refine our program to estimate spawning escapement.

Spawning escapement into lower Russian Lake is counted through a weir and sampled for age composition.

Estimation of Total Returns

Basic returns of Kenai River sockeye since 1981 are presented in Table 1. Total sockeye returns to UCI since 1981 have ranged from 2,500,000 to nearly 12,000,000 fish. During this time, returns of Kenai River sockeye have ranged from nearly 1,000,000 to nearly 9,000,000 sockeye.. The largest component of the Kenai return occurs in the commercial fishery and has ranged from approximately 500,000 to 7,000,000 sockeye. PU/Subsistence dip net harvests in the Kenai River mouth have been variable with changes in regulations and ranged from 0 to nearly 50,000 fish. Sport harvest below the Soldotna Bridge

has ranged from approximately 4,000 to nearly 112,000 sockeye. Inriver return past the rm 19 sonar has ranged from approximately 345,000 to nearly 1,600,000 sockeye. A PU harvest above tidewater has only occurred once: in 1991 at Hidden Lake with a total harvest of approximately 72,000 sockeye. Kenai River sport harvest above the Soldotna Bridge occurs in all SWHS reporting areas and ranged from approximately 11,000 to 165,000 sockeye. Sport harvest in the Russian River fishery has ranged from approximately 10,000 to nearly 60,000 sockeye. Total spawning escapement, estimated by subtraction of all harvest above the Soldotna Bridge from the sonar estimate, has ranged from approximately 311,000 to 1,400,000 sockeye.

One Application - Establishing the BEG

Estimates of total return are the heart and soul of the department's assessment program for Kenai River sockeye. In combination with age composition data, estimates of total return are partitioned into spawning escapements and their resulting returns, or broods. These spawner-return relationships, or brood tables, provide the basis for estimating the BEG.

The BEG for Kenai River sockeye is 330,000 to 600,000 spawners.

This analysis is presented in another report.

The BEG is the cornerstone for any fishery allocation plan. This is an important concept in evaluating the current or any proposed management plan. From the perspective of the department's fishery managers, a "workable" management plan must have a reasonable chance of delivering the prescribed 330,000 to 600,000 spawners.

THE INRIVER FISHERIES

How to Compute Expected Levels of Inriver Harvest

Return data can also be used to game out expected levels of harvest and spawning escapement for a given management scenario. To do this, we examined the performance of each inriver fishery to see if we could predict the response in harvest to a given management scenario or objective. The obvious management objective that we examined was inriver abundance as measured at the rm 19 sonar. In-other-words, what level of harvest do we expect from each inriver fishery at differing levels of inriver abundance as measured at the rm 19 sonar? And we must also ask: what level of spawning escapement do we expect at differing sonar counts?

We plotted annual harvest from each inriver fishery against the corresponding sonar count for that year (Figure 2).

The dip net fishery at the river mouth exhibits no clear pattern with sonar counts (see Figure 2a); in-other-words dip net harvests do not rise and fall as sonar counts rise and fall. This can be partly explained by the changing regulations that have governed this recent fishery. The change in regulations is why we only included six data points in the graph; these are the years in which the dip net fishery was governed by at least similar regulations to those now in place. Staff now expect that under current subsistence (fishing time is set at two 12-hr periods/week, 25-fish seasonal family limit) and personal use (continuous fishing after 700,000 sonar counts, 6-fish daily bag limit) regulations, dip net harvest will stabilize at the highest recorded level or approximately 50,000 sockeye/year across a wide range of sonar counts (at least those sonar counts greater than 400,000). In-other-words if current PU and subsistence dip net regulations remained unchanged, staff would expect approximately 50,000 sockeye to be dip netted in this fishery, irrespective of whether 400,000 sockeye crossed the rm 19 sonar, or 600,000, or 800,000, or even in

excess of 1 million. We base this conclusion on the manner in which fishing time is offered in this fishery. Subsistence fishing only occurs 2 days per week during July. Given the narrow time frame in which sockeye enter the Kenai River, it is unlikely that there would be more than 2 or 3 days of highly efficient dipping. Participation in this fishery is already high and we do not anticipate significantly more effort as the fishery is currently conducted. Given relatively stable fishing time, participants, and a seasonal bag limit, it is unlikely that harvest will continue to increase in this fishery. The same case can be made for the PU fishery. PU fishing is only offered after 700,000 sockeye have passed the rm 19 sonar which provides only a very narrow window (again, no more than 2 to 3 days) for highly efficient dipping. This, in combination with already maximal participation and the 6-fish bag limit lead staff to believe that total harvest in this fishery will remain relatively stable across a relatively wide range of inriver abundance.

The mainstem sport harvest below the Soldotna Bridge exhibits a very clear pattern with sonar counts (see Figure 2b); in-other-words sport harvests rise and fall as sonar counts rise and fall. Clearly, harvest in this fishery is very dependent upon inriver abundance. We have drawn a line, a *regression* line, through these data. This means that there is a straight-line, or *linear*, predictive relationship between sonar counts and sport harvest below the Soldotna Bridge. We will use this linear regression to predict sport harvest below the bridge from sonar counts. Why does harvest in this fishery vary with inriver abundance while harvest in the dip net fishery appears independent of abundance? We think that the answer lies in the differential manner in which the fisheries are currently conducted. While dip net fishing opportunity is quite fixed in relation to inriver abundance (remember that there are only a few days of relatively efficient dipping, irrespective of inriver abundance), sport fishing opportunity when sockeye are available for harvest can be quite variable. The number of days when harvestable numbers of sockeye (roughly 10,000 to 20,000 per day) are migrating into the river is very different if, say, 500,000 sockeye pass rm 19 vs, say, 800,000 sockeye. Days of good sport fishing attract large numbers of participants. Therefore, total sport fishing harvest and effort will increase in years where there are a relatively large number of days when harvestable numbers of sockeye are migrating into the river as opposed to years when there are relatively few of these days. This is very unlike the current dip net fishery where maximal numbers of people already participate on the relatively few and fixed days of efficient dipping. This differential number of days with high effort combined with good catch rates clearly translate into differential expectations for sport fishing harvest at different levels of inriver abundance.

This same dependence on inriver density is evident for the mainstem sport harvest above the bridge (see Figure 2c). Although somewhat more variable, sport harvests again rise and fall as sonar counts rise and fall. We have again fit a linear regression model to predict sport harvest above the bridge from sonar counts.

The Russian River sport harvest exhibits no clear pattern with sonar counts (see Figure 2d); in fact it looks like a shot gun pattern. Although not shown in this graph, harvest levels in the Russian River sport fishery are clearly driven by escapement to the Russian lakes as measured through the Russian River weir (see Table 1). Returns to the Russian River are often independent of returns to other Kenai drainage spawning locations. For our purposes here, we simply chose the average harvest at Russian River (38,000 sockeye) as our expectation across a wide range of sonar counts (at least those sonar counts greater than 400,000).

We now have a model to predict inriver harvest, and spawning escapement, given any given sonar count. To illustrate how this model can be utilized to evaluate various proposals, we evaluated several scenarios that were proposed by Task Force members. We need to be clear that these scenarios are NOT recommendations being proposed by the department. We modeled these scenarios for the Task Force process, and we are modeling them now to illustrate a framework for evaluating any proposal.

During the Task Force process, we recognized two broad categories of visions for the future of this fishery. The first school of thought envisioned either the *status quo* or an incremental change from the current management plan. This school of thought focused on those fisheries and stock assessment tools currently

in place. The second school of thought envisioned new fisheries and stock assessment tools not currently in place and well beyond the scope of the current Kenai River Sockeye Salmon Management Plan. In the remainder of this report, we attempt to model proposals from each of these broad categories.

The first scenario that we modeled is the *status quo*, the current management plan. The second scenario is the current sport fishery where the likelihood of inseason restrictions to the sport fishery is low and the current inriver goal of 400,000 to 700,000 sockeye is not in place. The third scenario moves well away from the current management plan and calls for a return at the Kenai River mouth of 800,000 to 1,100,000 sockeye, a liberalized dip net fishery in the river mouth, a new dip net fishery above the Soldotna Bridge, a liberalized bag limit in the sport fishery of 6 sockeye/day, a weir at the outlet of Skilak Lake to remove unharvested fish in excess of the BEG, and a new sonar counter to be installed above the Soldotna Bridge. For each of these scenarios, we attempt to estimate harvest and spawning escapement and provide management objectives. We present these scenarios to illustrate a framework of how to utilize the technical expertise of the department to evaluate any proposal for this issue.

SCENARIO I: THE CURRENT MANAGEMENT PLAN
Normal Sport Fishery (3-fish bag limit, 7 days/week)
PU/Sub Fishery as in 1992
Relax the 10% Harvest Guideline

Table 2 illustrates our expectations for inriver, or non-commercial, harvest at various levels of inriver abundance under the current management plan. First, please refer to the top table. Each column appears chronologically or in the order in which they actually occur during any return: sockeye are first available to the PU/Subsistence dip net fishery at the river mouth; then to the sport fishery below the bridge; they then pass the rm 19 sonar; then to the mainstem sport harvest above the bridge; then to the Russian River sport fishery; and survivors finally to the spawning escapement.

Now please refer to the third column titled *SONAR*. Our model is designed to predict harvest and spawning escapement at different levels of inriver abundance. The first row shows a value of 399,000; then succeeding rows show incremental values up to 1,000,000. We chose only one value of less than 400,000 to model because the current management plan contains a minimum inriver goal objective of 400,000 sockeye past the rm 19 sonar and any realized sonar count below 400,000 is not a legitimate management target. If department managers believed that they were tracking on a season-end sonar count of less than 400,000 (represented by the first row in Table 2), our expectation for the PU/Subsistence dip net fishery and the mainstem sport fishery (both above and below the bridge) would be zero because they would be closed. Conversely, our expectation for the Russian River sport fishery would be the average harvest of 38,000 sockeye. Remember that the Russian River sport fishery is not subject to the Kenai River Sockeye Salmon Management Plan but is instead regulated by the Russian River Sockeye Salmon Management Plan. Realized drainage-wide escapement for sonar counts less than 400,000 is then the sonar count minus the expected Russian River harvest or in this example, 399,000 - 38,000 = 361,000. This value for escapement is within the BEG range (330,000 to 600,000), but is only realized at an extremely high cost to these fisheries. For this reason, we did not model other sonar counts below 399,000 but this could certainly be done if so desired. 630,000

Now please refer to the second value in the *SONAR* column: 400,000. This is the minimum inriver goal called for in the management plan and a potentially legitimate management target. If under the current management plan department managers believed that they were tracking on a season-end sonar count of 400,000; then we would expect that the PU/Subsistence dip net fishery would be open and would harvest 50,000 sockeye. The mainstem sport fishery would also be open and, based on our regression model for the mainstem sport fishery below the bridge, we would expect a harvest of 24,000 sockeye. The mainstem sport fishery above the bridge would also be open and our regression model predicts a harvest here of 76,500 sockeye. Again, harvest at the Russian River could not be predicted from sonar data and we would expect an average level of harvest of 38,000 sockeye. Escapement would then be projected as the sonar

count minus all fishing mortality above the bridge or: 400,000 - 76,500 - 38,000 = 285,500. This value for escapement is NOT within the BEG range (330,000 to 600,000). What does this mean? It means that although the department would be in compliance with the management plan in terms of the objective for inriver goal (i.e. we met the mandate for 400,000 to 700,000 sockeye past the rm 19 sonar), the expectation for such a poor escapement would compel us to restrict the inriver fisheries during the season in such a manner to attain at least the lower end of the BEG range. An inseason restriction would undoubtedly include reductions in time/area and bag limits.

Let me provide one more example to illustrate how we model expectations under the current management plan. Please refer to the sixth row under the *SONAR* column where the value is 600,000. A sonar count of 600,000 is certainly within the inriver goal range stipulated in the management plan (400,000 to 700,000) and is a potentially legitimate management target. If department managers believed that they were tracking on a season-end sonar count of 600,000, then we would expect that the PU/Subsistence dip net fishery would be open and would harvest 50,000 sockeye. The mainstem sport fishery would also be open and based on our regression model for the mainstem sport fishery below the bridge, we would expect a harvest of 36,100 sockeye. The mainstem sport fishery above the bridge would also be open and our regression model predicts a harvest here of 91,900 sockeye. Again, harvest at the Russian River could not be predicted from sonar data and we would expect an average level of harvest of 38,000 sockeye. Escapement would then be projected as the sonar count minus all fishing mortality above the bridge or: 600,000 - 91,900 - 38,000 = 470,100. This value for escapement is well within the BEG range (330,000 to 600,000), the inriver fisheries would not be subjected to inseason restrictions, and a sonar count of 600,000 meets all criteria for a legitimate management target under the current management plan.

Although individual Task Force members had polarized views on the magnitude of the targeted inriver return and sport fishery, all were in agreement that any management plan should provide for a sport fishery that was characterized by at least a 3-fish bag limit and uninterrupted fishing opportunity (7 days/week). Therefore, we also used this criteria in evaluating this and other scenarios.

The lower table illustrates the range of sonar counts that can actually be considered legitimate management targets under the current management plan (with the caveat of no expectation of inseason restrictions to the sport fishery as recommended by the Task Force) and are depicted by the shaded area. Remember that a "*legitimate management target*" is defined by what is in code; or for the purpose of illustration what is proposed to be in code. The current management plan provides for an inriver goal range of 400,000 to 700,000 sockeye past the rm 19 sonar. Sonar counts of less than 400,000 are obviously outside of this range, not a legitimate management target, and are excluded from the shaded area. However, a sonar count of 400,000, coupled with uninterrupted or "normal" inriver fishing, would provide for a spawning escapement of only 285,500 sockeye, well outside of the BEG range (330,000 to 600,000). Therefore since one of the criteria in this example is to provide normal inriver fishing , even the bottom end of the inriver goal range cannot be considered a legitimate management target and is excluded from the shaded area. A sonar count of 450,000 is the minimum value within the inriver goal range for which department managers could expect to offer normal inriver fishing and still be within the BEG range. Here, we would project an escapement of 331,700 sockeye. At this inriver abundance, our expectation for total non-commercial harvest would be 195,000 sockeye: 50,000 in the dip net fishery and 145,500 in the Kenai and Russian River sport fisheries.

One last point should be raised under this particular scenario. Our expectation would be for a mainstem sport harvest above the bridge of 80,300. It is this portion of the sport fishery which applies to the 10% harvest guideline stipulated in the management plan. At a sonar count of 450,000; we would expect that the guideline harvest level (10%) would be far exceeded and would in fact be 17.8%.

The remaining values in the shaded area illustrate sonar counts which stay within the maximum 700,000 inriver goal stipulated in the management plan and also provide for projected escapements within the BEG range. As this model shows, a maximum sonar count of 700,000 should provide for an escapement of 562,400; which is within the BEG range (330,000 to 600,000). A sonar count of 700,000 also should

provide for a total non-commercial harvest of 229,700 sockeye: 50,000 in the dip net fishery and 179,700 in the Kenai and Russian River sport fisheries. Again, we would expect for the 10% guideline to be far exceeded (14.2%). Clearly under the current management plan, sonar counts of greater than 700,000 could not be considered legitimate management targets and are excluded from the shaded area.

To illustrate how the various factors interact under the current management plan, please refer to Figure 3. In the top graph, each bar depicts different sonar counts from 400,000 to 1,000,000. The two horizontal lines at the bottom are the predicted PU/Subsistence (solid) and Russian River sport (dashed) harvest at each sonar count. As we discussed previously, we would anticipate similar levels of harvest for each of these fisheries across this entire range of sonar counts. The increasing line depicts the mainstem sport fishery. Per our regression models, we would expect mainstem sport harvest to increase as sonar counts increase. However, please note that the rate at which the sport fishery increases is not as fast as that of the sonar counts. In-other-words harvest in the sport fishery, as it is currently configured, increases with inriver abundance; but at a slower rate. For instance, as inriver abundance doubles from 400,000 to 800,000; mainstem sport harvest increases from 100,500 to 155,500: about a 50% increase.

In the bottom graph, you can see how total inriver return would factor into harvest and escapement at different sonar counts. For instance to realize a sonar count of 400,000 (the first bar), a total of approximately 474,000 sockeye would have to make it to the mouth of the Kenai River: we would anticipate that 50,000 would be harvested in the dip net fishery and 24,000 in a normal sport fishery below the bridge. In combination with other normal upriver harvests, total sport and dip net harvest is projected at 188,500 sockeye (the hatched part of the bar). Escapement (the dotted part of the bar) is projected at 285,500. The two horizontal lines at 330,000 and 600,000 represent the BEG range. As you can see, our expectation for escapement does not reach that range. The next six bars from 450,000 to 700,000 sonar counts are outlined in bold because the anticipated escapements at these levels all fall within the BEG range (as the inriver fisheries are currently configured) which makes them legitimate management targets under the current management plan. Sonar counts above 700,000 cannot be considered legitimate management targets under the current management plan and are therefore not outlined in bold. Also note for sonar counts greater than 800,000 under the current management plan, it is our expectation that realized spawning escapements would be greater than the BEG range.

SCENARIO II:

Relax the 400,000 to 700,000 Inriver Goal Objective
Normal Sport Fishery (3-fish bag limit, 7 days/week)
PU/Sub Fishery as in 1992

The scenario of eliminating the current inriver goal (400,000 to 700,000 past the rm 19 sonar) is a specific option that the Task Force asked us to evaluate and we present it here as an example of how to evaluate various scenarios.

Table 3 illustrates our expectations for inriver, or non-commercial, harvest at various levels of inriver abundance under this scenario. As you can see, the actual modeling for this scenario is identical to the previous example of the *status quo*. As you refer to the upper table, there is no change in our expectations for harvest or escapement in the inriver fisheries at differing levels of sonar counts. We still expect the dip net fishery to harvest 50,000 sockeye at all levels of sonar counts. We still expect the mainstem sport harvest to increase as sonar counts increase. We still expect the Russian River sport fishery to harvest 38,000 sockeye at all levels of sonar counts. We still expect to realize a spawning escapement of 331,700 at a sonar count of 450,000 and so on.

As you refer to the lower table, what does change is the range of sonar counts that can become legitimate management targets. Again, legitimate management targets are those sonar counts that department managers could actively manage for under this proposed management plan and are defined in this example by those sonar counts that provide the expectation of an uninterrupted sport fishery and a

realized escapement within the BEG range. The lower end of the range remains unchanged: we would still need to manage for a sonar count of 450,000 to realize a spawning escapement within the BEG range without the need to restrict the sport fishery inseason. At a sonar count of 450,000, we would expect to realize an escapement of 331,700; barely within the BEG range (330,000 to 600,000). However at the upper end, a sonar count of 750,000 becomes a legitimate management target. Our expectation for spawning escapement becomes 608,500; barely outside the BEG range (330,000 to 600,000). Although the actual number falls outside the range, the point is that marginally higher values above 700,000 sonar counts can be considered legitimate management targets if the current inriver goal of 400,000 to 700,000 is relaxed.

This scenario is graphically illustrated in Figure 4. The upper figure is unchanged from that of the *status quo*. Nothing has changed in any of the inriver fisheries and our expectations for harvest remain unchanged from the previous example. However the lower figure shows that a sonar range of 450,000 to 750,000 could now be considered as legitimate management targets.

SCENARIO III:

Manage for a Return to the River Mouth of 800,000 to 1,100,000
Liberalized Sport Fishery (6-fish bag limit, 7 days/week)
Liberalized PU/Sub Fishery in the Lower River
New PU/Sub Fishery above the Soldotna Bridge
A Weir at the Outlet of Skilak Lake
A New Sonar above the Soldotna Bridge

This scenario is a specific proposal submitted for Board consideration. A similar vision for these fisheries was considered by the Task Force and represents the second school of thought discussed earlier. This second school of thought envisions new fisheries and stock assessment tools not currently in place and moves beyond the scope of the current Kenai River Sockeye Salmon Management Plan. Again, this scenario is not a department recommendation, but discussed only for illustration.

There are pieces of this scenario that we can address in our current model:

- Clearly, we can consider managing for a return to the river mouth of 800,000 to 1,100,000 in our model. This part of the scenario needs to be translated into a sonar count objective.

- We also have the means to consider liberalizing the sport fishery in this model. As discussed with the Task Force, it is our opinion that a doubling of the bag limit to 6 sockeye/day would likely increase the sport harvest by about 15%. In-other-words, the mainstem sport fishery would still be driven by sockeye density past the sonar; the Russian River sport fishery would still be driven by sockeye destined for the Russian lakes and not predictable by sonar counts; and finally that expected sport harvest in these fisheries would increase by 15% if the bag limit was doubled. We won't go into detail here as to why we think this is the case except that it has been our experience in managing sport fisheries around the state that increases in bag limit have only marginal effects on realized harvest.

- We can also make reasonable assumptions, with the information at hand, about expected harvest in the proposed lower river dip net fishery. The authors' of this scenario have proposed a lower river dipnet fishery that differs from the current fishery in several areas; the most significant of which is that dip netting opportunity would be available 7 days/week throughout the sockeye immigration into the Kenai River. Under this scenario, department managers would expect for the dip net harvest to: increase over the current expectation (50,000); and be driven to a greater extent by sockeye density as currently happens in the sport fishery. While we do not currently have a history upon which to build a predictive model, we can reasonably assume that harvest in such a fishery would increase over time and approach 100,000 sockeye annually.

KC 209

Kenai Peninsula Fishermen's Association

Ensuring the Sustainability of Our Fishery Resources

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February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
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RE: Update to Assessment of Sockeye Salmon Returns to the Kenai River
Part Two – Updated Tables

Attention: Chairman Vince Webster

KPFA continues to assist the Board with complex decisions it must make to ensure a *reasonable opportunity* to harvest a given resource while maintaining Maximum Sustained Yield (MSY). An efficient decision that minimizes the risk of lost opportunity.

Please review the tables attached to this memorandum. KPFA members or ADF&G staff should be available to discuss any questions the Board may have on how and why these scenarios were developed.

Thank You,

Jeff Beaudoin
Research Analyst

Note: This is part two which contains the updated DIDSON tables.

◊ The return to the river mouth, with the lower river dip net and sport fisheries described above, can now be translated into a sonar count objective of 650,000 to 930,000. How did we compute this? If the department were to manage for 800,000 to 1,100,000 sockeye at the Kenai River mouth with the lower river fisheries described above; then we would expect 100,000 sockeye to be harvested from the dip net and 50,000 to 70,000 sockeye from the sport fisheries. An expected below-sonar removal of 150,000 to 170,000 sockeye subtracted from the 800,000 to 1,100,000 sockeye at the river mouth, translates into a sonar goal objective of 650,000 to 930,000.

Unfortunately, we are unable to completely model this scenario, with the information at hand, without additional Board direction. At question are the provisions in this scenario for an upriver dip net fishery, a weir, and another sonar:

◊ The authors of this scenario have proposed a dip net fishery above the Soldotna Bridge to be conducted from anchored boats with the objective of harvesting 100,000 sockeye. Designing a fishery of this magnitude is a significant piece of work: the fishing effort alone would likely be on par with the level of boat fishing effort in the lower river chinook salmon fishery. Without additional direction from the Board as to what this fishery should look like, we are simply unable at this time to effectively model expected levels of harvest and appropriate management objectives.

◊ The authors of this scenario recognized the potential that their proposed inriver goal of 650,000 to 930,000 sockeye past the rm 19 sonar could be in excess of the fishing power for their proposed inriver fisheries. In-other-words, inriver returns of this magnitude might well be expected to not only satiate the proposed inriver fisheries, but also yield escapements in excess of the BEG range (330,000 to 600,000). For this reason, they proposed additional stock assessment tools: a weir to harvest sockeye in excess of the BEG range and another sonar to better assess actual spawning escapement on a more timely basis. While not fully addressed in this report, several important issues would need to be addressed concerning such a weir and associated harvest. For instance, the proposed weir site (outlet of Skilak Lake) is upstream from the largest known mainstem spawning site (the mainstem from Skilak Lake outlet downstream several miles, commonly referred to as *the Dunes*); removal of fish in excess of the BEG range would clearly be at the expense of sockeye bound for the Russian River and spawning sites above Skilak Lake. Also, what status would such a cost-recovery harvest have in comparison to other uses? And finally, construction and operation of such a weir would cost at least in the hundreds of thousands of dollars; on what basis would the state commit to such a financial obligation? Similar issues would also need to be addressed for the proposed sonar project prior to fully modeling this scenario as we have the others.

CONCLUSIONS

Table 4 summarizes the legitimate management targets for the various scenarios presented here; remember that the term *legitimate management targets* means those sonar goals for which department staff could actively manage under the terms of the proposed scenario:

- Under a strict interpretation of the current Kenai River Sockeye Salmon Management Plan, the department is to manage for a sonar count of 400,000 to 700,000. Assuming a PU/Subsistence dip net fishery as in 1992, we anticipate harvest in this fishery at 50,000 sockeye. Total sport harvest (mainstem plus Russian River) could range from 38,000 to 180,000. The reason for this large range is that if less than 450,000 sonar counts were actually realized, the mainstem sport fishery would be at least severely restricted to realize an adequate escapement within the BEG range. There is no provision here for a low likelihood of restrictions to the sport fishery. Any normal sport fishery within the inriver goal range of 400,000 to 700,000 will be in excess of the 10% guideline and result in either preseason or inseason restrictions..

- Scenario I calls for maintenance of the current management plan, but with a low likelihood of inseason restrictions for the sport fishery and no guideline harvest for the sport fishery. It also calls for no change in the dip net fishery. Therefore, the inriver goal past the rm 19 sonar would need to be altered to 450,000 to 700,000. We would expect for the PU/Subsistence dip net fishery to harvest 50,000 sockeye. Total sport harvest (mainstem plus Russian River) could range from 145,000 to 180,000.

- Scenario II is an incremental change from the current management plan and calls for relaxation of the inriver goal, low likelihood of inseason restrictions for the sport fishery, and no guideline harvest for the sport fishery. It also calls for no change in the dip net fishery. Therefore, the inriver goal past the rm 19 sonar would be changed to 450,000 to 750,000. We would expect for the PU/Subsistence dip net fishery to harvest 50,000 sockeye. Total sport harvest (mainstem plus Russian River) could range from 145,000 to 190,000.

- Scenario III is a very different vision for the inriver fisheries from that encompassed by the current management plan and calls for an increase in the inriver goal, liberalized sport and lower river dip net fisheries, a new upriver dip net fishery, a weir at which cost-recovery of sockeye in excess of the BEG range could be harvested, and a new sonar above the Soldotna Bridge. Return to the Kenai River mouth would be 800,000 to 1,100,000 sockeye. The inriver goal past the rm 19 sonar would be changed from 650,000 to 930,000. We would expect for the harvest in the lower river dip net fishery to approach 100,000 sockeye. Total sport harvest (mainstem plus Russian River) would be in excess of 200,000 sockeye. The proposal calls for a new upriver dip net harvest of 100,000 sockeye. However, design of this fishery and the proposed stock assessment tools remains incomplete without further direction.

This concludes our presentation of the Kenai River sockeye salmon data base and the manner in which it can be used to evaluate management options. We have presented several options which were considered by the Task Force for illustration and pointed out where additional input is needed to fully model expected harvest and management targets for any proposal. We hope that it is clear that the harvest and escapement potential for virtually any management option can be similarly evaluated in this manner.

Percent of sport harvest taken above bridge from 1994-95 management option

		Sport Harvrest		
Bendix	Didson	Above Brid.	Bendix	Didson
400,000	560,000	76,500	19%	14%
450,000	630,000	80,300	18%	13%
500,000	700,000	84,200	17%	12%
550,000	770,000	88,100	16%	11%
600,000	840,000	91,900	15%	11%
650,000	910,000	95,800	15%	11%
700,000	980,000	99,600	14%	10%
750,000	1,050,000	103,500	14%	10%
800,000	1,120,000	107,400	13%	10%
900,000	1,260,000	115,000	13%	9%
1,000,000	1,400,000	122,800	12%	9%

Table 1. Summary of historical selected fishery statistics for Kenai River Soskeye Salmon, 1981 - 1994.

			Sockeye Salmon Of Kenai River Origin												
Year	Total Sockeye Salmon Return	Total Sockeye of Kenai Origin	Commercial Harvest	PU/Subst. Harvest	Sport Har Cook Inlet to Bridge	Inriver (SONAR)	Sport Har Bridge to Moose R.	Sport Har Moose R. to Skilak	Hidden PU	Hidden Spawners	Sport Har Skilak to Kenai L	Sport Har Russian R	Russian Spawners	Spawners Remainder of Drainage	TOTAL SPAWNERS
1981	2,560,000	943,297	530,239	149	5,270	407,639	5,336	4,266	0	15,938	4,849	23,720	44,523	309,007	369,468
1982	4,490,000	2,404,118	1,772,577	0	11,710	619,831	14,829	12,136	0	9,790	11,432	10,320	30,800	530,524	571,114
1983	6,490,000	3,440,053	2,779,191	7,562	22,960	630,340	22,454	15,180	0	11,297	10,672	16,000	33,734	521,003	566,034
1984	3,400,000	975,896	626,906	0	4,419	344,571	2,183	2,300	0	27,784	6,800	21,970	92,659	190,875	311,318
1985	5,500,000	2,114,961	1,596,396	805	14,940	502,820	13,025	13,299	0	24,832	15,948	58,410	136,969	240,337	402,138
1986	5,840,000	2,842,352	2,320,018	0	21,177	501,157	13,846	13,533	0	17,530	23,842	30,810	40,281	361,315	419,126
1987	11,950,000	8,905,949	7,199,968	24,090	85,020	1,596,871	65,841	39,926	0	43,487	50,032	40,575	53,932	1,303,078	1,400,497
1988	9,000,000	6,056,105	4,968,129	16,880	49,627	1,021,469	43,494	29,178	0	50,907	30,452	19,536	42,476	805,426	898,809
1989	7,100,000	5,561,491	3,798,449	51,192	111,890	1,599,959	90,550	45,844	0	7,770	28,942	55,210	138,377	1,233,266	1,379,413
1990	5,000,000	2,772,564	2,076,357	3,477	33,210	659,520	37,199	22,083	0	77,959	28,291	56,175	83,434	354,379	515,772
1991	3,600,000	1,812,003	1,083,880	27,195	53,331	647,597	56,059	24,768	72,060	35,576	27,444	31,449	78,175	322,066	435,817
1992	10,800,000	8,120,080	6,997,282	47,465	80,535	994,798	85,942	40,617	0	32,911	35,398	26,101	63,478	710,351	806,740
1993	6,500,000	3,590,207	2,736,678	25,588	38,379	813,617	41,457	18,724	0	11,582	30,107	26,772	99,259	585,716	696,557
1994 [a]	5,100,000	3,119,387	2,091,776	1,390 [b]	23,397	1,004,214		125,000 [c]	0	8,000		22,269	122,078	726,867	856,945

[a] Data Preliminary.

[b] Includes only educational fishery data, PU dip net harvest not available until 1995.

[c] Estimated total harvest above bridge; harvest by area not available until 1995.

Table 2. Evaluation of selected management options for Kenai River Sockeye Salmon.

SCENARIO I:

1. Maintain normal sport fishery (3-fish bag limit, 7 days/week) under current management plan.
2. PU/Sub Fishery same as 1992.

PU/SUB Har Below Bridge	Sport Har Below Bridge	SONAR	Mainstem Sport Har Above Bridge	Sport Har Russian	ESCAPEMENT
0	0	399,000	0	38,000	361,000
50,000	24,000	400,000	76,500	38,000	285,500
50,000	27,100	450,000	80,300	38,000	331,700
50,000	30,100	500,000	84,200	38,000	377,800
50,000	33,100	550,000	88,100	38,000	423,900
50,000	36,100	600,000	91,900	38,000	470,100
50,000	39,100	650,000	95,800	38,000	516,200
50,000	42,100	700,000	99,600	38,000	562,400
50,000	45,100	750,000	103,500	38,000	608,500
50,000	48,100	800,000	107,400	38,000	654,600
50,000	54,200	900,000	115,000	38,000	747,000
50,000	60,200	1,000,000	122,800	38,000	839,200

SONAR	ESC	Total Non-Comm Harvest	Total Sport Harvest	Mainstem Sport Har Above Bridge (Number)	(Percent)
399,000	361,000	38,000	38,000	0	0.0%
400,000	285,500	188,500	138,500	76,500	19.1%
450,000	331,700	195,400	145,400	80,300	17.8%
500,000	377,800	202,300	152,300	84,200	16.8%
550,000	423,900	209,200	159,200	88,100	16.0%
600,000	470,100	216,000	166,000	91,900	15.3%
650,000	516,200	222,900	172,900	95,800	14.7%
700,000	562,400	229,700	179,700	99,600	14.2%
750,000	608,500	236,600	186,600	103,500	13.8%
800,000	654,600	243,500	193,500	107,400	13.4%
900,000	747,000	257,200	207,200	115,000	12.8%
1,000,000	839,200	271,000	221,000	122,800	12.3%

d: 5/26/94

Table 3. Evaluation of selected management options for Kenai River Sockeye Salmon.

SCENARIO II

1. Maintain normal sport fishery (3-fish bag limit, 7 days/week) with low liklihood of inseason restrictions.
2. PU/Sub Fishery same as 1992.

PU/SUB Har Below Bridge	Sport Har Below Bridge	SONAR	Mainstem Sport Har Above Bridge	Sport Har Russian	ESCAPEMENT
0	0	399,000	0	38,000	361,000
50,000	24,000	400,000	76,500	38,000	285,500
50,000	27,100	450,000	80,300	38,000	331,700
50,000	30,100	500,000	84,200	38,000	377,800
50,000	33,100	550,000	88,100	38,000	423,900
50,000	36,100	600,000	91,900	38,000	470,100
50,000	39,100	650,000	95,800	38,000	516,200
50,000	42,100	700,000	99,600	38,000	562,400
50,000	45,100	750,000	103,500	38,000	608,500
50,000	48,100	800,000	107,400	38,000	654,600
50,000	54,200	900,000	115,000	38,000	747,000
50,000	60,200	1,000,000	122,800	38,000	839,200

SONAR	ESC	Total Non-Comm Harvest	Total Sport Harvest	Mainstem Sport Har Above Bridge (Number)	(Percent)
399,000	361,000	38,000	38,000	0	0.0%
400,000	285,500	188,500	138,500	76,500	19.1%
450,000	331,700	195,400	145,400	80,300	17.8%
500,000	377,800	202,300	152,300	84,200	16.8%
550,000	423,900	209,200	159,200	88,100	16.0%
600,000	470,100	216,000	166,000	91,900	15.3%
650,000	516,200	222,900	172,900	95,800	14.7%
700,000	562,400	229,700	179,700	99,600	14.2%
750,000	608,500	236,600	186,600	103,500	13.8%
800,000	654,600	243,500	193,500	107,400	13.4%
900,000	747,000	257,200	207,200	115,000	12.8%
1,000,000	839,200	271,000	221,000	122,800	12.3%

d: 5/26/94

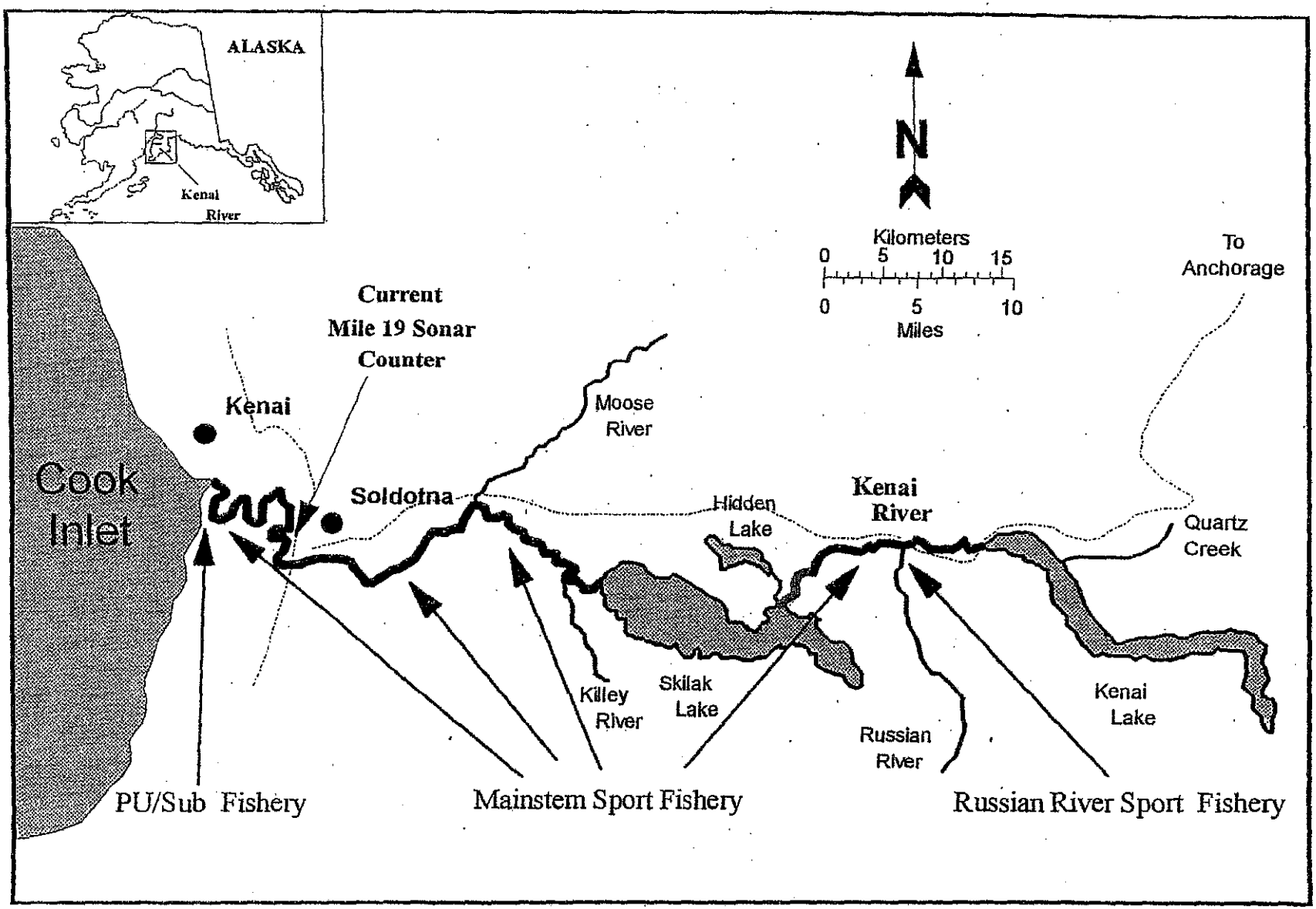


Figure 1. Map of the Kenai River drainage depicting major locations of non-commercial fisheries for sockeye salmon.

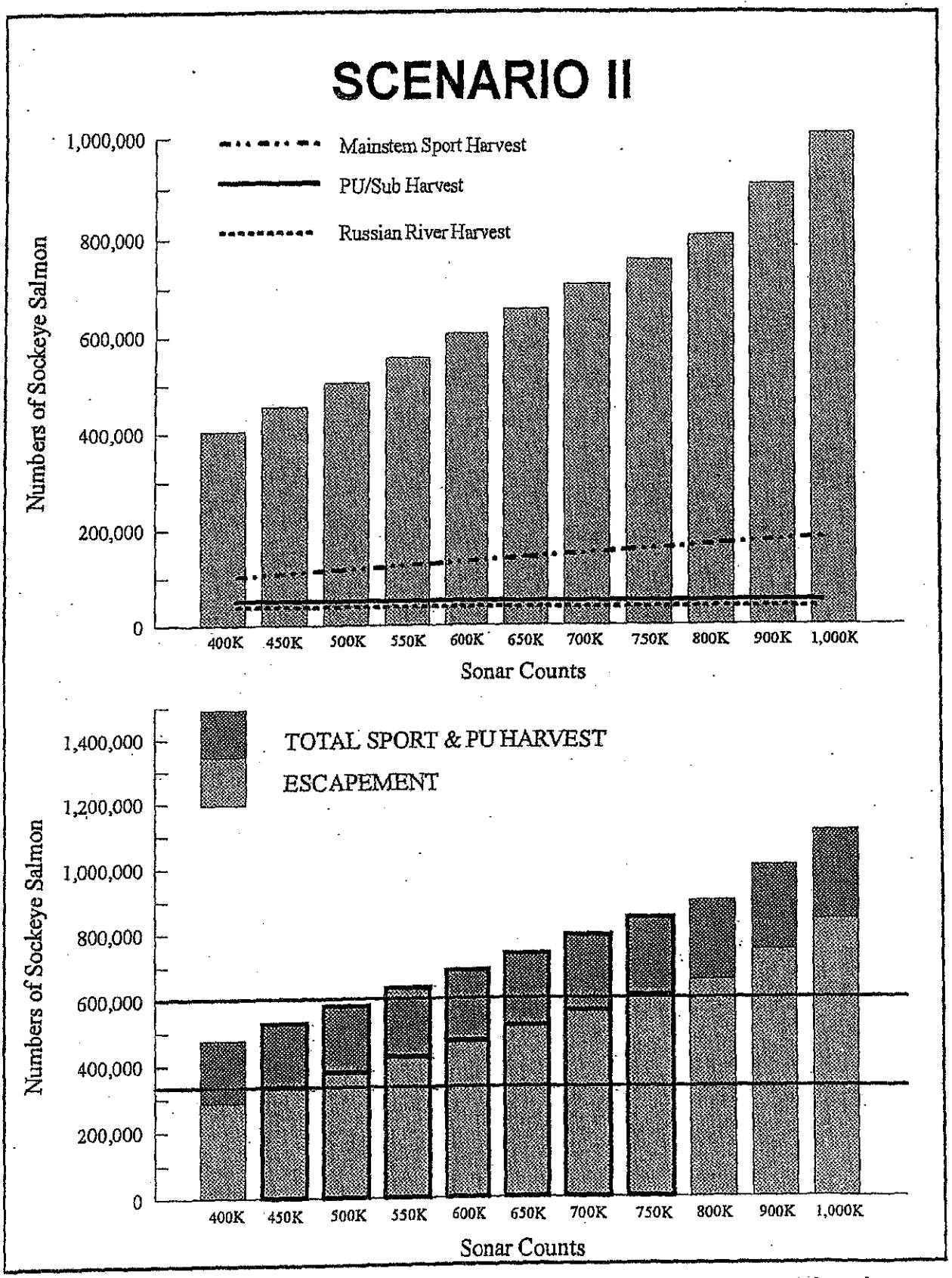


Figure 4. **Projected harvest in components of the Kenai River non-commercial sockeye salmon fishery at various inriver return levels (sonar counts) and the resultant spawning escapement under scenario II (Table 3).**

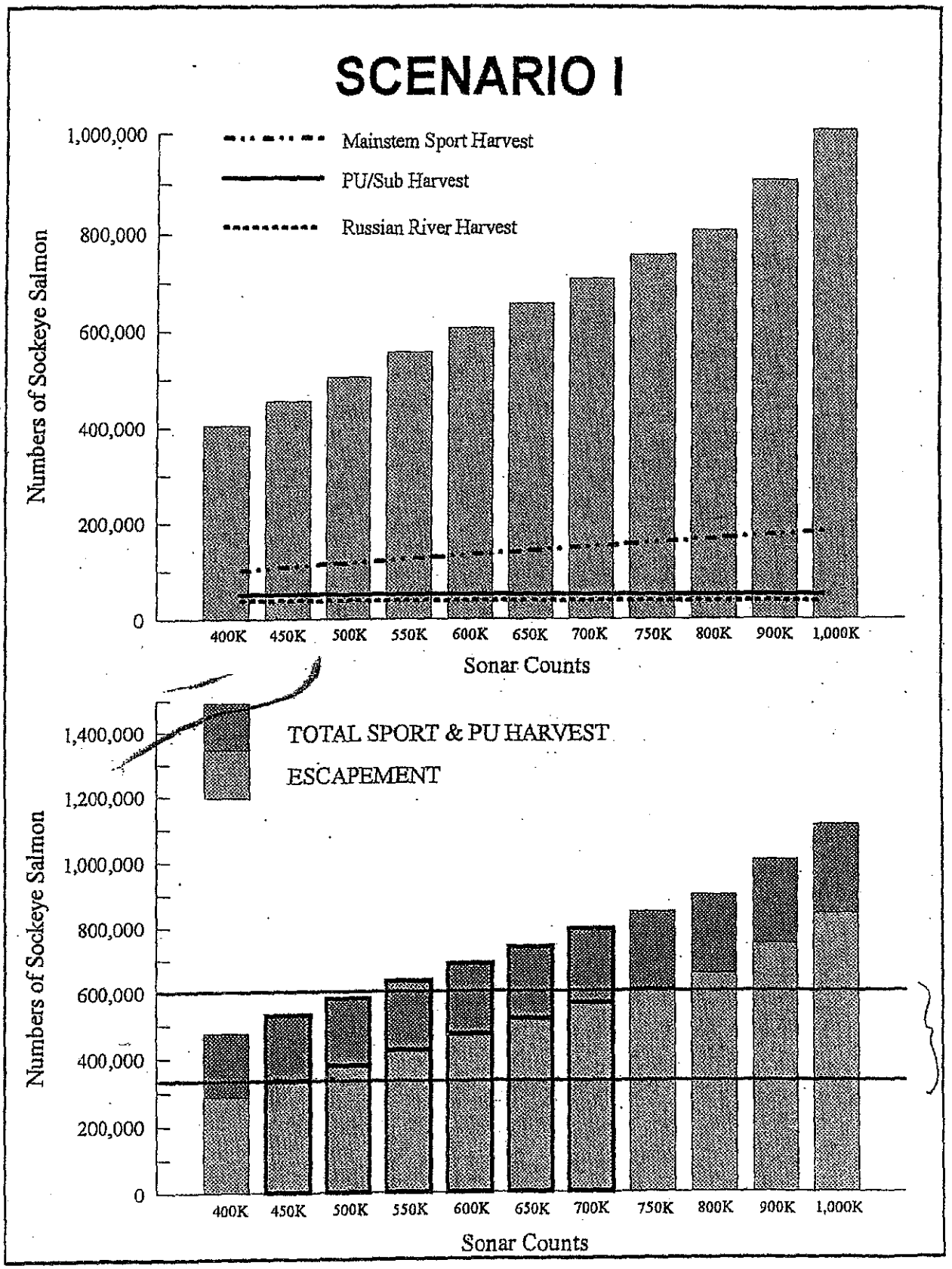
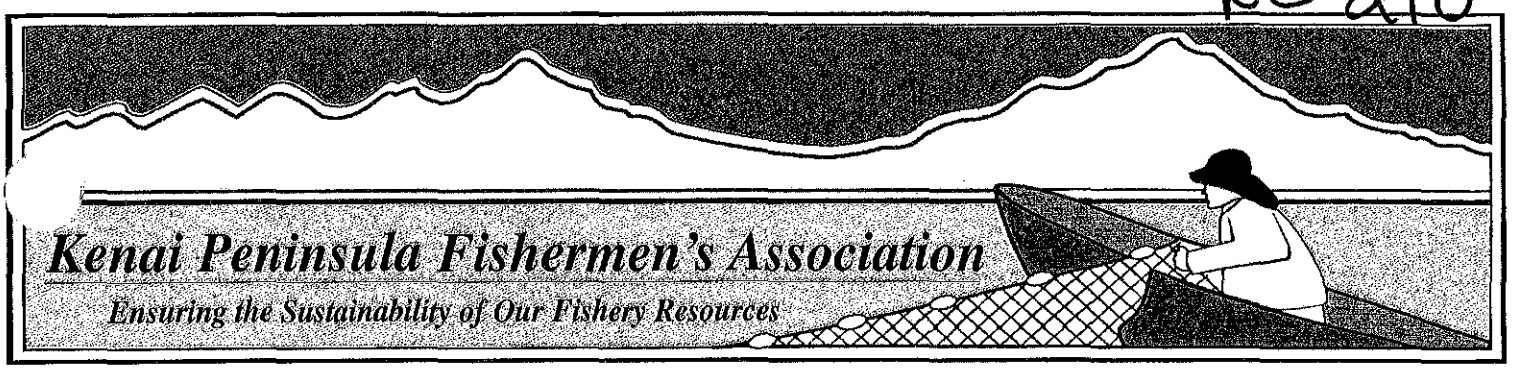


Figure 3. Projected harvest in components of the Kenai River non-commercial sockeye salmon fishery at various inriver return levels (sonar counts) and the resultant spawning escapement under scenario I (Table 2).

RC 210



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February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Proposal 129,130,321

Attention: Chairman Vince Webster

KPFA appreciates the interest from the Board in reviewing possible *time and area methods and means (tamm)* for implementing a Pink Salmon Management Plan (PSMP). KPFA members may submit different scenarios with specific *tamm's*.

What KPFA offers here is the past proposals by the department and other individual groups that offered supportive language for a PSMP. Included is previous regulatory language that addressed Pink Management.

Please note that previous plans did not address the set net fishery. The setnet fishery has been the traditional pink fishery with historical peaks recorded in the 1960's. Restrictions in place since the 70's have severally diminished a reasonable opportunity to harvest a valuable and an underutilized resource.

Thank you,

Paul A. Shadura II
Executive Director

996 - 1998 -
Cook Inle[illegible] [illegible]diak and Chignik Areas

[illegible] count[s] established in (1) - (3) of this subsection may be reduced by the board [illegible] if noncommercial fishing, after consideration of mitigation efforts, results in a [illegible] habitat units on the Kenai River, as determined by the board based on the department's [illegible] and on the use of the habitat evaluation procedures described in Technical Report [illegible] dated July 1994 and titled "An Assessment of the Cumulative Impacts of Development [and] Human [Uses] on Fish Habitat in the Kenai River," hereby incorporated by reference.

[Th]e department shall provide for a personal use dip net fishery in the lower Kenai River as [follows:]

[(1)] the fishery is open July 10 - August 5, seven days per week, 24 hours per day;

[(2)] fishing from a boat can occur only from the downstream side of the Warren Ames [bridge d]ownstream to the ADF&G regulatory marker located near the Kenai city dock;

[(3)] fishing from shore can occur only downstream from the downstream side of the Warren [Ames B]ridge to the ADF&G regulatory markers located on the Cook Inlet beaches outside the [mouth] of the river;

[(4)] the seasonal limit is as specified in 5 AAC 77.525, except that only one king salmon [per house]hold may be retained.

[(c) T]he department shall manage the sport fishery on the Kenai River, except that portion of [the Ken]ai River from its confluence with the Russian River to an ADF&G regulatory marker [located] 1,800 yards downstream, in a manner consistent with achieving the biological escapement [goal as] follows:

[(1)] fishing will occur seven days per week, 24 hours per day; and

[(2)] the daily bag and possession limits are six sockeye salmon.

[5 AA]C 21.363. UPPER COOK INLET SALMON MANAGEMENT PLAN. (a) The [Depart]ment of Fish and Game should receive long-term direction in management of upper Cook [Inlet s]almon stocks rather than being called upon to respond annually to changing management [issue]s. Divisions within the department must receive long-term direction in order to accomplish [their m]issions and plan management, research, administrative, and other programs. Therefore, the [board] establishes the following priorities for the use of upper Cook Inlet salmon stocks:

(1) consistent with the statutory priority for subsistence, the harvest of upper Cook Inlet [salmo]n for customary and traditional subsistence uses will be allowed for specific species in [approp]riate areas, seasons, and periods to satisfy subsistence needs; other beneficial uses, to the [extent] they are consistent with the public interest and overall benefit of the people of Alaska, will [be allo]wed in order to maximize the benefits of these resources;

(2) Northern District king, early Kenai king, and early Russian River sockeye salmon [stock]s, which normally move into upper Cook Inlet to spawning areas before July 1, will be [mana]ged primarily for recreational uses in order to promote the public interest and provide [maxim]um benefits to the people of Alaska and to the extent that management is consistent with [the st]atutory subsistence priority; and

(3) insofar as the following management steps are consistent with the statutory subsistence [priori]ty:

(A) from July 1 through August 15, salmon stocks which normally move in upper Cook [Inlet] will be managed primarily for commercial uses;

(B) after August 15, salmon stocks moving to spawning areas in Kenai Peninsula [drain]ages will be managed primarily for recreational uses; and

(C) salmon stocks other than those spawning in Kenai Peninsula drainages will be managed primarily for commercial uses.

(b) Consistent with (a) of this section, the department shall

(1) manage the upper Cook Inlet commercial salmon fisheries to minimize the incidental take of Susitna coho, late Kenai king and early Kenai coho salmon stocks;

(2) assist the board in setting optimal salmon harvest rates for all uses by monitoring upper Cook Inlet salmon fisheries to determine the interception of Susitna coho, late Kenai king, and early Kenai coho salmon stocks;

(3) maintain the sustained yield of more abundant pink, chum, and sockeye salmon stocks;

(4) insure that subsistence use priorities are met; and

(5) manage the Northern District commercial salmon fisheries, after August 15, to limit the harvest of coho salmon by limiting fishing time to regularly scheduled periods.

(c) In this section "upper Cook Inlet salmon stocks" means those salmon that move through the Northern and Central Districts as defined in 5 AAC 21.200(a) and (b) and spawn in waters draining into those districts.

(d) The Board of Fisheries (board) will, to the extent practicable, consider the following guiding principles when taking actions associated with the adoption of regulations regarding upper Cook Inlet salmon stocks:

(1) the conservation and sustained yield of healthy salmon resources and maintenance of habitat and ecosystem on which salmon and allied species depend for survival throughout their life-cycle;

(2) the maintenance of viable and diverse fish species and stocks;

(3) the maintenance of the genetic diversity of fish species and stocks;

(4) the best available information presented to the board;

(5) the capability of being implemented and evaluated, including factors such as flexible and adaptive management, conflict with other law, and mixed stock management;

(6) the capability of providing tangible benefits to user groups or conservation, with the least risk to existing fisheries and to conservation;

(7) stability and viability of sport, commercial, and personal use fisheries.

5 AAC 21.364. FISH CREEK SOCKEYE SALMON MANAGEMENT PLAN. (a) This management plan governs the harvest of Fish Creek sockeye salmon in excess of spawning escapement needs of 50,000 sockeye salmon. It is the intent of the Board of Fisheries that Fish Creek sockeye salmon be harvested in the traditional harvest locations. The mixed stock nature of the fisheries in those locations, and the present lack of information on locations within those fisheries which could be used to specifically target on Fish Creek sockeye salmon stocks, at times will prevent full harvest of those surplus salmon. Therefore, the board, through this plan, authorizes a set gillnet fishery for Fish Creek sockeye in Knik Arm if the surpluses are not harvested in the traditional areas.

(b) Salmon may be taken in those waters within one mile of mean high water on the western shore of Knik Arm from an ADF&G regulatory marker on the north shore of Goose Bay to Fish Creek if the Fish Creek sockeye salmon escapement goal is projected to be met. Fishing will be allowed from July 15 through July 26. Fishing periods are Tuesdays and Sundays from 7 a.m. to 7

2002 2005 Cook Inlet Area Commercial Salmon Fishing Regulations

5 AAC 21.355. REPORTING REQUIREMENTS. A commercial salmon fisherman shall at the time of landing report on an ADF&G fish ticket the number of salmon, by species taken but not sold.

5 AAC 21.356. COOK INLET PINK SALMON MANAGEMENT PLAN. (a) In 2002 and 2004, the department shall manage the Cook Inlet pink salmon stocks primarily for commercial uses to provide an economic yield from the harvest of these salmon resources based on abundance. The department shall also manage the commercial pink salmon fishery to minimize the harvest of Northern District and Kenai River coho salmon stocks.

(b) A commercial pink salmon fishery is authorized to be conducted under this section if the department determines that

(1) the pink salmon stocks are sufficient to conduct a commercial harvest;

(2) the coho salmon escapement goals in the upper Cook Inlet Area are being met; and

(3) sport and guided sport fisherman will have a reasonable opportunity to harvest coho salmon resources over the entire coho salmon run, as measured by the frequency of inriver restrictions.

(c) The commercial pink salmon fishery will be managed as follows:

(1) the commissioner will open, by emergency order, three fishing periods from 7:00 a.m. to 7:00 p.m., as follows:

(A) the first fishing period will be on the first Monday, Wednesday, or Friday after August 9;

(B) the second fishing period will be on the Monday, Wednesday, or Friday after the first fishing period; and

(C) the third fishing period will be on the Monday, Wednesday, or Friday after the second fishing period;

(2) drift gillnets may not exceed 150 fathoms in length and 45 meshes in depth, and

(A) in 2002, may not exceed five inches in mesh size;

(B) in 2004, may not exceed four and three-quarter inches in mesh size;

(3) fishing may occur only in the waters of Cook Inlet enclosed by a line extending from Boulder Point at 60° 46.39' N. lat., to Shell Platform C at 60° 45.80' N. lat., 151° 30.30' W. long., to the Kalgin Buoy at 60° 04.70' N. lat., 152° 09.90' W. long., to the southwest corner of the Kasilof Section at 60° 04.02' N. lat., 151° 46.60' W. long., to the western boundary of the Kenai and Kasilof Sections as described in 5 AAC 21.200(b)(2)(B) and (C).

(d) To participate in the commercial pink salmon fishery, a CFEC permit holder must first obtain a pink salmon permit from the department by August 9 at the department office in Soldotna or Homer. The terms of the permit may include reporting requirements, gear restrictions, and any other conditions that the commissioner determines are necessary for the management and conservation of the pink salmon stock; fishing must be conducted in accordance with the terms of the permit.

(e) The provisions of this section do not apply after December 31, 2004

Editor's note: For the purposes of obtaining the pink salmon permit specified in 5 AAC 21.356(d), the physical location of the department office in Soldotna is 43961 Kalifornsky Beach Road, Suite B, Soldotna, Alaska and the department office in Homer is 3298 Douglas Place, Homer, Alaska.

5 AAC 21.357. KENAI RIVER COHO SALMON CONSERVATION MANAGEMENT PLAN. (a) The purposes of this management plan is to ensure an adequate escapement of coho salmon into the Kenai River drainage and to provide management guidelines to the department. The department shall manage the Kenai River coho salmon stocks primarily for sport and guided sport uses in order to provide sport and guided sport fishermen with a reasonable opportunity to harvest these salmon resources over the entire run, as measured by the frequency of inriver restrictions. The department shall manage the upper Cook Inlet commercial salmon fisheries to minimize the incidental take of Kenai River coho salmon stocks as follows:

(1) additional fishing periods, other than the weekly fishing periods described in 5 AAC 21.320, shall not be provided in the Upper Subdistrict of the Central District set gillnet fishery when coho salmon are expected to be the most abundant species harvested during that period; additional fishing periods shall not be provided at any time based on the abundance of Kenai River coho salmon;

(2) in the Kenai, Kasilof, and East Forelands Sections of the Central District, additional fishing periods shall be curtailed when

(A) sockeye salmon are below the upper end of the inriver sonar goal, described in 5 AAC 21.360;

(B) sockeye salmon catches show a trend of sharp decline; and

(C) coho salmon catches are increasing;

(3) from August 1 through August 7, the Kenai, Kasilof, and East Forelands Sections set gillnet fisheries are restricted to the regularly scheduled fishing periods as described in 5 AAC 21.320, except that the commissioner may open, by emergency order, one additional fishing period not to exceed 24 hours.

(b) Notwithstanding 5 AAC 21.310 and 5 AAC 21.320, in the set gillnet fishery in the Upper Subdistrict of the Central District, the season shall close August 7.

(c) Notwithstanding any provisions of 5 AAC 56, the department shall manage sport fishing in the Kenai River drainage for the conservation of coho salmon stocks as follows:

(1) coho salmon fishing is prohibited from October 1 through June 30; any coho salmon caught must be released immediately without further harm;

(2) repealed;

(3) from July 31 or the end of the king salmon season, whichever is later, through September 30, sport fishing from a vessel that is registered with the Department of Natural Resources, division of parks, as a guide vessel is restricted as follows:

(A) a person who is a guide as defined in 5 AAC 75.995, may not sport fish while a client is present or is within the guide's control or responsibility, except when guiding a client with a disability as defined in 5 AAC 61.036;

(B) the maximum number of fishing rods that may be operated may not exceed the

WHO IS LIKELY TO BENEFIT? Everyone.

WHO IS LIKELY TO SUFFER? No one.

OTHER SOLUTIONS CONSIDERED?

PROPOSED BY: Matanuska-Susitna Borough (SC-01-F-136)

****

PROPOSAL 145 - 5 AAC 21.3XX. COOK INLET PINK SALMON MANAGEMENT PLAN. Create a new regulation to provide the following:

A plan would direct fisheries managers to allow for the harvest of surplus pink salmon bound for the Kenai River and other tributaries in the Cook Inlet region. The use of test boat fishing after August 1 and continuing until abundance shows declines with the PIT tagging program and radio tagging will determine the available biomass. Inriver assessments will be made by fishwheels, radio tagging, netting and observation. Sport and personal use CPUE will be used to evaluate real time abundance. Commercial fishermen's catches will be monitored for concentration of pink salmon and the location of peak concentrations and regulated accordingly. Coho will be monitored from all sources above and evaluated on a daily basis. Minimum thresholds will be established for coho bycatch analysis from all user groups. Maximum harvest of coho could be the maximum threshold for all users and shall be determined by historical evaluations. Time for opening and closing for all users shall be tentative and based on abundance-based management and inseason EOs. Time, gear and area restrictions will be used to minimize the impact on other nontargeted stocks.

ROBLEM: No management plan for pink salmon.

WHAT WILL HAPPEN IF NOTHING IS DONE? Waste of salmon resource.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR PRODUCTS PRODUCED BE IMPROVED? Yes, there is a market for Cook Inlet pink salmon that will pay for fresh quality flesh and high contents of high quality roe. Other users complain of waste and nuisance in attempting to harvest coho. Pink salmon fecundity will decline if not utilized.

WHO IS LIKELY TO BENEFIT? All users will share in the bounty of a utilized harvest.

WHO IS LIKELY TO SUFFER? Disruption on the spawning beds by excess late running pinks have a high probability of reducing other species of salmon of reaching a high levels of emergence.

OTHER SOLUTIONS CONSIDERED? Doing nothing will interfere with balance between man and nature.

PROPOSED BY: Paul A. Shadura II (HQ-01-F-281)

****

PROPOSAL 146 - 5 AAC 21.XXX UPPER COOK INLET PINK AND CHUM SALMON MANAGEMENT PLAN. The purpose of this proposal is to develop a management plan for nk and chum salmon in the Upper Cook Inlet Management Area. This plan will restore the

Submitted by ADF&G

Proposal Book 2002

department's management authority for the commercial fishery to harvest pink and chum salmon during times and periods when other allocation and management objectives will permit.

This is a conceptual plan submitted to foster the discussion and development of regulatory language to establish a workable pink and chum salmon management plan.

The sideboards for this plan include the following;

1. It is assumed that chinook salmon returns will be very nearly complete when a pink and chum plan would become effective, however pink and chum management actions will not compromise or affect chinook salmon management objectives.

2. Sockeye salmon management objectives as outlined in existing management plans, will not be altered or compromised. These objectives include inriver goals, optimal escapement goals (OEGs), biological escapement goals (BEGs) and sustainable escapement goals (SEGs).

3. Coho salmon management objectives as outlined in existing management plans, will not be altered or compromised. The principal objective for coho management as established by the Board is to "provide sport and guided sport fishermen with a reasonable opportunity to harvest these salmon resources over the entire run, as measured by the frequency of in-river restrictions." The Board of Fisheries will evaluate whether this guideline is achieved. Other management objectives for coho salmon include, inriver goals, BEGs and SEGs.

4. Chum and pink salmon resources will be managed for sustainable escapement levels for those species.

5. It is recognized that during the periods of time that this pink and chum plan will be effective, a mixture of salmon species and stocks are present in Upper Cook Inlet. The additional fishing opportunity provided under this plan would include not only the taking of pink and chum salmon, but also the unavoidable taking of other salmon species including coho salmon.

Coho Salmon Stock Assessment – Coho salmon stock assessment is critical to the successful implementation of a pink and chum management plan. Drift fishery CPUE will be the most useful indicator of relative coho salmon abundance along with weir counts and other escapement information where available.

Pink and Chum Salmon Stock Assessment – Pink and chum salmon abundance will be gauged based on drift fishery CPUE and other abundance indicators such as weir and other escapement information where available.

MANAGEMENT OPTIONS FOR THE DRIFT GILLNET FISHERY

Options for the drift fishery as outlined below may be utilized provided that first all of the following criteria are met:

1. Sockeye and chinook salmon objectives will be met or exceeded even with fishing,

2. Commercial CPUE, and when available, weir counts and inriver assessments of coho salmon indicate sufficient abundance of coho salmon that any incidental take of coho salmon would not trigger widespread inseason restrictions for the recreational fisheries,

3. Commercial CPUE indicates a surplus of chum and/or pink salmon,

4. Managing for sockeye and chum salmon will not negatively impact a weaker pink salmon return,

5. Managing for sockeye and pink salmon will not negatively impact a weaker chum salmon return.

The board may choose to adopt one, none or any combination of the following options. Harvest opportunities for the drift fleet under this plan would apply to all or portions of the Central District. The department will take into consideration mixed stock, mixed species biological requirements and allocation structures when selecting the times, gear, and areas open to the fishery.

Option 1: Lift one or both restrictions prior to and after July 25 depending on pink and chum return strength and provided the criteria above are met.

Option 2: From July 16–August 9, provided the criteria above are met, the department may allow additional fishing periods outside of the Kenai and Kasilof sections for pink and chum salmon.

Option 3: From July 16–August 9, provided the criteria above are met, allow regular periods and up to XX (number specified by the board) additional fishing periods per week depending on pink and chum returns given the provisions in #2 above are met.

Option 4: After August 9 until August 31 (or a date specified by the board), provided the criteria above are met, allow regular periods for the harvest of pink and/or chum salmon.

Option 5: After August 9 until August 31 (or a date specified by the board), provided the criteria above are met, allow regular periods and up to XX (number specified by the board) additional fishing periods per week for the harvest of pink and/or chum salmon.

UPPER SUBDISTRICT SET GILLNET FISHERY

Options for the set gill net fishery as outlined below may be utilized provided that first all of the following criteria are met:

Set gillnet fishery in the Upper Subdistrict (even years only):

1. Sockeye salmon objectives will be met even with fishing,

2. Commercial CPUE, and when available, weir counts and inriver assessments of coho salmon indicate sufficient abundance of coho salmon that any incidental take of coho salmon would not trigger widespread inseason restrictions for the recreational fisheries in the Kenai River or other peninsula streams,

3. Commercial CPUE indicates a surplus of pink salmon.

The board may choose to adopt one, none or any combination of the following options. Harvest opportunities for the set gillnet fleet under this plan would apply to all or portions of the Upper Subdistrict. The department will take into consideration mixed stock and mixed species biological requirements and allocation structures when selecting the times, gear, and areas open to the fishery.

Option 1: After August 7 until August 31 (or a date specified by the board), provided the criteria above are met, allow regular periods for the harvest of pink salmon.

Option 2: After August 7 until August 31 (or a date specified by the board), provided the criteria above are met, allow regular periods and up to XX (number specified by the board) additional fishing periods per week depending on pink salmon return strength.

NORTHERN DISTRICT AND THE REST OF CENTRAL DISTRICT SET GILLNET FISHERY

This option for the Northern District set gill net fishery as outlined below may be utilized provided that first all of the following criteria are met.

Set gillnet fishery in the Northern District:

1. Sockeye salmon objectives will be met or exceeded even with fishing,

2. Commercial CPUE and when available, weir counts and inriver assessments of coho salmon indicate sufficient abundance of coho salmon that any incidental take of coho salmon would not trigger widespread inseason restrictions for the recreational fisheries,

3. Commercial CPUE indicates a surplus of chum and/or pink salmon,

4. Managing for sockeye and chum salmon will not negatively impact a weaker pink salmon return,

5. Managing for sockeye and pink salmon will not negatively impact a weaker chum salmon return.

The board may choose to adopt this option or not. Harvest opportunities for the set gillnet fleet under this plan would apply to all or portions of the Northern District. The department will take into consideration mixed stock and mixed species biological requirements and allocation structures when selecting the times, gear, and areas open to the fishery.

the periods take place the impact may or may not be measurable in terms of fishing success. It is noted that only a small fraction of the northern commercial fishermen continue to fish. It is not anticipated that this action will create any widespread closures in any recreational fishery. The possible increased catch of coho when spread across 1,000 streams will be insignificant.

The increase in harvest by the drift gillnet fleet will impact the total abundance of salmon available for harvest by other users. However, since the drift gillnet fleet exploitation rate is so low, less than 10 percent, most of the additional harvest will come from fish surplus to escapement needs and other users many not see a measurable impact on their fisheries. Based on recent run strengths it is also recommended that all precautionary regulations placed on other users be removed.

OTHER SOLUTIONS CONSIDERED? Concerning managing for escapement goals there are no other alternatives. If limitations on time and area are left in place the conflict over which takes priority escapement goals or time and area restrictions will continue.

The Central District is about 1800 square miles in size making the location of salmon difficult. Additionally in Upper Cook Inlet we have some of the largest tides in the world. These tides and associated tidal rips thoroughly mix the salmon on a daily basis. The fishing periods must be long enough to locate salmon in the 1800 square mile area during both flood and ebb tides.

By decreasing the options used by the department that could be put into regulations, however, this would defeat the purpose of allowing flexibility. For example, the fishery could be allowed to fish regular periods with a restriction on the fishery to the area below Kalgin Island. This would accomplish the goal of lowering the exploitation rate but would not be needed in all years. Any regulation that does not allow for flexibility based on abundance of the stocks was rejected.

Chum salmon are primarily harvested by the drift gillnet fleet and the current regulations precluded that harvest so there was no option for harvesting chum salmon. Relative to the sockeye salmon harvest an option that increased the size of the Kenai and Kasilof sections was considered and rejected. It was considered a better approach to allow for the full district and let the department restrict area via emergency order authority if needed. The least restrictive option is the most preferable and the department can select that option under this approach.

Lastly, there are no alternatives needed concerning coho since the original reason for this action was invalid. There are currently no coho conservation concerns.

PROPOSED BY: United Cook Inlet Drift Association (SC-04-F-083)

****

Identical proposals were submitted by each organization listed at the bottom of the proposal. The submissions are reproduced here as one proposal for publishing purposes:

PROPOSAL 244 - 5 AAC 21.356(e). Cook Inlet Pink Salmon Management Plan. Reauthorize the management plan as follows:

Provision 5 AAC 21.356(e), the sunset clause, would be removed.

PROBLEM: The Cook Inlet Pink Salmon Management Plan expires on December 31, 2004. The plan authorizes a commercial pink salmon fishery based on abundance and minimized harvest of coho. The plan follows the overall objectives of the Upper Cook Inlet Salmon Management Plan and needs reauthorization.

WHAT WILL HAPPEN IF NOTHING IS DONE? Without reauthorization, the commercial pink salmon fishery will be left without a management plan:

AS 16.05.251(h). The Board of Fisheries shall adopt by regulation a policy for the management of mixed stock fisheries. The policy shall provide for the management of mixed stock fisheries in a manner that is consistent with sustained yield of wild fish stocks;

5 AAC 21.363(a) the department should receive long-term direction in management of Upper Cook Inlet salmon stocks and salmon species; and

5 AAC 21.363(2) to provide for the management and allocation of the Upper Cook Inlet salmon resources, the harvest of the Upper Cook Inlet salmon will be governed by specific and comprehensive management plans…

We support the existing Cook Inlet Pink Salmon Management Plan as is for reauthorization.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR PRODUCTS PRODUCED BE IMPROVED? Not applicable.

WHO IS LIKELY TO BENEFIT? The fish. By making a permanent management plan for Cook Inlet Pink Salmon, the long-term sustainability of the resource is ensured.

WHO IS LIKELY TO SUFFER? None.

OTHER SOLUTIONS CONSIDERED? Forego reauthorization i.e., this would leave no management plan in place for commercial pink salmon fishery, which does not follow guidelines set forth in the Upper Cook Inlet Salmon Management Plan.

PROPOSED BY:	Kenai River Sportfishing Association	(HQ-04-F-094)
	Kenai River Professional Guide Association	(HQ-04-F-117)
	Kenai River Property Owners Association	(HQ-04-F-148)

****

Identical proposals were submitted by each organization listed at the bottom of the proposal. The submissions are reproduced here as one proposal for publishing purposes:

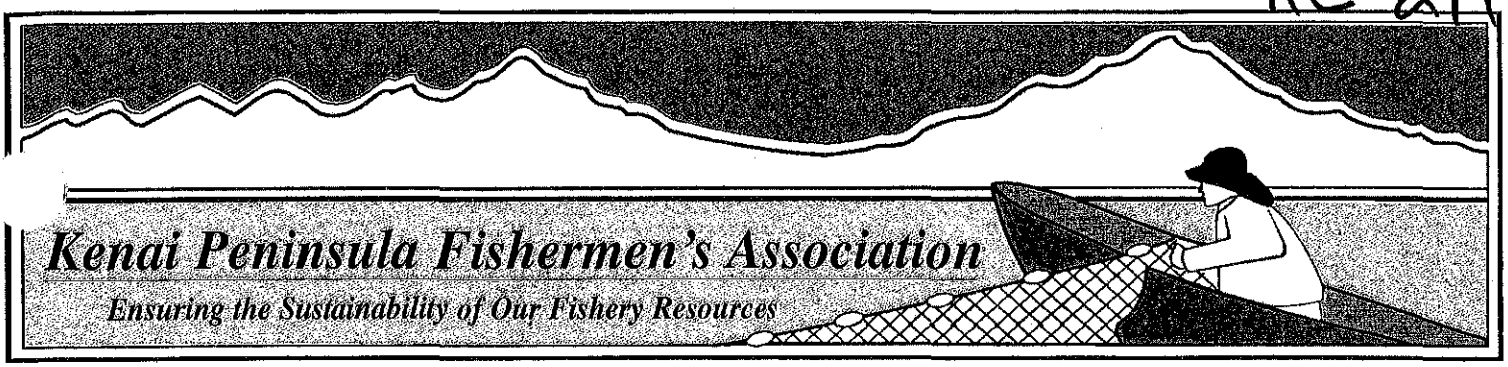
PROPOSAL 245 - 5 AAC 21.350(a). Closed waters. Amend this regulations to provide the following:

The definition of closed waters:
5 AAC 39.290 "Commercial fishing for salmon is prohibited at all times within the streams and rivers of Alaska…at all stages of the tide…"
5 AAC 39.975(14) defines salmon stream terminus as "a line drawn between the seaward extremities of the exposed tideland banks of any salmon stream at mean lower low water."

The new regulation would bring closed waters regulation along the west side of Cook Inlet in line with the standard definition of closed waters in the State of Alaska in respect that the terminus of rivers is measured at mean lower low water.

"At mean lower low tide" would replace "at mean high tide" in 5 AAC 21.350(b)(2), (5)(A), (C) and (D), and (c)(1). For example, 5 AAC 21.350(b)(5)(A) would read, "within one statute mile of the terminus, at mean lower low tide, of the Kustatan River and the Drift River."

KC 211



43961 Kalifornsky Beach Road • Suite F • Soldotna, Alaska 99669-8276
(907) 262-2492 • Fax: (907) 262-2898 • E Mail: kpfa@alaska.net

February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Maximum Benefit and the Commercial Fishing Industry

Attention: Chairman Vince Webster

KPFA understands the enormous task that the Board of Fisheries undertakes when members must absorb so much information in such a very short time. We offer this brief discussion paper on one of the essential arguments of Alaska's resource management. We believe that the difference on how the "pie" is sliced is extremely important in understanding the need for the states resources to be managed in a way that continues to strengthen the economic health of the commercial fishing industry.

This article does not argue the socioeconomics between other users; it merely discusses the complexities of developing *a set of consistent state seafood economic strategies.*

Thank you,
Paul A. Shadura II
Paul A. Shadura II
Executive Director

State of Alaska
Seafood Economic Strategies
PUBLIC COMMENT DRAFT

PREPARED FOR:
State of Alaska
Office of the Governor

McDowell GROUP
Research-Based Consulting
Juneau
Anchorage
Kodiak

October 2006

Purpose

The analysis and strategies discussed in this document are designed to help ensure that the state manages its seafood resource "for the maximum benefit of its people." This is a requirement of the Alaska Constitution. The strategies are therefore designed to align state activities, policy and investment to make the state as effective an advocate as possible for the interests of its citizens. Strategies include analysis, priorities and action items to guide the state in bringing government efforts to bear in the most positive and constructive ways. The scope of the strategies includes all aspects of the state's activities with respect to the commercial seafood industry. The strategies are not a critique of federal policies or agencies, nor do they address sport or subsistence fishing.

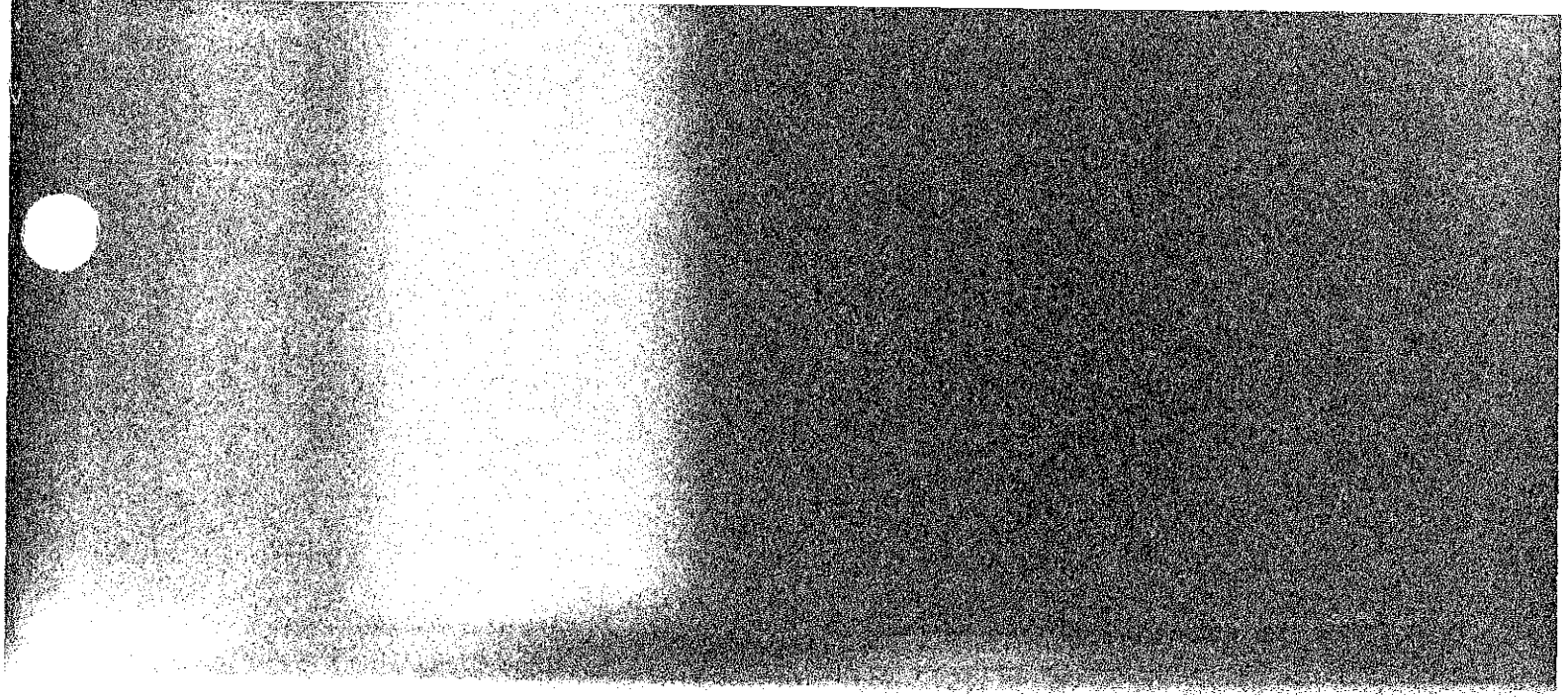
The state's concern is not to manage the seafood industry, but to manage a public asset, the seafood resource. The economic health of the industry is a necessary condition for any public initiative to succeed, and the strategies address how the state may support the efforts of firms and individuals to that end. However, this document does not attempt to identify business strategies for the private sector. The strategies recognize that it is the industry's job to maximize profits. This, particularly in a global marketplace, may or may not be consistent with what is good for Alaskans.

The challenge is how to accomplish both a healthy industry and healthy communities. The answer, in simplest terms, is for the state to be as explicit as possible about what it expects in return for access to its resource and to work closely with the industry and communities to obtain those returns as efficiently as possible. This is not fundamentally different from what currently occurs, but for two significant factors:

- The state has not clearly defined what "maximum benefit" entails; and
- Lack of socioeconomic analysis capacity significantly impedes the state's ability to undertake productive partnerships with communities and the industry and to advocate for Alaskans.

Clear objectives and a thorough understanding of socioeconomic factors are essential for the state to manage its seafood asset effectively. Communities and their residents are Alaska's permanent entities, and therefore, the primary point at which the success or failure of Alaska strategies must be evaluated. The state cannot act strategically unless it can project with reasonable accuracy who will be affected by policy and management decisions and how.

This document proposes goals and initial actions to address these shortcomings. Recommendations are based on analysis of global trends, management practices in Alaska and elsewhere, and the visions and concerns described by dozens of contributors to this effort. However, these strategies are a starting point, not a solution. Strategies are intended to be revised and updated as Alaska progresses closer and closer to the ideal of understanding and achieving "maximum benefit" in a constantly changing world.



"The Maximum Benefit of Its People"

George Rogers, one of the best-known and well respected analysts of Alaska economic policy from before statehood into the 1990s, emphasized that there is no such thing as economics; there is only social economics. Dr. Rogers focused on the social implications of economic theory because the only really useful measure of an economic policy is its effect on people. People are, of course, a troublesome variable in any analysis. Nevertheless, the Alaska Constitution – no doubt with Dr. Rogers' blessing – requires that the measure of Alaska resource policy success is "the maximum benefit of its (Alaska's) people."

This report reflects the belief that an economic strategy that concerns a public resource must be a socioeconomic strategy. The reason is that economic development is concerned only with the "size of the pie." Socioeconomics is necessary to understand how the pie is sliced. To meet the "maximum benefit" mandate, the state must address both size and distribution effectively. Socioeconomics deals with the objective documentation of who benefits or is harmed by existing and proposed policies and management regimes.

Lack of analytical capacity means the concept of maximum benefit is currently a source of great uncertainty, and uncertainty is the nemesis of both businesspeople and policymakers. A consistent theme in our interviews with participants in all areas of the Alaska seafood industry – harvesters, processors, resource managers, academics and other industry observers – is that the single most useful thing the state can do for the value of its seafood resource – in addition to ensuring its sustainability – is to develop a clear definition of "maximum benefit."

What is "Maximum Benefit?"

The fact that the Alaska Constitution does not define "maximum benefit" represents the first of two critical challenges to developing a set of consistent state seafood economic strategies. The second is what to use for measurement. One may infer that maximum benefit is a function of 1) the total economic value of the fisheries (including the health of the resource), 2) the proportion of that value available to Alaskans, and 3) the distribution of the Alaska value component with respect to state priorities and interests as determined by the people through their legislature. The interplay of these three aspects, multiplied by several dozen fisheries and hundreds of regional considerations within each fishery, creates a strategic environment that is forbiddingly complex.

RC 212

Chairman Webster
Alaska Board of Fisheries

Feb 28, 2011

Dear Mr. Webster;
Apparently, there is some confusion among the members of the Board of Fisheries regarding RC 127, second paragraph. In public testimony and committee work it was noted many times that the commercial fishing exploitation rate of northern bound sockeyes salmon was less than 28%. At least two members of the BOF told us that they thought that the drift fleet's harvest of northern bound sockeyes was less than 10%. See figure1 for the 2006-2009 actual harvest rates of Susitna sockeyes.

When the Susitna Sockeye Salmon were determined to be a Stock of Yield Concern the discussion centered on escapement goals and on an inaccurate sonar counter. Today the discussion never referenced either of these issues. Please see figures 2, 3 and 4. These figures indicate that the Susitna sockeye escapements are either increasing (Judd or Larson) or nearly static (Chelatna). For example the Larson Lake sockeye escapements have increased from an average of 33,551 to the current escapement average of 35,365. In Chelatna the 1992/8 average escapement was 39,487, current average is 37,768. The BOF didn't even ask for or use this escapement data in order to allocate away millions of dollars from the drift fleet! The BOF made the July 9th decision without a discussion of the escapement goals or sonar issues that formed the basis of the original stock of yield concern.

July 12 was our very best harvest of 2010. That day there were 251 vessel deliveries averaging 1328 sockeye. There are 583 drift permits in Upper Cook Inlet (UCI). As you can determine over 300 UCI permits were inactive on July 12th. The Kenai and Kasilof Rivers met their escapement goals in 2010.

July 12 is a Russian religious holiday and none of this fleet fished that day. On July 12, 2010 there were over 150 vessels and permit holders, owned by our Russian drift fishermen that remained in port. The BOF is subjecting a minority to an unusual financial burden. We ask that this community be given an equal opportunity to harvest UCI salmon.

At the 2005 BOF meeting, one (1) full district wide opening and one (1) corridor opening were taken away and replaced with two (2) Area 1 openings. This was an allocation change that cost the drift fleet in 2005. Now in 2011 the BOF is allocating away from the drift fleet again while the in river users have had few if any restrictions placed on them as per the current policy of sharing a conservation burden.

In the past the drift fleet has been used to monitor and assess sockeye run strength prior to July 25th. This is needed to determine the current tier. Today's BOF discussions and decision make run assessments very difficult. We feel that assessment or future returns have been comprised by the board's decision concerning July 9th.

We ask the BOF to reconsider its vote on RC 200

UCIDA

Figure 1

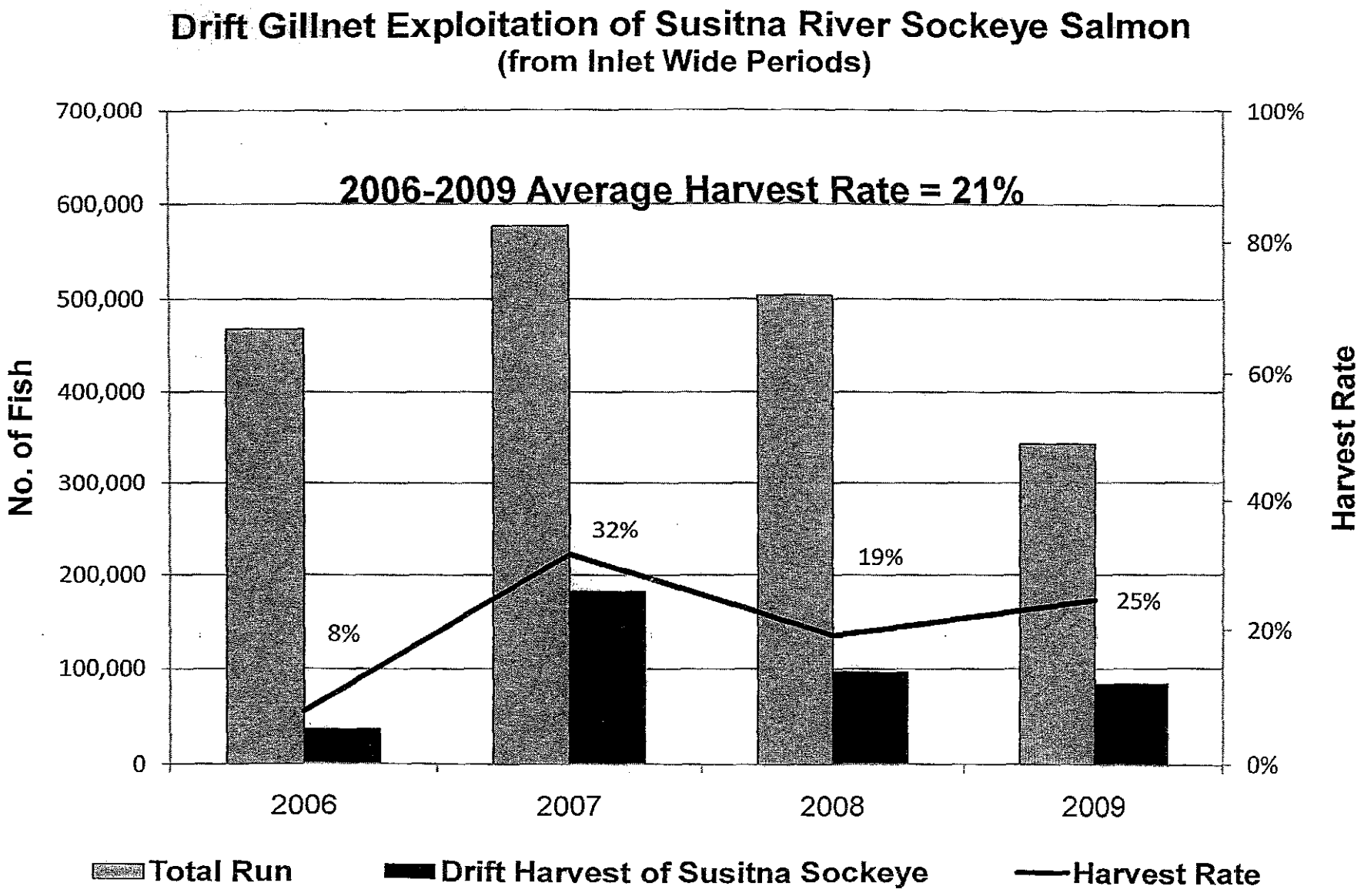

Drift Gillnet Exploitation of Susitna River Sockeye Salmon
(from Inlet Wide Periods)
2006-2009 Average Harvest Rate = 21%
No. of Fish
Harvest Rate
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
100%
80%
60%
40%
20%
0%
8%
32%
19%
25%
2006
2007
2008
2009
Total Run
Drift Harvest of Susitna Sockeye
Harvest Rate

Figure 2

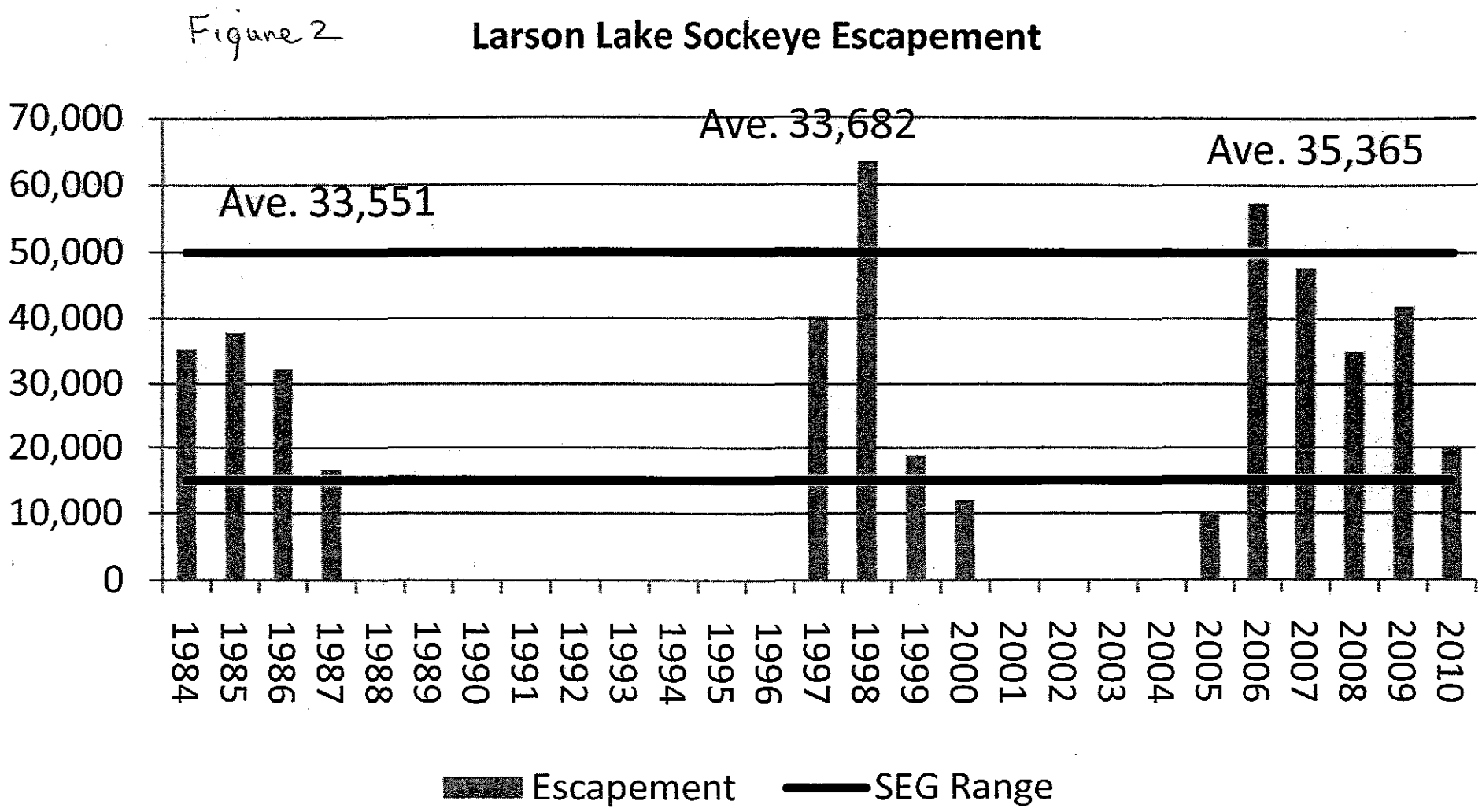

Larson Lake Sockeye Escapement
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Ave. 33,551
Ave. 33,682
Ave. 35,365
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Escapement
SEG Range

Figure 3

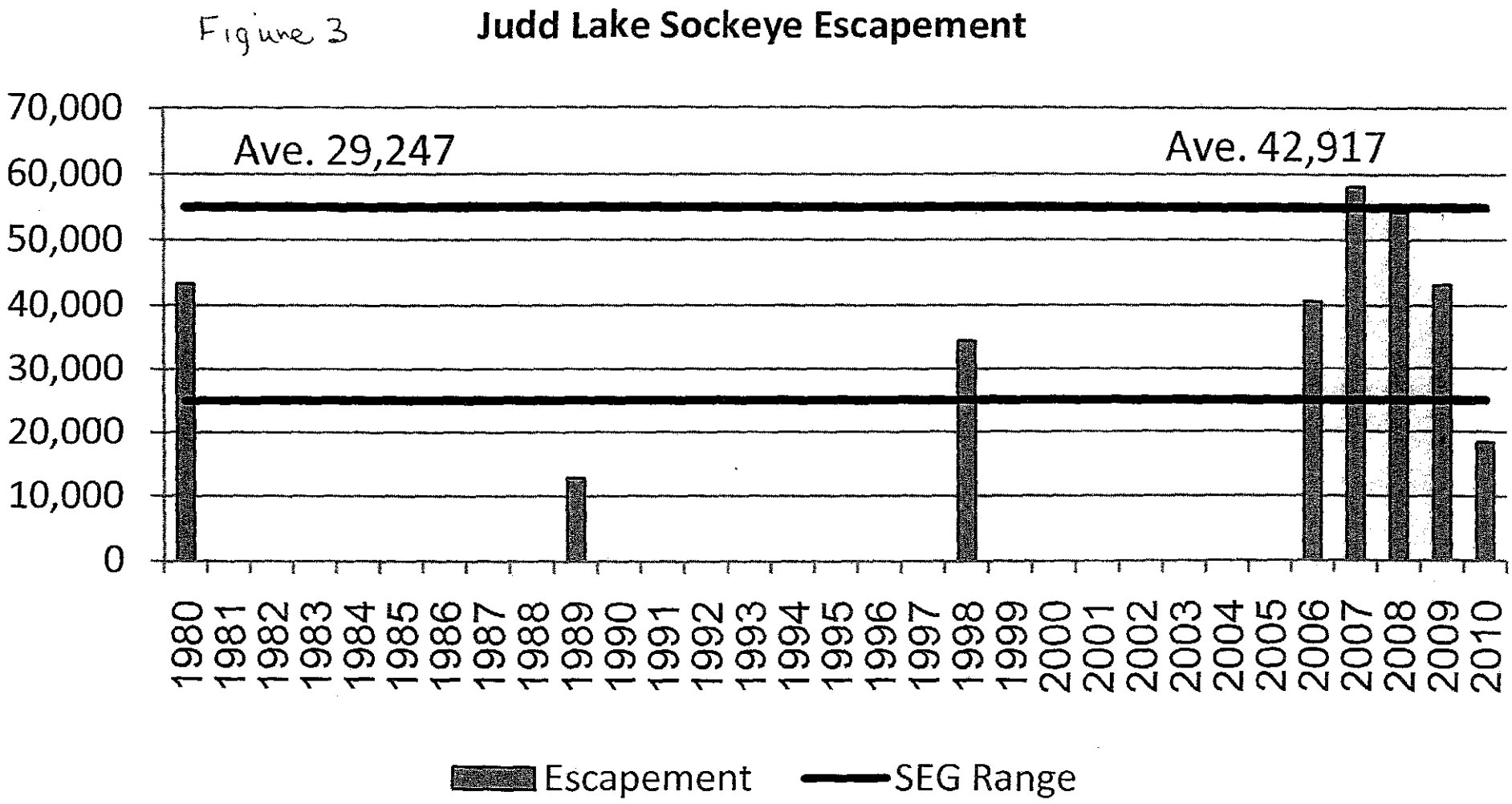
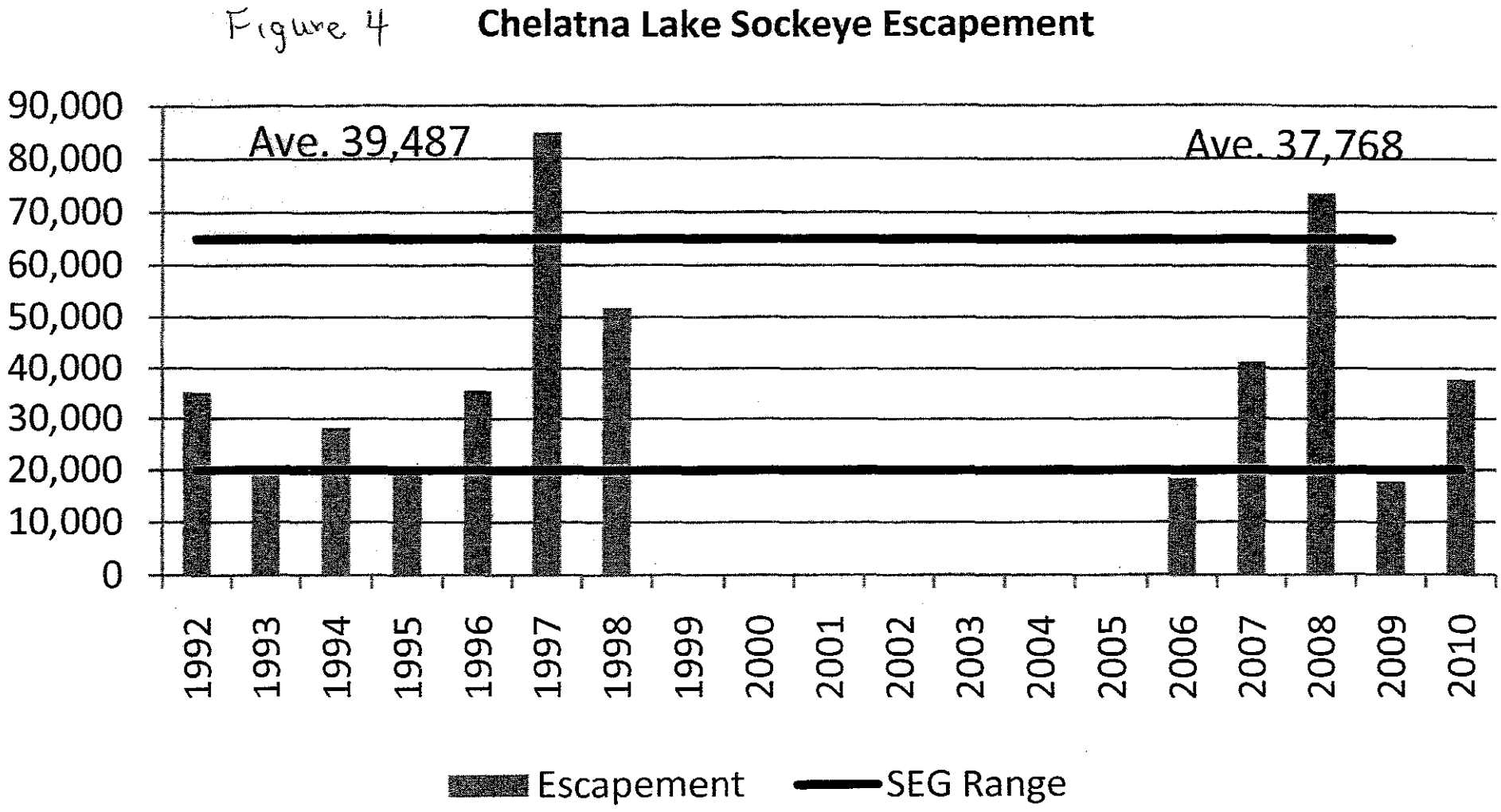

Judd Lake Sockeye Escapement
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Ave. 29,247
Ave. 42,917
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Escapement
SEG Range

Figure 4


Chelatna Lake Sockeye Escapement
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Ave. 39,487
Ave. 37,768
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Escapement
SEG Range

Proposed changes to inriver goal and OEG's for Kenai and Kasilof sockeye salmon

Kenai late-run sockeye salmon escapement goals

Bendix Units				Didson Units			
		Inriver Goal				Inriver Goal	
Tier		Lower	Upper	Tier[a]		Lower[b]	Upper[c]
<2,000,000		650,000	850,000	<2,280,000		850,000	1,050,000
2,000,000	4,000,000	750,000	950,000	2,280,000	4,560,000	950,000	1,150,000
>4,000,000		850,000	1,100,000	>4,560,000		1,050,000	1,300,000
SEG		500,000	800,000	SEG		700,000	1,200,000
OEG		500,000	1,000,000	OEG[d]		700,000	1,400,000

[a] Conversion factor 1.140.

[b] Add inriver allocation (Run<2,000,000: 150,000. Run 2,000,000-4,000,000: 250,000. Run>4,000,000=350,000)

[c] Add to new lower inriver goal the difference between the old upper and lower inriver goals.

[d] Upper OEG is 100,000 fish greater than the upper SEG.

Kasilof sockeye salmon escapement goals

]endix Units			Didson Units		
Goal	Lower	Upper	Goal	Lower	Upper
SEG	150,000	250,000	SEG	160,000	340,000
OEG	150,000	300,000	OEG[a]	160,000	390,000

[a] Add 50,000 to upper SEG.

Kenai
Area
Fisherman's
Coalition

PROTECTING YOUR FISHING RIGHTS & RESOURCES

RC214

Issue: RC162 – Slot Limit Replacement Proposal

Originator - Kenai River Professional Guides Assn.

Conclusion: This proposal will do little to reduce the harvest of our larger 1.4 and 1.5 King salmon because it allows the harvest of one over 46 inches per angler throughout the season. With the low numbers of large Kings available for harvest hardly anyone catches one this size let alone more than one.

Additional Factors:

1) **The 46 inch criteria for a second fish does not protect about 50% of the 1.5 females and 85% of the 1.4 females.**

2) **Guides harvest about 70-80% of early run Kings and about 60% of second run fish. Their clients generally only harvest one fish so the second fish limitation would mainly fall on resident anglers.**

3) **The slot limit option is the fairest way to share the burden of conservation towards recovery of our larger and older age class Kings.**

4) **Allowing harvest of 20-28 inch fish provision does not specify if the angler has to quit fishing for the day and puts this age group at risk of excessive harvest in years where is age class is under represented.**

Submitted By: _____

Dwight Kramer, KAFC Chairman

RC215

Chairman Webster Alaska Board of Fisheries March 1, 2011

The drift fleet's harvest of Coho salmon have decreased over the last 15 years, see appendix B6-page 2. In the last 11 years our harvest of Coho salmon has decreased by 124,236.

The northern district sport fish harvest of Coho salmon have increased by 21,415 to a total annual harvest of 83,398 in the 2004-2008 time frame, see page 64 attached.

In addition the northern district caught and released 68,650 Coho. With a modest 50% mortality rate an additional 34,000 Coho were killed. Total annual harvest and release mortality in the northern Cook Inlet is over 117,398.

The sport harvests in the remaining areas of Cook Inlet were 45,000 plus the catch and release mortality of an additional 25,000.The total annual Coho harvest and release mortality for the rest of Cook Inlet is over 70,000.

The annual Cook Inlet sport harvest and mortality is estimated to exceeded 187,000 and could exceeded 250,000 when the entire area is considered.

Coho escapements have fluctuated over the past 25 years see figures attached.

We don't feel there is a Coho conservation issue. But if there were a conservation issue the burden should be shared as per current policy.

We further feel that any additional Coho restrictions will comprise the sockeye escapement goals

Roland Maw

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1995	17,893	2,951,827	446,954	133,575	529,422	4,079,671
1996	14,306	3,888,922	321,668	242,911	156,501	4,624,308
1997	13,292	4,176,738	152,404	70,933	103,036	4,516,403
1998	8,124	1,219,242	160,660	551,260	95,654	2,034,940
1999	14,383	2,680,510	125,908	16,174	174,541	3,011,516
2000	7,350	1,322,482	236,871	146,482	127,069	1,840,254
2001	9,295	1,826,833	113,311	72,559	84,494	2,106,492
2002	12,714	2,773,118	246,281	446,960	237,949	3,717,022
2003	18,490	3,476,159	101,756	48,789	120,767	3,765,961
2004	27,476	4,926,220	311,056	357,939	146,164	5,768,855
2005	28,171	5,238,168	224,657	48,419	69,740	5,609,155
2006	18,029	2,192,730	177,853	404,111	64,033	2,856,756
2007	17,625	3,316,779	177,339	147,020	77,240	3,736,003
2008	13,333	2,380,135	171,869	169,368	50,315	2,785,020
2009	8,750	2,045,619	153,210	214,321	82,986	2,504,886
1966–2008 Avg	16,119	2,920,365	312,926	482,979	459,359	4,191,748
1999–2008 Avg	16,687	3,013,313	188,690	185,782	115,231	3,519,703

Note: Catch statistics prior to 2009 reflect minor adjustments to harvest database.

See 10-50 ND Recreational Fisheries
- 124,000
p64

See page 131 AMR 2009

Table 17.–Northern Cook Inlet Management Area recreational harvest of coho salmon by management unit, 1977–2009.

	Northern Cook Inlet Management Area					South-central			
Year	Knik Arm	Eastside Susitna	Westside Susitna	West Cook Inlet	Total Harvest	Region Total	% by NCIMA	Alaska Total	% by NCIMA
1977	4,366	5,709	6,599	532	17,206	67,866	25	105,004	16
1978	7,895	8,573	10,173	378	27,019	81,990	33	131,945	20
1979	7,139	7,564	9,036	337	24,076	93,234	26	119,329	20
1980	16,030	10,368	12,141	628	39,167	127,958	31	164,302	24
1981	10,484	6,593	5,940	604	23,621	95,376	25	125,666	19
1982	13,676	10,167	10,658	745	35,246	136,153	26	195,644	18
1983	6,139	5,176	3,610	2,552	17,477	87,935	20	149,270	12
1984	23,429	13,916	9,511	2,681	49,537	166,688	30	238,536	21
1985	14,339	7,042	11,270	6,320	38,971	137,671	28	200,773	19
1986	12,361	16,190	13,117	4,222	45,890	188,872	24	255,887	18
1987	25,787	11,028	8,746	8,548	54,109	176,710	31	235,435	23
1988	40,037	19,518	16,283	7,403	83,241	225,812	37	281,450	30
1989	23,846	17,078	18,226	7,683	66,833	237,155	28	338,195	20
1990	18,762	11,743	13,883	6,016	50,404	214,114	24	325,936	15
1991	22,186	19,479	20,507	8,253	70,425	254,961	28	389,569	18
1992	25,814	33,790	16,218	7,037	82,859	237,204	35	345,513	24
1993	35,763	26,063	15,454	10,326	87,606	283,868	31	412,487	21
1994	28,539	20,870	15,361	8,247	73,017	299,849	24	502,948	15
1995	20,650	19,165	17,148	8,182	65,145	263,749	25	368,631	18
1996	24,874	24,174	17,375	11,430	77,853	328,178	24	503,413	15
1997	11,773	10,297	7,123	6,492	35,685	283,311	13	462,931	8
1998	23,750	23,086	13,235	8,160	68,231	375,742	18	600,862	11
1999	14,429	23,292	17,995	9,339	65,055	309,564	21	632,829	10
2000	32,530	37,748	23,262	11,712	105,252	419,835	25	624,327	17
2001	30,106	26,617	19,221	13,949	89,893	480,048	19	811,799	11
2002	44,448	27,183	14,144	13,380	99,155	488,911	20	776,033	13
2003	24,583	18,585	16,072	14,239	73,479	450,231	16	783,328	9
2004	34,298	20,484	17,785	16,179	88,746	516,183	17	861,490	10
2005	27,000	17,471	18,266	12,572	75,309	514,473	15	937,965	8
2006	39,953	22,719	20,474	11,940	95,086	425,981	22	652,953	15
2007	27,733	13,464	14,065	12,580	67,842	444,032	15	716,815	9
2008	35,996	24,211	15,126	14,673	90,006	426,916	21	676,376	13
1977-2008 Mean	22,772	17,480	14,001	7,729	61,983	276,268	24	435,239	16
2004-2008 Mean	32,996 +	19,670 +	17,143 +	13,589 +	83,398 +	465,517	18	769,120	11
% of NCIMA 2004-2008	40 +	24 −	21 −	16 −					
2009	37,271	15,335	14,464	9,801	76,871	426,916	18	676,376	11

77-08

21,415 ~ increase

61983

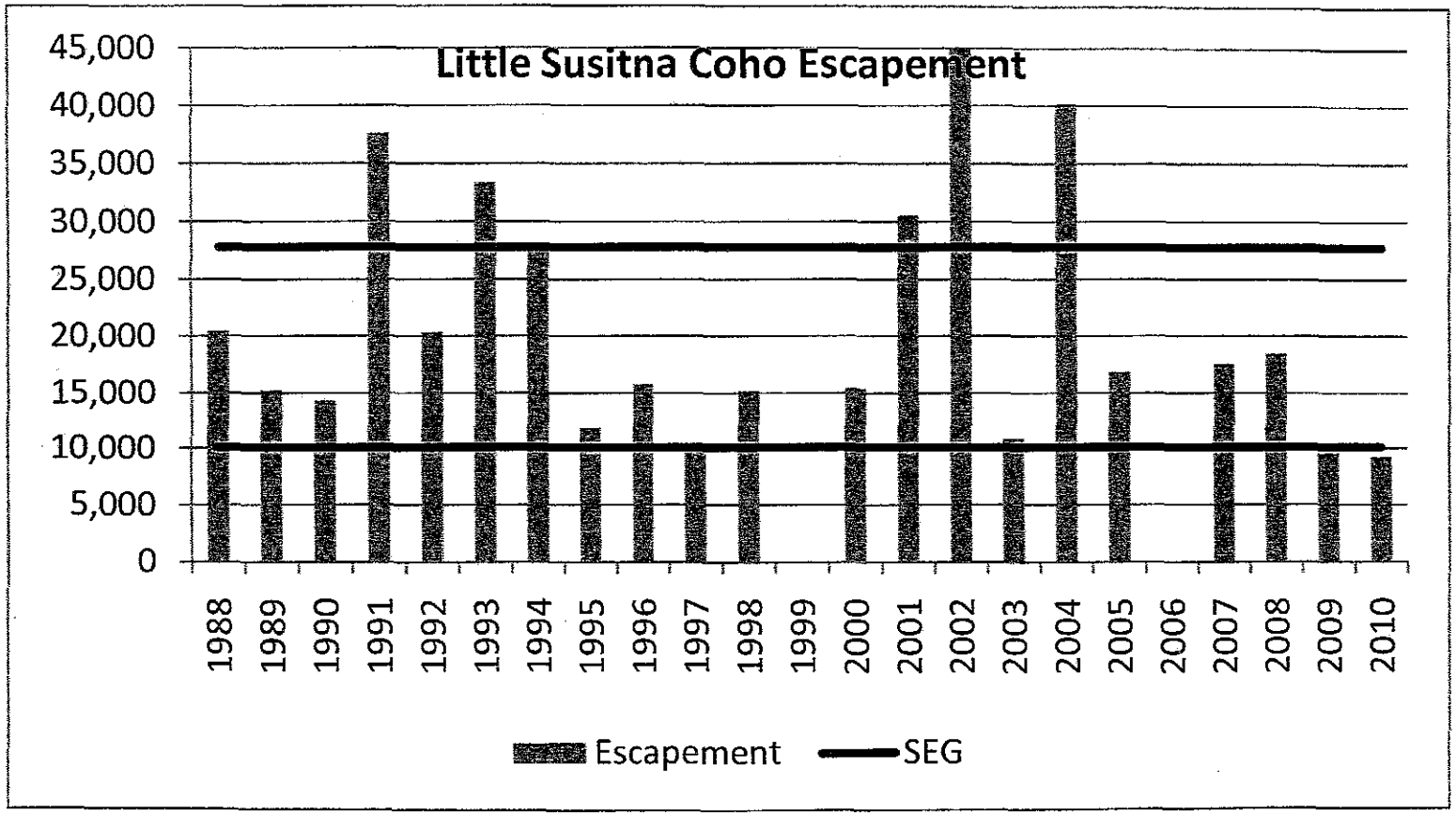
+22,000

83,398 Since last Board

21415

76,871

~P.133


Little Susitna Coho Escapement
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1988
1989
1990
1991
1992
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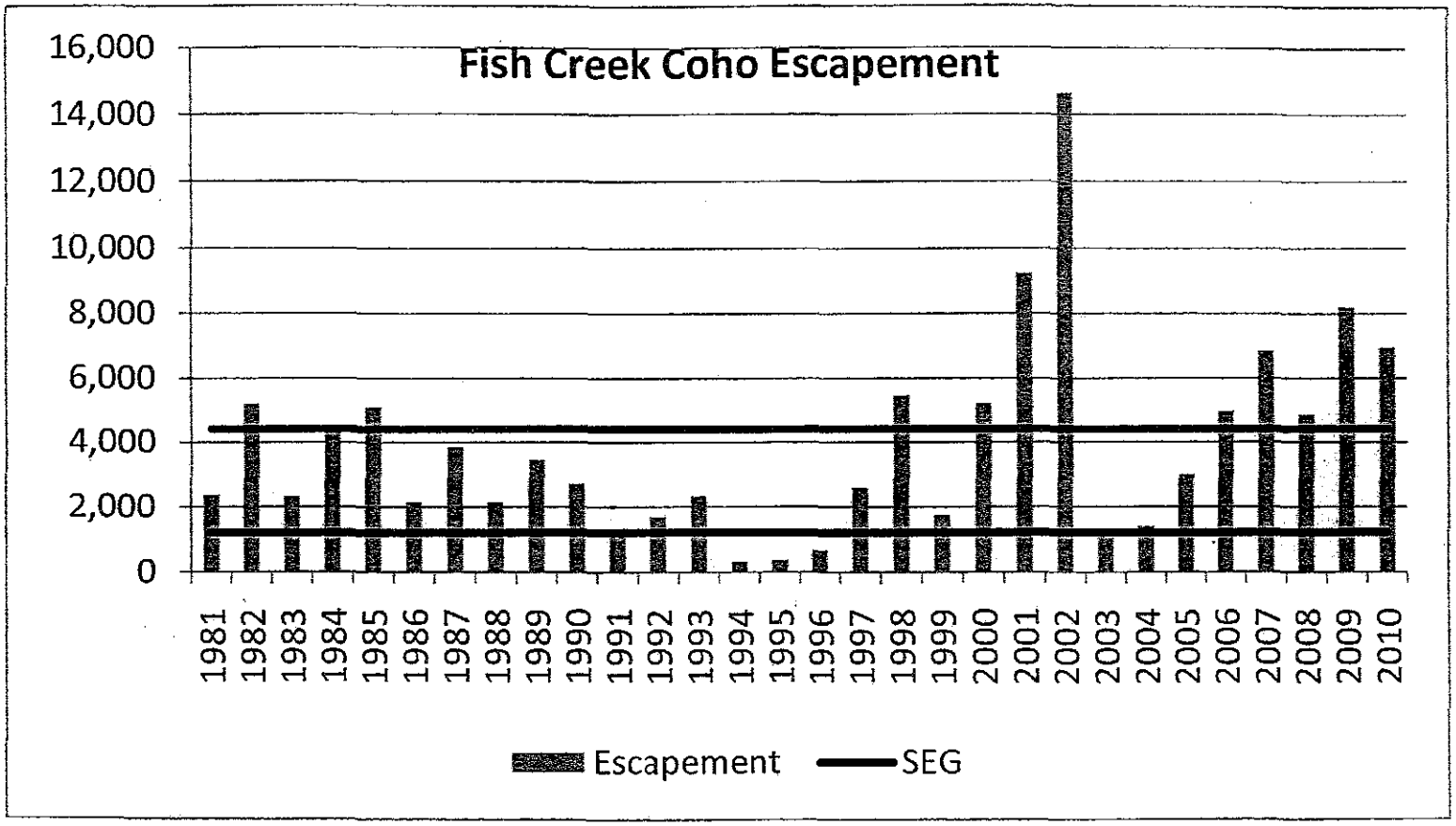
2010
Escapement
SEG


Fish Creek Coho Escapement
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
1981
1982
1983
1984
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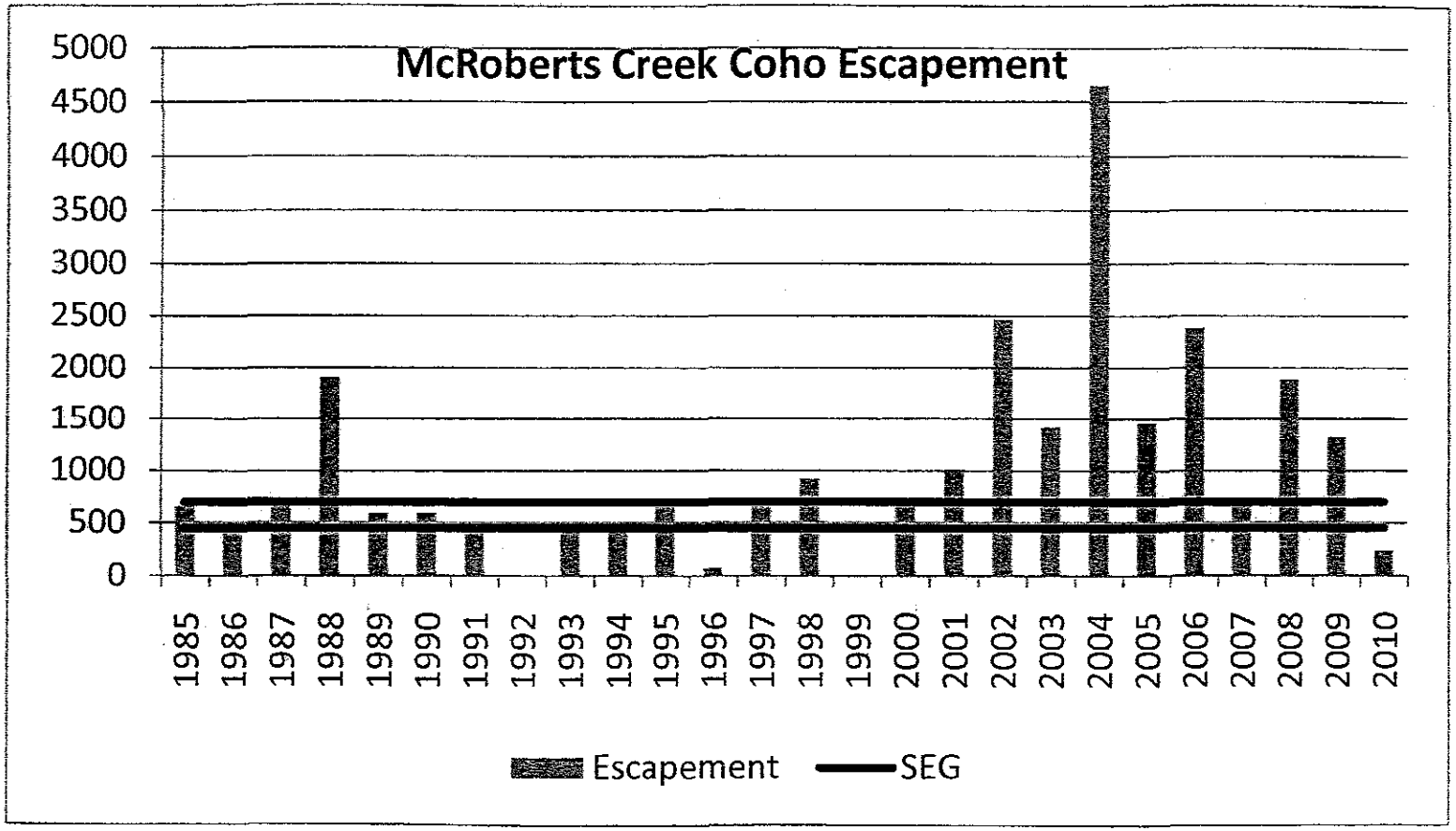
Escapement
SEG


McRoberts Creek Coho Escapement
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Escapement
SEG

RC 216

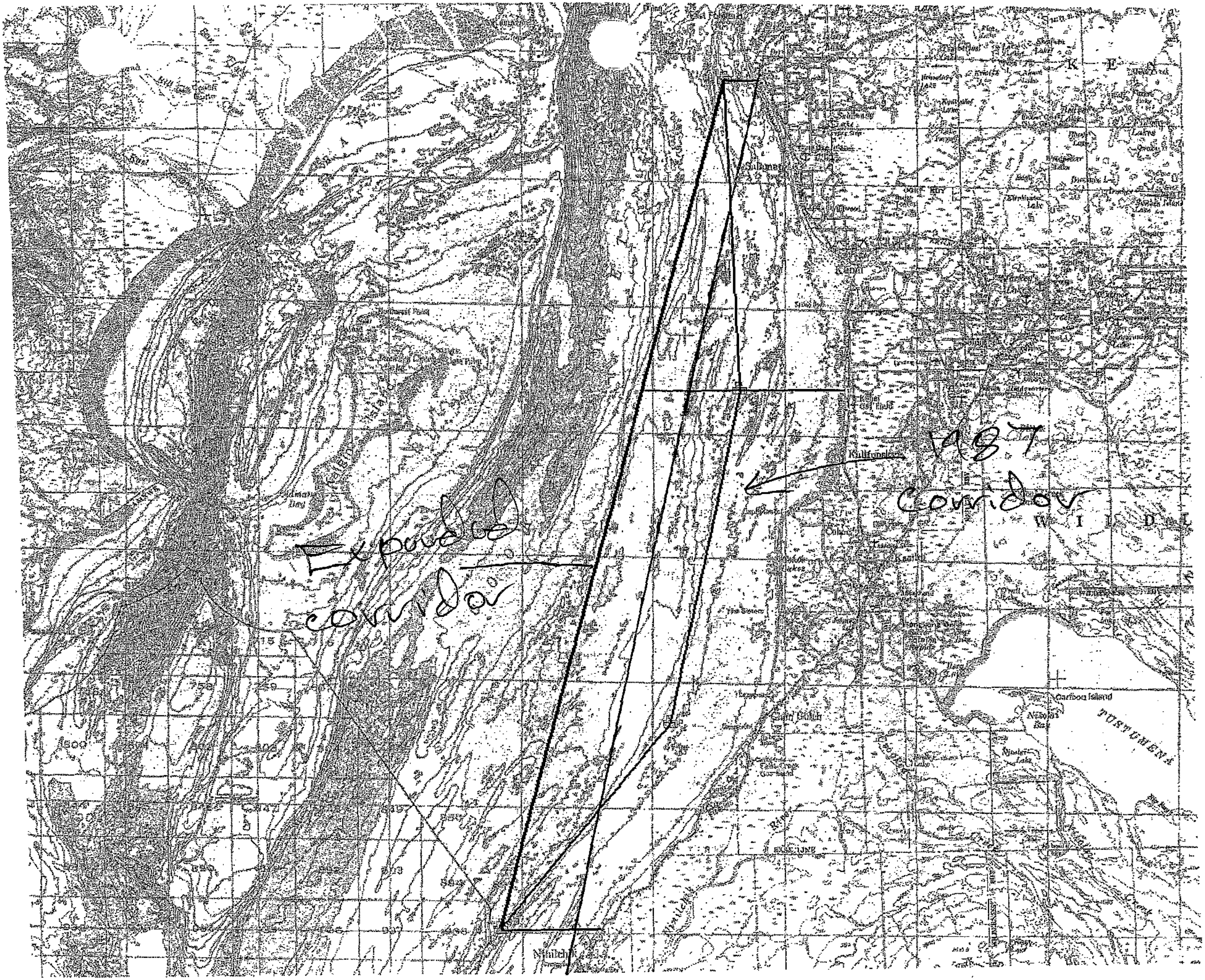
Review of Commercial Landings from Drift harvests in the Expanded Corridor.

Review of existing catch information from the Commercial Fish Division Annual management reports allows an assessment of the harvest potential of the commercial drift fleet in areas similar to the Expanded Corridor described in the Board Generated proposal based upon RC 200.

Date	Landings	Sockeye Harvest	Corridor Description
7/19/87	441	321,848	S. Blanchard Line within 3 miles of shore
7/22/87	579	509,520	E. of line from E. Foreland light to Cape Ninilichik
7/25/87	547	194,690	E. of line from E. Foreland light to Cape Ninilichik
7/27/87	568	307,809	E. of line from E. Foreland light to Cape Ninilichik
7/28/87	341	248,434	E. of line from E. Foreland light to Cape Ninilichik
7/29/87	531	285,198	E. of line from E. Foreland light to Cape Ninilichik
7/30/87	421	245,755	E. of line from E. Foreland light to Cape Ninilichik

- Data are from 1987 AMR.
- During a single period (7/22) the fleet landed over 509,000 fish in a single period in the expanded corridor.
- During a three day consecutive period (7/28-7/30) a total of 779,300 sockeye were harvested from expanded corridor fishery.
- This demonstrates that in years of large returns the drift fleet has the fishing power to harvest large numbers of sockeye in an expanded corridor fishery.

Submitted by the Mat/Su Mayors Blue Ribbon Committee



1987 Corridor
Expanded corridor
TUSTUMENA
Kenai
Caribou Island
Ninilchik

Table 5. Commercial salmon catch by period and species by drift gill nets in the Central District, 1987.

Date	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
624	208	38	14,730	59	233	209	15,269
626 R	420	74	26,236	99	506	453	27,368
629 R	467	117	50,226	359	1,199	1,180	53,081
703 R	566	92	222,788	2,458	3,476	5,735	234,549
706 R	588	110	226,150	3,754	3,117	6,671	239,802
710 R	594	84	590,299	21,752	5,015	10,778	627,928
713 R	592	76	357,325	17,590	5,874	10,794	391,659
717 R	607	23	700,916	37,262	5,854	21,492	765,547
719	441	113	321,848	7,108	2,131	3,241	334,441
720 R	591	86	624,295	30,612	3,221	21,640	679,854
722	579	226	509,520	15,632	2,732	14,818	542,928
724 R	573	266	435,792	20,968	2,079	38,536	497,641
725	547	695	194,690	3,677	722	8,097	207,881
727 R	568	548	307,809	4,165	767	6,226	319,515
728	544	341	248,434	3,109	585	5,093	257,562
729	531	358	285,198	4,860	303	4,236	294,955
730	421	194	245,755	3,467	168	1,908	251,492
731 R	541	520	182,577	6,716	293	12,951	203,057
801	370	183	24,820	805	38	808	26,654
802	189	194	21,919	836	30	861	23,840
804	246	182	26,480	2,309	74	4,554	33,599
807 R	257	18	9,919	3,494	121	14,221	27,773
810 R	173	12	3,497	1,998	25	10,525	16,057
814 R	13	0	99	712	4	1,032	1,847
817 R	58	2	368	2,482	70	2,945	5,867
821 R	23	0	32	1,714	15	743	2,504
824 R	17	0	14	1,988	8	1,468	3,478
828 R	7	0	9	863	0	259	1,131
831 R	8	0	1	1,354	0	74	1,429
904 R	2	0	0	104	0	25	129
Total		4,552	5,631,746	202,306	38,660	211,573	6,088,837

East Foreland Light to Cape Nukshak

1987 AMR

ASL 9543743

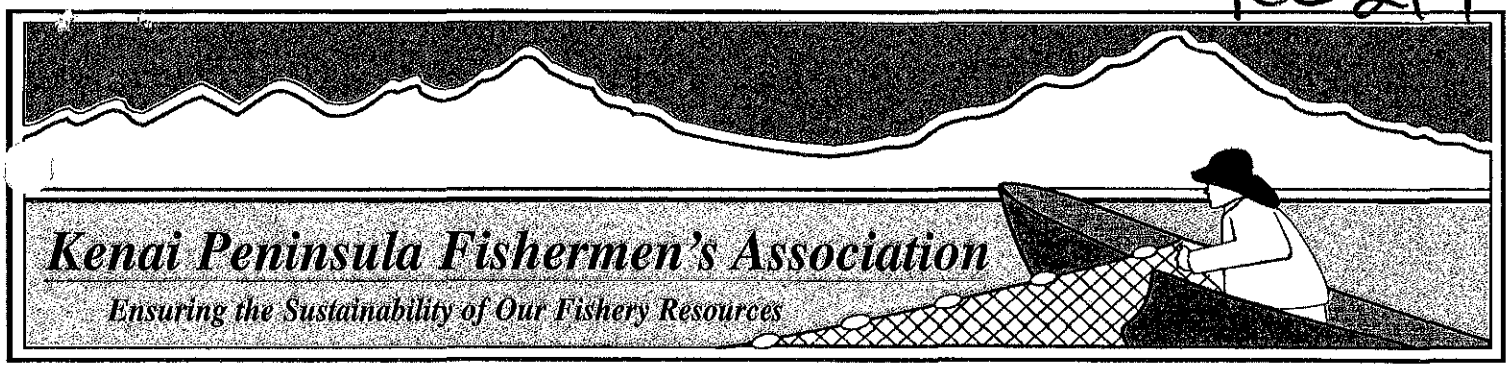
Table 14, continued. Emergency Order summary, Upper Cook Inlet commercial salmon fishery, 1987.

E.O. Number	Effective Date	Description	Reason
2S-16-87	7/18	Opened set gillnetting in Upper Subdistrict south of Blanchard Line from 5:00 P.M. July 18 until 7:00 A.M. July 20. Opened drift gillnetting south of Blanchard Line and within 3 miles of shore from 7:00 A.M. to 7:00 P.M. July 19.	Same as for 2S-14-87.
2S-17-87	7/20	Opened set gillnetting in Upper Subdistrict south of Blanchard Line and within 1/2 mile of shore from 7:00 P.M. July 20 until 7:00 P.M. July 21. Opened set gillnetting in the Western Subdistrict from 7:00 P.M. July 20 until 7:00 P.M. July 22.	To slow the sockeye escapement rate into the Kasilof and Crescent Rivers.
2S-18-87	7/21	Opened set gillnetting in the Upper Subdistrict from 4:00 P.M. July 21 through 7:00 P.M. July 22. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. July 22.	Slow the escapement rate of sockeyes into the Kasilof and Kenai Rivers.
2S-19-87	7/22	Opened set gillnetting in the Upper and Western Subdistricts from 7:00 P.M. July 22 through 7:00 A.M. July 24.	Harvest surplus sockeye salmon bound for the Kasilof, Kenai and Crescent Rivers.
2S-20-87	7/24	Opened set gillnetting in the Western Subdistrict until further notice effective at 7:00 P.M. July 24. Opened set gillnetting in the Upper Subdistrict from 7:00 P.M. July 24 until 7:00 A.M. July 27. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik on July 25 from 7:00 A.M. to 7:00 P.M.	Same as for 2S-19-87.
2S-21-87	7/25	Reduced the area closed to commercial fishing at the mouth of the Kenai River effective 7:00 A.M. July 25.	Increase the effective harvest rate on Kenai River sockeye salmon.
2S-22-87	7/27	Restricted drift gillnetting to those waters east of a line from the East Foreland Light to Cape Ninilchik on July 27 from 7:00 A.M. to 7:00 P.M.	Protect Susitna River chum and sockeye salmon.
2S-23-87	7/27	Opened the Fish Creek terminal harvest area from 7:00 A.M. July 27 through July 29.	Fish Creek sockeye salmon escapement goal achieved.

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1987.

E.O. Number	Effective Date	Description	Reason
2S-24-87	7/27	Opened set gillnetting in the Upper Subdistrict from 7:00 P.M. July 27 until 7:00 P.M. July 29 and in the Kalgin Island Subdistrict on July 29 from 7:00 A.M. to 7:00 P.M. Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik on July 28 from 7:00 A.M. to 7:00 P.M.	Harvest surplus sockeye salmon bound for the Kasilof River, Kenai River, and Packers Creek.
2S-25-87	7/29	Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik on July 29 from 7:00 A.M. to 7:00 P.M.	Harvest surplus sockeye salmon bound for the Kenai and Kasilof Rivers.
2S-26-87	7/29	Opened set gillnetting in the Upper Subdistrict north of the Clam Gulch Access Road from 7:00 P.M. July 29 until 7:00 A.M. July 31. Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik and north of the latitude of Clam Gulch Tower on July 30 from 7:00 A.M. to 7:00 P.M.	Harvest surplus sockeye salmon bound for the Kenai and Kasilof Rivers while providing protection for coho salmon bound for the Kenai River.
2S-27-87	7/31	Opened set gillnetting in the Upper Subdistrict north of Clam Gulch from 7:00 P.M. July 31 until 7:00 A.M. August 3. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik and north of Clam Gulch Tower on August 1 from 9:00 A.M. to 5:00 P.M.	Harvest surplus sockeye salmon bound for Kenai and Kasilof Rivers.
2S-28-87	8/01	Opened the remainder of Upper Subdistrict to set gillnetting from 2:00 P.M. August 1 to 7:00 A.M. August 3.	Increased abundance of Kenai and Kasilof sockeye in the southern portion of the subdistrict.
2S-29-87	8/02	Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik on August 2 from 9:00 A.M. to 5:00 P.M.	Harvest surplus Kenai and Kasilof River sockeye salmon.
2S-30-87	8/03	Closed the Central District to drift gillnetting on August 3.	Protect a weak chum salmon return to the Susitna River.
2S-31-87	8/03	Opened set gillnetting in the Upper Subdistrict from 7:00 P.M. August 3 until 7:00 P.M. August 4. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. August 4.	Harvest surplus Kenai and Kasilof River sockeye salmon.

RC217



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(907) 262-2492 • Fax: (907) 262-2898 • E Mail: kpfa@alaska.net

February 28, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Exploitation Rates on Kenai Coho by ESSN

Attention: Chairman Vince Webster

KPFA continues to assist the BOF with supporting their difficult task in balancing use's and of user's. We offer this document from the Department that will substantiate the low harvest rate of Kenai Coho's in the set net fleet for the years of 1993 – 2003.

A mean of 6% or around 1% would indicate a minimilized harvest of no-targeted stocks of Coho.

Thank you,

Robert Williams
President

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

FRANK MURKOWSKI, GOVERNOR

P.O. BOX 25526
JUNEAU, AK 99802-5526
PHONE: (907) 465-4150
FAX: (907) 465-2604

RC47

January 19, 2005

Jeff Bedouin
PO Box 75
Kasilof, AK

Dear Mr. Bedouin:

This letter is a follow-up to your letter and email of January 9th and my subsequent phone call to you on January 11th. That call helped me to better understand the concerns expressed in your letter.

You wanted to know why the department supported proposal 161. This proposal removes the word "conservation" from the title of 5 AAC 21.357, as well as in two subsections of the regulation. The department's support for this proposal is based on our assessment that Kenai River coho are generally healthy and the proposal requests no changes in existing allocations resulting from the Kenai River Coho Salmon Conservation Management Plan. We considered the proposal to be merely a technical amendment to the existing regulation.

You believe that the department should not have considered proposal 161 a merely a technical proposal, because it continued restrictions that were adopted for conservation concerns despite removing the conservation justification for the restrictions on the various fisheries. In addition, the department has produced more recent information indicating the Kenai coho salmon stock is healthy.

From your point of view making the restrictions permanent on the eastside set net fishery when those restrictions are no longer based on a conservation need, makes proposal 161 an allocative proposal. I have discussed your concern with other staff from the department and we can see your point of view, although it was certainly not the department's intention to endorse a particular allocation of Kenai River coho. So, we want to clarify that the department is neutral on the allocative consequences of the adoption of proposal 161.

You also raised some concerns about the department's position on proposal 162, which requests the removal of all the fishery restrictions contained in 5 AAC 21.357. I understand, in your view, the removal of these restrictions, as requested by proposal 162, should be neutral and benefit all

users equally. This is a matter that properly falls to the Alaska Board of Fisheries to decide, because the proposal clearly addresses allocative issues and, therefore, the appropriate position for the department is neutral.

You also requested some information about the relative harvests by eastside set netters and in-river users of Kenai River coho in the period prior to the adoption of the conservation restrictions contained the 5AAC 21.357. We don't have estimates on marine survivals of coho smolt for this time period, so the best we can do is give you an approximation based on an assumption about the marine survival of coho smolt. We assumed a marine survival of 20 percent to come up with the estimated calculations which are contained in the following table. When comparing the estimates of total return for the years prior to 1999, we ask that you keep in mind they are generated with an assumed value for marine survival and are of a different quality than the estimates for the years 1999-2003 which are based on a mark-recapture project.

Table 1. Estimated exploitation rate of Kenai River coho salmon inriver and in the eastside set net fishery during August, 1993-2003.

Return	Smolt	Estimated	Harvest		Exploitation Rate	
Year	Abundance	Return*	Inriver	ESSN	Inriver	ESSN
1993	879,290	175,858	54,452	5,166	0.31	0.03
1994	977,964	195,593	93,980	12,452	0.48	0.06
1995	628,909	125,782	51,588	9,000	0.41	0.07
1996	465,075	93,015	49,723	5,286	0.53	0.06
1997	534,323	106,865	21,309	1,077	0.20	0.01
1998	374,255	74,851	32,590	7,982	0.44	0.11
1999	799,687	48,014	36,563	2,758	0.76	0.06
2000	578,355	131,302	53,938	1,582	0.41	0.01
2001	601,236	134,155	56,559	0	0.42	0.00
2002	641,693	209,196	67,825	2,014	0.32	0.01
2003	627,347	136,115	53,276	584	0.39	0.00
Mean 1993-1996	737,810	147,562	62,436	7,976	0.43	0.06
Mean 1997-1999	569,422	76,577	30,154	3,939	0.47	0.06
Mean 2000-2003	612,158	152,692	57,900	1,045	0.39	0.01

*The 1993-1998 total return was calculated using an assumed marine survival of 20 percent for coho smolt. In 1999-2003, marine survival of coho smolt was estimated through an in-river mark and recapture project.

Sincerely,

Geron Bruce

Geron Bruce
Deputy Director

Kenai Sonar Number Conversion – Committee C

- ✓ This RC highlights the need for further review of in-river tier numbers in the Kenai Late-run sockeye plan based on the Bendix to Didson conversion. **RC 213 from the Department represents a significant change in the current effective allocation of Kenai sockeye and king salmon.**
- ✓ RC 213 was meant to be an "**intent neutral**" conversion. These numbers step up the tiers relative to the bottom of the old SEG by 150,000; 250,000 and 350,000 at the lower end of each tier and 350,000; 450,000 and 600,000 at the upper end of each tier (*columns H and I below*). This is the same calculation used by the Board when the numbers were originally established.
- ✓ Historical sonar biases confound the "intent-neutral" conversion. Where 150,000 fish were delivered on paper to the fishery above the sonar, in reality 213,000 fish were delivered (due to the x1.42 Didson conversion factor).
- ✓ RC 213 effectively reallocates sockeye to commercial fishery because of this problem – all the additional fish previously delivered to the river but not recognized by the sonar, are effectively reallocated to the commercial fishery.
- ✓ RC 151 from KRSA identifies an "**effect neutral**" conversion of the old numbers. The numbers in columns F and G below effectively deliver the same number of fish to the river as the old numbers. **These numbers are effectively allocation-neutral.**
- ✓ RC 151 was submitted as an alternative to proposal 148 which was withdrawn because it was based on the old sonar and SEG.
- ✓ Note also that RC 151 (KRSA) further recommends standardizing the top end of all tiers at the top of the highest tier. This change is intended to provide for optimum sustained yields of all fisheries by reducing the incidence of out-of-plan actions to maximize the harvest of Kenai sockeye in the commercial fishery.

	Bendix Run	Old Bendix Numbers		Didson Run	RC 151 Didson equivalent		RC 213 Dept. reconstruction	
Goal	(millions)	Lower	Upper	(millions)	Lower	Upper	Lower	Upper
SEG	--	500,000	800,000		700,000[a]	1,200,000[a]	700,000[a]	1,200,000[a]
OEG	--	500,000	1,000,000		750,000	1,500,000	700,000	1,400,000[b]
In-river	< 2	650,000	850,000	<2.3	920,000	1,210,000	850,000	1,050,000
	2-4	750,000	950,000	2.3 – 4.6	1,060,000	1,350,000	950,000	1,150,000
	> 4	850,000	1,100,000	>4.6	1,210,000	1,560,000	1,050,000	1,300,000
Col. A	B	C	D	E	F	G	H	I

[a] *ADFG revision of SEG based on updated stock-recruitment analysis using Didson-corrected brood tables.*

[b] *Addition of 200,000 to the upper SEG as per the calculation by the previous board.*

Submitted by: Kenai River Sportfishing Association

RC 218

✓ Recent sport fishery harvests of Kenai sockeye above and below the sonar are graphed below for reference.

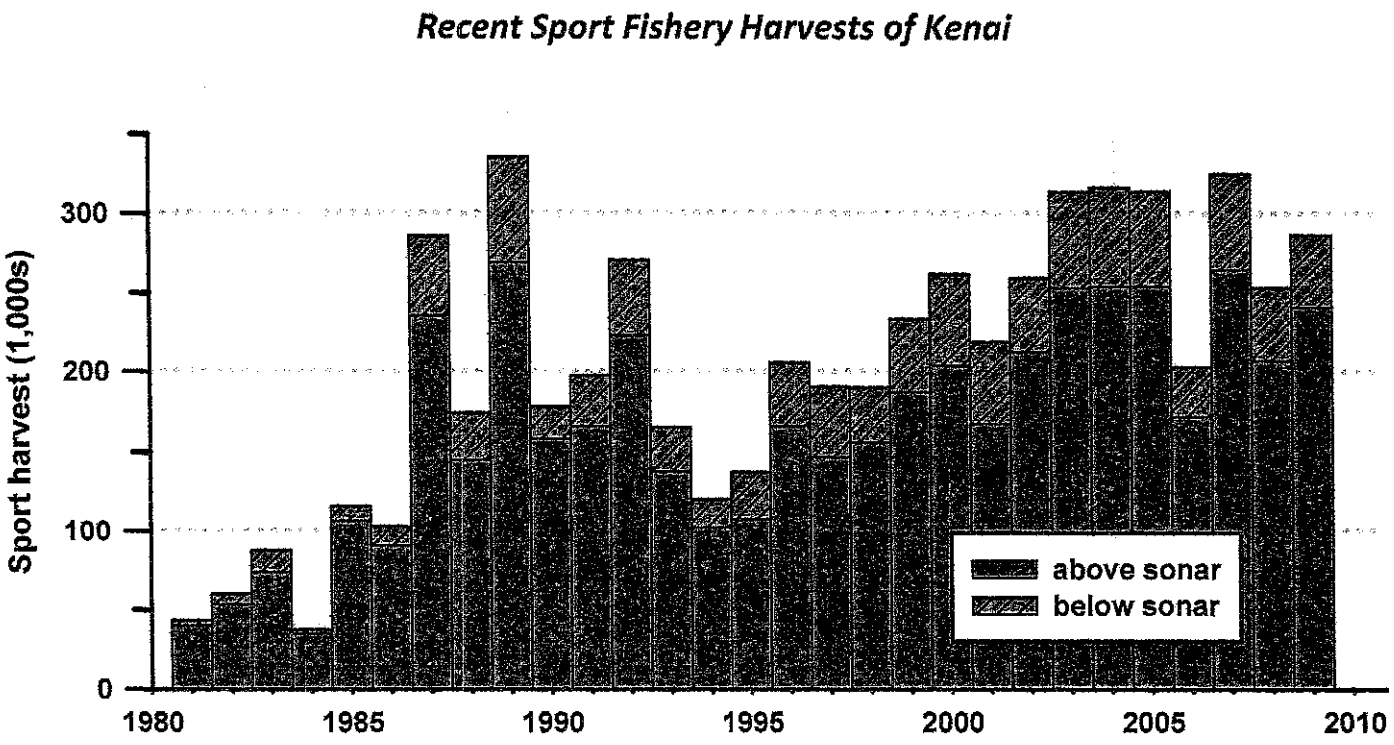


Figure 1. Mainstem sport harvest of Kenai sockeye.

Kenai
Area
Fisherman's
Coalition

PROTECTING YOUR FISHING RIGHTS & RESOURCES

RC219

Issue: RC100 Committee "F" Report Proposal 262 – Allowing guides to take more than one group of clients per day on the Kasilof River

Originator - Scott Eggemeyer

Issue: Board Committee Recommendation: Consensus to Support

Discussion: On behalf of private boat and shore anglers, we believe this provision would increase the harvest disparity that already exists between guided and unguided anglers. The total ER Kasilof R. 2010 harvest was only about 1,330 Kings so any additional fish harvested by guided anglers would only make it that many fewer fish available for unguided shore or boat anglers.

10 Data Information:

Angler Days: Guided Boat – 45.6% Unguided Shore – 45.2% Unguided Boat – 9.2%

Angler Success: Guided Boat –81.7% Unguided Shore – 12.8% Unguided Boat – 5.6%

Conclusion: Since stocking programs have been reduced this King run is smaller with limited harvest potential. All user groups have seen reduced harvest potential but bank angler success has seemed to be the hardest hit. If this provision was approved it would certainly make matters worse for them with fewer fish available for harvest do to the additional harvest potential associated with more guide boats in the fishery.

Submitted By:

Dwight Kramer, KAFC Chairman

Kenai
Area
Fisherman's
Coalition

PROTECTING YOUR FISHING RIGHTS & RESOURCES

RC 220

Issue: RC100 Committee "F" Report Proposal 225 – Prohibiting fishing from a boat in the "People's Hole" area adjacent to Crooked Creek SRS.

Originator - Kenai Area Fisherman's Coalition

Discussion: During committee discussion an opposition member alluded to the fact that shore anglers had another option to fish at Coho Cove Campground.

In follow-up discussions with ADF&G personnel responsible for collecting Kasilof River creel data it was revealed that;

1) **Coho Cove is basically a campground location with a small boat launch and a very limited bank fishing area.**

2) **Fishing effort is very low because catch rates are extremely poor.**

3) **On shore interviews and creel survey reports illustrate that between 2004 – 2009 only 4-5 Kings per year were the average harvest.**

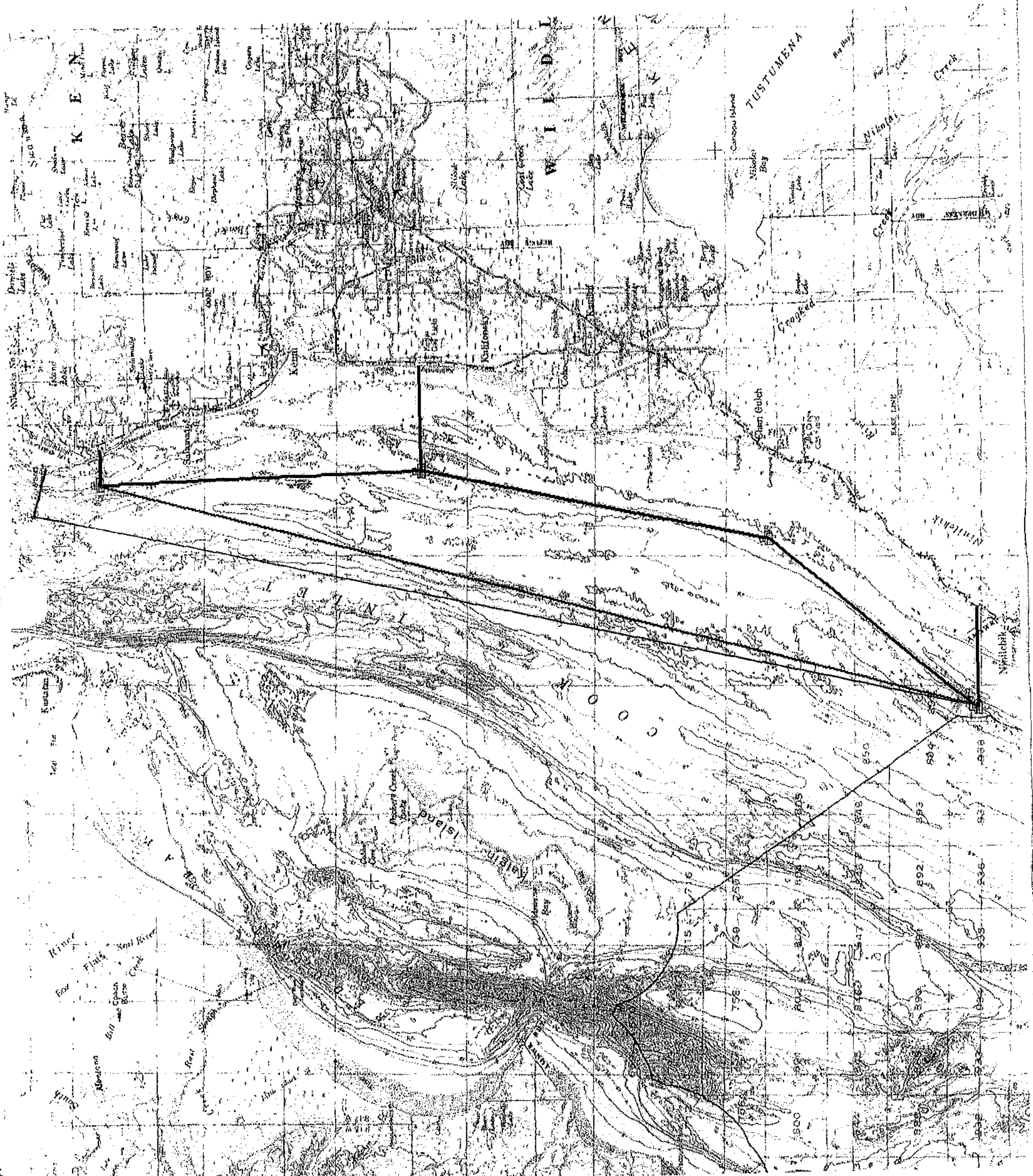
4) **In 2008 and again in 2010(zero) Kings were recorded as harvested at Coho Cove campground.**

Conclusion: To say that Coho Cove is a viable alternative fishing location for Ksilof River shore anglers is very disingenuous. Everyone including ADF&G personnel understand that almost all shore angling opportunity occurs at the Crooked Creek SRS access point.

Submitted By:

Dwight Kramer, KAFC Chairman

RC221



Re Maps

RC 222

1) What is the risk factor based on the DIDSON brood table on escapement at or above 1.5 million of producing yields of less than 1,000,000?

2) What further significant risk to Kenai River Sockeye salmon on exceeding the escapement (SEG) by closing August 7?

3) What is the risk factor on exceeding escapements on the Kasilof River of over 340,000 sockeye to future yield?

4) What is the risk factor on exceeding escapements on the Kasilof River of over 390,000 sockeye on reduced yields?

5) What further significant risk to Kasilof River Sockeye salmon on exceeding the escapement (BEG) by closing August 7?

Questions to the Department.

KPFA

Kenai Peninsula Fishermen's Association
Ensuring the Sustainability of Our Fishery Resources

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RC 223

March 1, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: DOL AN 2009103937

Attention: Chairman Vince Webster

Memorandum from ADOL 11.09 & 02.11;

The Department of Law has the following comments on certain of the proposals to be considered by the Board of Fisheries at its March 2011 meeting on Upper Cook Inlet Finfish regulations.

Proposals to Establish Escapement Goals. A number of proposals deal with escapement goals, and many of these proposals confuse or ignore the roles of the Board and the Department set out in the policies for sustainable management of salmon fisheries and for statewide salmon escapement goals, 5 AAC 39.222 and 39.223. These policies define several types of escapement goals and explain how those goals are established. These include "biological escapement goal (BEG)," "inriver run goal," "optimal escapement goal(OEG)," "sustainable escapement goal (SEG)," and "sustained escapement threshold (SET)." The policy regulations state that all these goals and measurements, with the exception of OEGs and inriver run goals, are established or determined by the Department. The policy regulations state that the Board will only adopt OEGs and inriver run goals. (We do note, however, that the Board established a BEG in the Kenai River Late-Run King Salmon Management Plan, 5 AAC 21.359.)

We recommend that the Board act consistently with its policy regulations when it considers escapement goal proposals. If the Board adopts an OEG, it should, if practicable, estimate the expected differences in yield of any salmon stock relative to maximum sustained yield from implementation of an OEG, consistent with 5 AAC

39.223©(2).[1] If it chooses to specify a BEG or SEG in regulation, it should explain its reasoning and reconcile the inconsistency with the general policies such as by including language that it is acting "notwithstanding anything to the contrary" in the general policies. Also, while the Board and Department are not confined to using the types of escapement goals defined in the policies, it is best to use defined goals to avoid confusion unless the new goal and reasons for using it are explained. Some of the proposals ask the Board to adopt undefined types of escapement goals, as discussed below in comments on specific proposals.

Record making and "costs." It is important that Board members carefully explain on the record the reasons for the Board's actions and the factual and policy grounds on which the actions are based. The Alaska Supreme Court has stressed the importance of a clear record to show that Board actions are within the bounds of statutory authority and are reasonable. The Department of Law encourages Board members to summarize their reasons for each action on the record. Special attention should be given to past practices. If a particular action does not appear consistent with the Board's past action, board members should discuss the reasons for the change.

Fair and reasonable opportunity. Regulations adopted for the purposes set forth in AS 16.05.251(a), consistent with sustained yield and the subsistence law, must also "provide a fair and reasonable opportunity for the taking of fishery resources by personal use, sport and commercial fishermen." That requirement, however, does not prevent the Board from allocating resources among user groups. The Board may make a particular species in a particular area available to one user group without making the same species or area available to another user group. If there is any question as to whether action on a proposal could deprive a user group of a "fair and reasonable opportunity" Board members should discuss this issue and provide their reasoning as to whether the proposal would provide such opportunity.

KPFA suggests that the BOF review these statements and that they utilize them as directives while they develop implementation of OEG's & BEG's. Escapement goals are pivotal policy statements and effect all users for major periods of time. A reasonable approach which requires a thorough debate with fisheries managers, biologists and science.

---

[1] "Optimal escapement goal" is defined in the sustainable salmon fisheries policy as a specific management objective for salmon escapement that (a) considers biological and allocative factors and may differ from the SEG or BEG, (b) may be expressed as a range with the lower bound above the level of sustainable escapement threshold, (c) will be sustainable, and (d) will be adopted as a regulation by the Board. 5 AAC 29.22(f)(25). The policy for statewide salmon escapement goals states that the Board, during its regulatory process, will "review a BEG, SEG, and SET determined by the Department and, with the assistance of the Department, determine the appropriateness of establishing an optimal escapement goal (OEG); the Board will provide an explanation of the reasons for establishing an OEG and provide, to the extent practicable, and with the assistance of the Department, an estimate of expected differences in yield of any salmon stock, relative to maximum sustained yield, resulting from implementation of an OEG." 5 AAC 29.223(c)(2).

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KPFA has submitted several RC's which address the new escapement goals for the Kenai and Kasilof Rivers. We request the BOF members to question on record with clear dialogue with the Department of Fish and Game the validity of the statements and facts submitted by KPFA.

Clearly, it is the combined duty of the Department and the BOF to clearly assess the difference in yields from implementing an OEG over an SEG or BEG. The question is how far away from Maximum Sustained Yield (MSY) is the Board willing to accept and does the board understand that "yield" is directly related to harvestable surpluses.

Without these surpluses there is a diminished expectation for a "reasonable opportunity" for the commercial fishing industry. A direct correlation between maintaining the economic strength of the local commercial fishing industry and maintaining a stable diverse community.

KPFA strongly suggests that the Board members each state clearly their reasons for denying or limiting the "fair and reasonable opportunity" of one group over another. The public has a right to know how each Board member decides how to weigh the interests of one user group over another user group. The public deserves to understand how the individual Board member reasons their decision to deny or diminish access to the resource of one resident over another. The public has a right to hear in a public meeting the decision making process in an honest and open forum.

KPFA does not believe that sufficient dialogue has been presented that would give a high degree of confidence to the public that Board members have sufficient understanding of the principles of escapement dynamics to make reasonable decisions at present. This is not a statement on whether and individual board member has a capacity issue; this is statement that addresses the complexity of the issue.

Under the "rule making" paragraph the Supreme Court has advised that Board actions should be within legal limits and are in fact "reasonable".

It is our firm belief that the Department of Fish and Game will not address the escapement issues without the Board asking them specific, detailed questions. Without this question and answer exchange; a professional debate on escapement dynamics; we do not agree that board at this time has the sufficient knowledge to make fair and reasonable decisions on escapement goals that will ultimately affect state policy for salmon fisheries.

We remain patient,

Paul A. Shadura

Paul A. Shadura II
Executive Director

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RC 22

COMMITTEE A – APPLICATION OF THE 1% RULE

This RC proposes to revise the definition of fishing periods relative to the application of the 1% rule triggering closure of the east side set net fishery in August.

Reference: Proposal 321

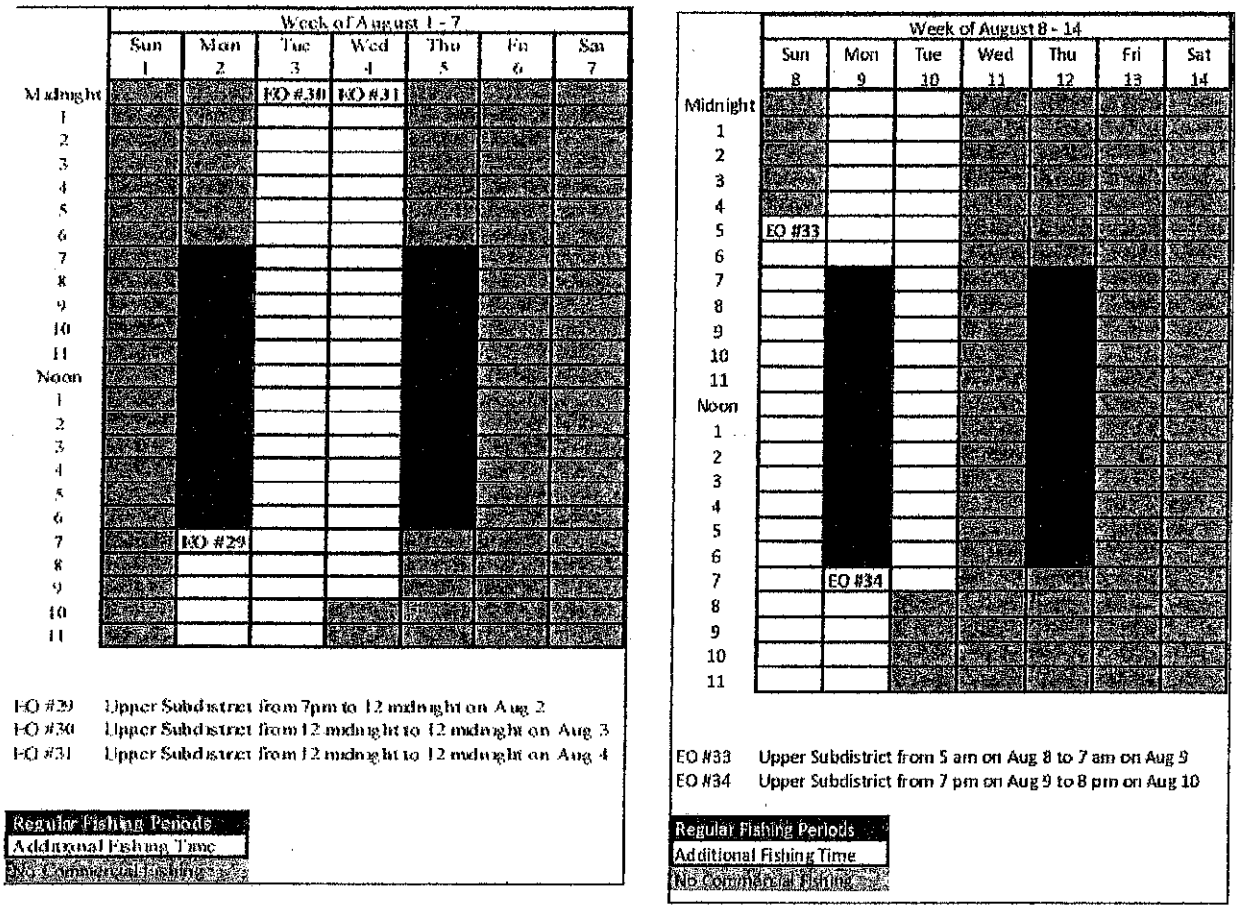
- ✓ Proposal 321 seeks to extend the east side set net season in the Kenai, Kasilof and East Forelands sections in August. Based on this proposal, the Board committee was in consensus to support establishing a Pink Salmon Management Plan for one or two periods between August 11-15 opened by EO based on pink salmon and coho triggers.
- ✓ The substitute language for a pink salmon plan references the **1% rule** which is intended to provide a season closure date when coho impacts of additional openers exceed the benefits of marginal sockeye catches at the tail end of the run.
- ✓ The definition of a fishing period relative to the application of the 1% rule needs to be revised consistent with the Board's original intent when the rule was adopted in 2005.
- ✓ Prior to the adoption of the 1% rule, fishing periods at the end of the season were typically opened for 24 hours or less as needed to access the available coho.
- ✓ Since adoption of the 1% rule, fishing periods at the end of the season have been opened for extended intervals spawning multiple days in order to avoid triggering the 1% closure.

Proposed revision:

5 AAC 21.310. Fishing seasons. (b)(2)(C)(iii) Kenai, Kasilof, and East Forelands Sections: the season will close August 15, unless closed earlier by emergency order after July 31, if the department determines that less than one percent of the season's total sockeye harvest has been taken per fishing period; from August 11 through August 15, the fishery is open for regular periods only; for purposes of this sub-paragraph, "fishing periods" mean a time period open to commercial fishing ~~[WITHOUT CLOSURE]~~ **per calendar day**;

Submitted by: Kenai River Sportfishing Association

Figure 1 – 2010 Example



East Side Set Net Harvest vs. 1% Rule in 2010

Date	Sockeye Harvest (cumulative)	Hours fished (daily)	Sockeye Harvest (daily)	Daily % of cumulative	Hours fished (period	Sockeye Harvest	Period % of cumulative
2 Aug	1,018,962	17	45,615	4.5%	63	79,702	7.6%
3 Aug	1,034,071	24	15,109	1.5%			
4 Aug	1,053,049	22	18,978	1.8%			
5 Aug	1,062,329	12	9,280	0.9%	12	9,280	0.9%
6 Aug	1,062,329	0					
7 Aug	1,062,329	0					
8 Aug	1,071,948	19	9,619	0.9%	63	20,105	1.9%
9 Aug	1,078,921	24	6,973	0.6%			
10 Aug	1,082,434	20	3,513	0.3%			
11 Aug	1,082,434	0					
12 Aug	1,085,799	12	3,365	0.3%	12	3,365	0.3%

- ✓ Season should have closed after Aug 8 under the original intent of the 1% rule.
- ✓ By extending open periods across several days to avoid the 1% trigger, the season was extended through Aug 12.

Submitted by: Kenai River Sportfishing Association

Pre- 1% fishing pattern – no extended openers past 1 day

Table 11. Commercial salmon fishing periods, Upper Cook Inlet, 2002 (page 3 of 3).

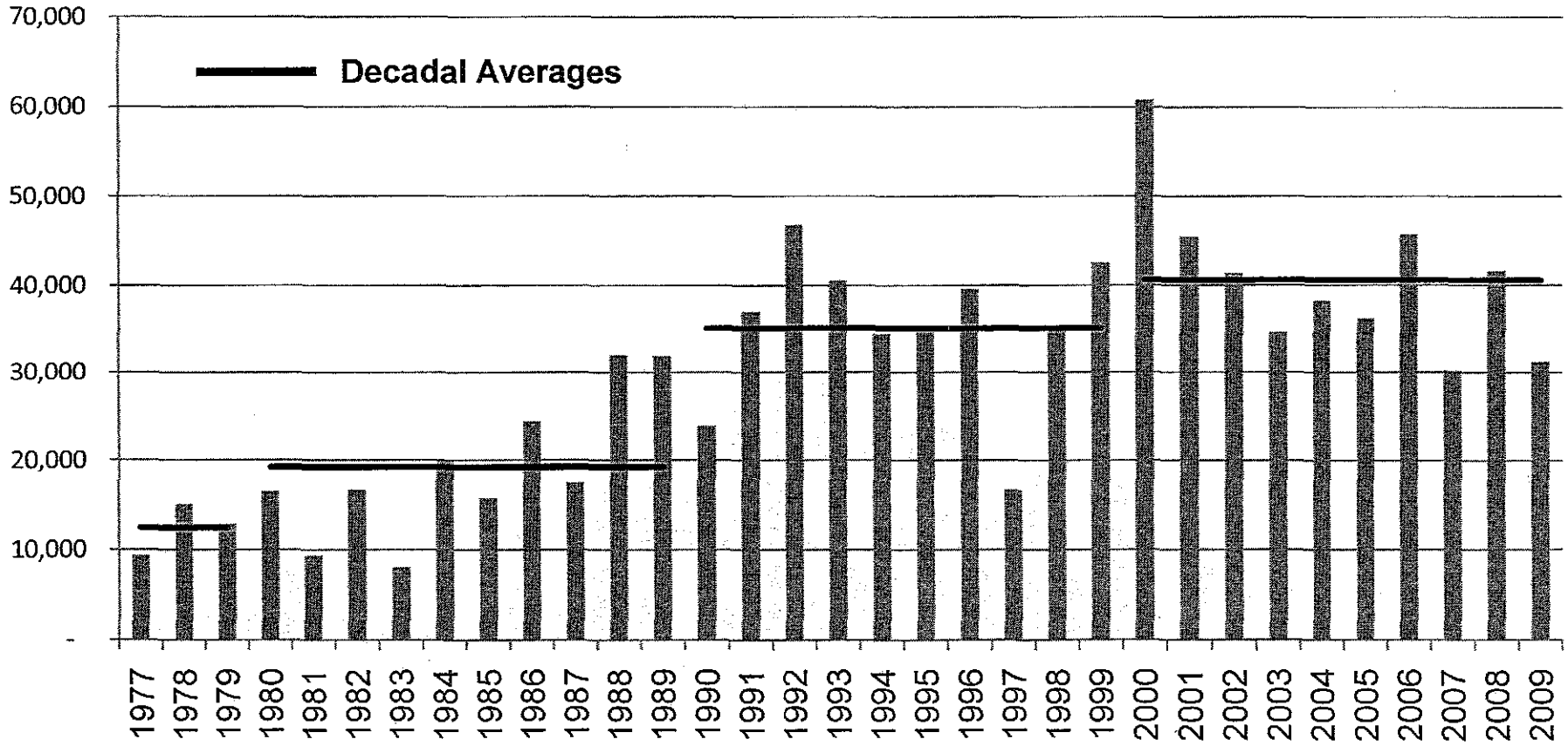
Date	Day	Time	Set Gill Net	Drift Gill Net
26-Jul	Sat	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
27-Jul	Sun	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	Kenai, Kasilof & East Forelands Sections	Kenai & Kasilof Sections
28-Jul	Mon	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0500-2300	All	All except s. of Kalgin and "box" e. of Kalgin
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
29-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
		0800-2000	Kenai, Kasilof & East Forelands Sections	
30-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
		0900-2100	Kenai, Kasilof & East Forelands Sections	
31-Jul	Thu	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All	All
		1900-2300		Kenai & Kasilof Sections
1-Aug	Fri	0000-1700	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
2-Aug	Sat	0500-2300		Kenai & Kasilof Sections
3-Aug	Sun	0500-2300		Kenai & Kasilof Sections
		0600-1800	Kalgin Island Subdistrict	
		0700-2400	Kenai, Kasilof & East Forelands Sections	
4-Aug	Mon	0000-0700	Kenai, Kasilof & East Forelands Sections	
		0500-0700		Kenai & Kasilof Sections
		0700-1900	All [a]	All
		1900-2300		Kenai & Kasilof Sections
5-Aug	Tue	0600-2300		Kenai & Kasilof Sections
6-Aug	Wed	0600-2300		Kenai & Kasilof Sections
7-Aug	Thu	0600-0700		Kenai & Kasilof Sections
		0700-1900	All [a]	All
11-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
14-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	
18-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
21-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	
25-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
28-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	
1-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
4-Sep	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	
8-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
11-Sep	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	
15-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	

[a] Northern District reduced to two set gillnets per permit

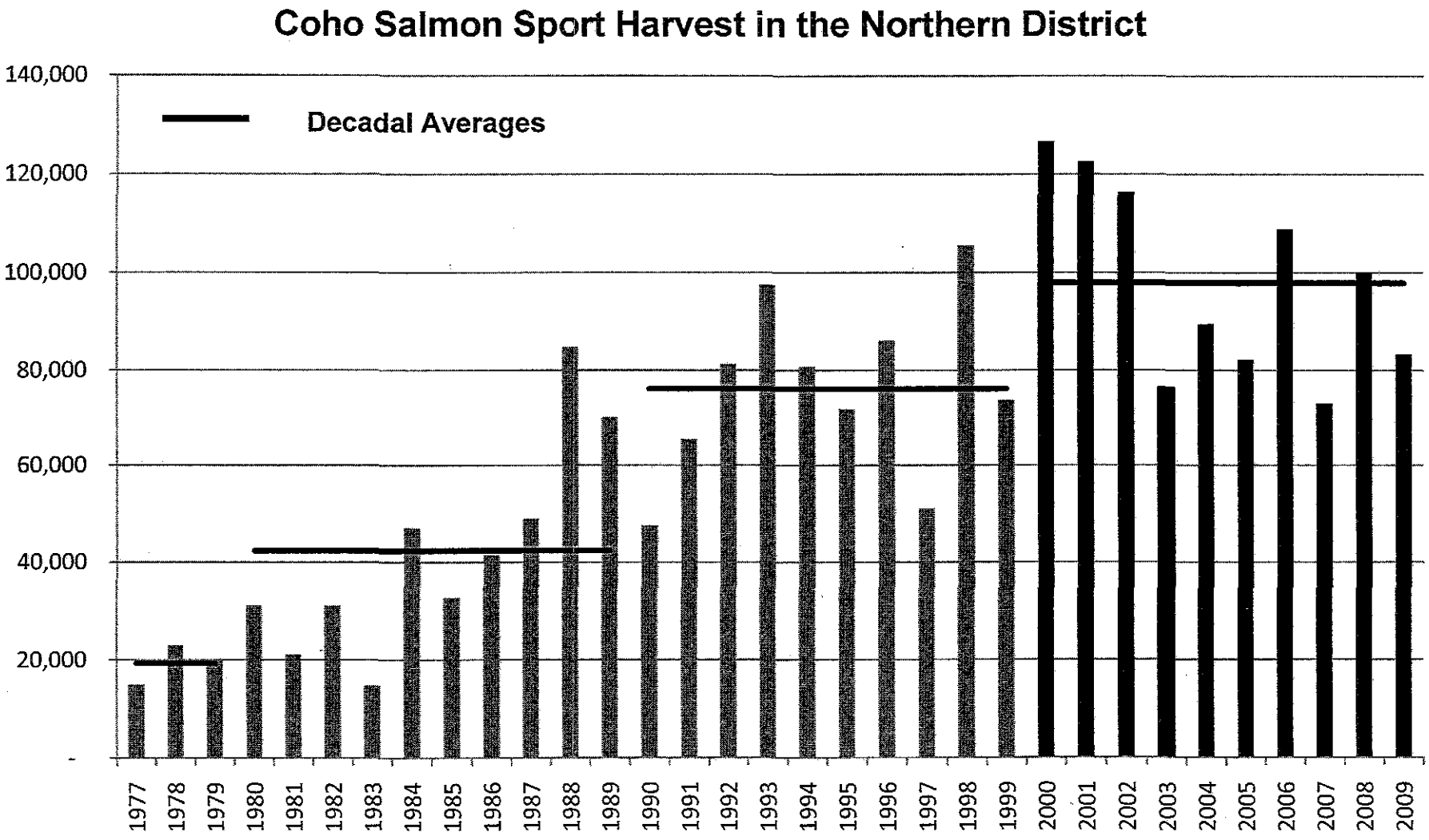
3

RC 225

Coho Salmon Sport Harvest in the Susitna River



CIDA


Coho Salmon Sport Harvest in the Northern District
Decadal Averages
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
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1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009

RC 226

AAC 21.365. Kasilof River Salmon Management Plan

(a) This management plan governs the harvest of Kasilof River salmon excess to spawning escapement needs. It is the intent of the Board of Fisheries that Kasilof River salmon be harvested in the fisheries that have historically harvested them, including the methods, means, times, and locations of those fisheries. Openings in the areas historically fished must be consistent with escapement objectives for upper Cook Inlet salmon and with the Upper Cook Inlet Salmon Management Plan (5 AAC 21.363) .

(b) Achieving the lower end of the Kenai River sockeye salmon escapement goal shall take priority over not exceeding the upper end of the Kasilof River optimal escapement goal range of 150,000 to 300,000 sockeye salmon.

(c) The commercial set gillnet fishery in the Kasilof Section shall be managed as follows:

(1) fishing will be opened as described in 5 AAC 21.310(b) (2) for regular weekly fishing periods, as specified in 5 AAC 21.320;

(2) from the beginning of the fishing season through July 7,

(A) the commissioner may, by emergency order, open additional fishing periods or extend regular weekly fishing periods to a maximum of 48 hours of additional fishing time per week;

(B) the fishery shall remain closed for at least one continuous 36-hour period per week to begin between 7:00 p.m. Thursday and 7:00 a.m. Friday;

(3) beginning July 8, the set gillnet fishery in the Kasilof Section will be managed as specified in 5 AAC 21.360(c) ; in addition to the provisions of 5 AAC 21.360(c) , the commissioner may, by emergency order, limit fishing during the regular weekly periods and any extra fishing periods to those waters within one-half mile of shore, if the set gillnet fishery in the Kenai and East Forelands Sections are not open for the fishing period;

(4) after July 15, if the department determines that the Kenai River late-run sockeye salmon run strength is projected to be less than two million fish and the 300,000 optimal escapement goal for the Kasilof River sockeye salmon may be exceeded, the commissioner may, by emergency order, open fishing for an additional 24-hours per week in the Kasilof Section within one-half mile of shore and as specified in 5 AAC 21.360(c) .

(d) The personal use fishery will be managed as specified in 5 AAC 77.540(b) and (c).

Submitted by ADF&G

(e) Repealed 6/4/2008.

(f) **after July 8, if the Kasilof Section set gillnet fishery is restricted to fishing within the first one half mile of shore, the commissioner may open, by emergency order, the Kasilof River Special Harvest Area to set and drift gillnetting for fishing periods not to exceed 48 hours in duration without one period of 24 consecutive hours of closure.**

(1) The commissioner may, by emergency order, open the Kasilof River Special Harvest Area (KRSHA) to the taking of salmon by gillnets when it is projected that the Kasilof River sockeye salmon escapement will exceed 275,000 fish. It is the intent of the Board of Fisheries (board) that the KRSHA should rarely, if ever, be opened under this subsection and only for conservation reasons. Before the commissioner opens the KRSHA, it is the board's intent that additional fishing time be allowed in the remainder of the Kasilof Section first, and secondly that the mandatory closures specified in regulation be reduced in duration, if necessary to meet the escapement goals contained within this and other management plans. The Kasilof River Special Harvest Area is defined as those waters within one and one-half miles of the navigational light located on the south bank of the Kasilof River, excluding waters of the Kasilof River upstream of ADF&G regulatory markers located near the terminus of the river and waters open to set gillnetting under 5 AAC 21.330(b) (3)(C)(ii) and (iii). The following apply within the special harvest area when it is open:

(1) set gillnets may be operated only within 600 feet of the mean high tide mark;

(2) a set gillnet may not exceed 35 fathoms in length;

(3) drift gillnets may not be operated in waters within 600 feet of the mean high tide mark;

(4) no more than 50 fathoms of drift gillnet may be used to take salmon;

(5) a permit holder may not use more than one gillnet to take salmon at any time;

(6) a person may not operate a gillnet outside the special harvest area when operating a gillnet in the special harvest area;

(7) there is no minimum distance between gear, except that a gillnet may not be set or operated within 600 feet of a set gillnet located outside of the special harvest area; and

(8) a vessel may not have more than 150 fathoms of drift gillnet or 105 fathoms of set gillnet on board.

(g) The commissioner may depart from the provisions of the management plan under this section as provided in 5 AAC 21.363(e) .

(h) For the purposes of this section, "week" means a calendar week, a period of seven consecutive days beginning at 12:01 a.m. Sunday and ending at 12:00 midnight the following Saturday.

History: Eff. 4/18/86, Register 98; am 6/22/2002, Register 162; am 7/3/2002, Register 163; am 9/28/2002, Register 163; em am 7/20/2004 - 11/16/2004, Register 171; am 2/13/2005, Register 173; am 6/11/2005, Register 174; am 10/1/2006, Register 179; am 6/4/2008, Register 186

Authority: AS 16.05.060

AS 16.05.251

RC 227

Amended Proposal # 147

This amended proposal identifies two changes in the Kenai Late-Run sockeye plan.

1. Numbers need to be corrected for the Didson conversion(Reference KRSA RC 151 and RC 218).
2. Expand the 24-hour window to 36 hours and fix on Tuesdays to ensure delivery of kings to the Kenai and address the continuing inequity in king allocation. (Commercial harvest share continues to approach or exceed 50% despite the sport fish priority.)

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

(a) The department shall manage the Kenai River late-run sockeye salmon stocks primarily for commercial uses based on abundance. The department shall also manage the commercial fisheries to minimize the harvest of Northern District coho, late-run Kenai River king, and Kenai River coho salmon stocks to provide personal use, sport, and guided sport fishermen with a reasonable opportunity to harvest salmon resources.

(b) 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] XXX,XXX – XXX,XXX 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;

(c) Based on preseason forecasts and inseason evaluations of the total Kenai River late-run sockeye salmon return during the fishing season, the run will be managed as follows:

(1) at run strengths of less than 2,000,000 sockeye salmon,

(A) the department shall manage for an inriver goal range of [550,000 – 850,000] XXX,XXX – XXX,XXX sockeye salmon past the sonar counter at river mile 19; and

(B) subject to the provisions of other management plans, the Upper Subdistrict set gillnet fishery will fish regular weekly fishing periods, as specified in 5 AAC 21.320, through July 20, unless the department determines that the minimum inriver goal will not be met, at which time the fishery shall be closed or restricted as necessary; the commissioner may, by emergency order, allow extra fishing periods of no more than 24-hours per week, except as provided in 5 AAC 21.365;

(2) at run strengths of 2,000,000 to 4,000,000 sockeye salmon,

(A) the department shall manage for an inriver goal range of [750,000 – 950,000] XXX,XXX – XXX,XXX sockeye salmon past the sonar counter at river mile 19;

(B) subject to the provisions of other management plans, the Upper Subdistrict set gillnet fishery will fish regular weekly fishing periods, as specified in 5 AAC 21.320, through July 20, or until the department makes a determination of run strength, whichever occurs first; if the department determines that the minimum inriver goal will not be met, the fishery shall be closed or restricted as necessary; the commissioner may, by emergency order, allow extra fishing periods of no more than 51-hours per week, except as provided in 5 AAC 21.365; and

Submitted by: Kenai River Sportfishing Association

(C) the Upper Subdistrict set gillnet fishery will be closed for one [two] continuous 36-hour period[s] per week beginning between [7:0 0pm Monday and 7:0 0am Tuesday,] and 7:00 p.m. Thursday and 7:00 a.m. Friday and for an additional 24-hour period during the same management week;

(3) at run strengths greater than 4,000,000 sockeye salmon,

(A) the department shall manage for an inriver goal range of [[redacted]] [redacted] sockeye salmon past the sonar counter at river mile 19;

(B) subject to the provisions of other management plans, the Upper Subdistrict set gillnet fishery will fish regular weekly fishing periods, as specified in 5 AAC 21.320, through July 20, or until the department makes a determination of run strength, whichever occurs first; if the department determines that the minimum inriver goal will not be met, the fishery shall be closed or restricted as necessary; the commissioner may, by emergency order, allow extra fishing periods of no more than 84-hours per week, except as provided in 5 AAC 21.365; and

(C) the Upper Subdistrict set gillnet fishery will be closed for one continuous 36-hour period per week, beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday.

(d) The sonar count levels established in this section may be lowered by the board if noncommercial fishing, after consideration of mitigation efforts, results in a net loss of riparian habitat on the Kenai River. The department will, to the extent practicable, conduct habitat assessments on a schedule that conforms to the Board of Fisheries (board) triennial meeting cycle. If the assessments demonstrate a net loss of riparian habitat caused by noncommercial fishermen, the department is requested to report those findings to the board and submit proposals to the board for appropriate modification of the Kenai River late-run sockeye salmon inriver goal.

(e) Repealed 6/11/2005.

(f) Repealed 6/11/2005.

(g) 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 as specified in 5 AAC 77.540.

(h) 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:

(1) fishing will occur seven days per week, 24 hours per day;

(2) 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

(3) if the projected inriver run of sockeye salmon above the Kenai River sonar counter located at river mile 19 is less than [redacted] [[redacted]] 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.

(i) For the purposes of this section, "week" means a calendar week, a period of time beginning at 12:00:01 a.m. Sunday and ending at 12:00 midnight the following Saturday.

(j) The commissioner may depart from the provisions of the management plan under this section as provided in 5 AAC21.363(e).

RC 228

Kenai Sonar Conversion

- ✓ **An allocatively neutral conversion from Bendix to Didson would result in these numbers.**
- ✓ **In-river goal numbers were calculated by the simple 1.4x conversion of the old tiers.**

Goal	Bendix Run (millions)	Old Bendix Numbers Lower	Old Bendix Numbers Upper	Didson Run (millions)	RC 151 Didson equivalent Lower	RC 151 Didson equivalent Upper
SEG	--	500,000	800,000		700,000[a]	1,200,000[a]
OEG	--	500,000	1,000,000		750,000	1,500,000
In-river	< 2	650,000	850,000	<2.3	920,000	1,210,000
	2-4	750,000	950,000	2.3 – 4.6	1,060,000	1,350,000
	> 4	850,000	1,100,000	>4.6	1,210,000	1,560,000

[a] *ADFG revision of SEG based on updated stock-recruitment analysis using Didson-corrected brood tables.*

Submitted by: Kenai River Sportfishing Association

RC 229

Submitted by Karl Johnstone for proposal 147:

Option 1:

During runs of 2-4 million sockeye there will be two set closed fishery windows of 36 hours, and the 24 hour floating window is deleted;

Option 2:

During runs of 2-4 million sockeye the 24 hour floating period will be a fixed date on Tuesdays;

RC230

Amended Proposal #147

Portions of the original proposal withdrawn include:

- Revisions to priority language
- Limitations on EO authority based on 48 hour projections
- End of season triggers.

Portions remaining include:

- Expansion of the 24-hour window to 36 hours and fixing it on Tuesdays.
- Amend upper limit OEG

Submitted by: Kenai River Sportfishing Association

Clarification of Inriver Goals **RC 231**

Board has adopted SEG, OEG and sport allocation of 200,000 sockeye above the sonar.

SEG	700,000	1,200,000
OEG	700,000	1,400,000
Sport Allocation	200,000	
Proposed in-river Goals:		
<2.3 Million	**900,000**	**1,150,000**
2.3 to 4.6 Million	**1,000,000**	**1,250,000**
> 4.6 Million	**1,100,000**	**1,400,000**

Submitted by KRSA.

Eklutna Tailrace / Knik River King Salmon Fishery Proposal 279 RC232
Committee G

We supply the following facts for the Board's consideration on Proposal 279:

The Eklutna Tailreace / Knik River king salmon fishery was created by ADF&G to harvest king salmon stocked by the Department at this location. ADF&G's Harvest survey catches from this 8 year old fishery start in 2003.

In addition to the significant cost of providing hatchery fish for this location, ADF&G spent a considerable sum of the public's money upgrading the access road, improving and greatly expanding the parking area, providing handicapped access, and installing a footbridge over the tailrace since hatchery king salmon started returning to this location.

ADF&G goals for the stocked king salmon fishery are to provide annual returns of 4000 king salmon, generating an additional 10,000 days of angler effort per year.

According to the Department, all of the stocked hatchery king salmon have been thermally marked and held long enough, before release, to imprint on water released into the tailrace outflow.

Since 2003 annual harvests of king salmon from the Eklutna Tailrace / Knik River sport fishery as estimated by the statewide angler harvest survey have been:

2003 -- 399
2004 -- 23
2005 -- 941
2006 -- 484
2007 -- 1084
2008 -- 594
2009 -- 499

In response to a similar proposal, and following ADF&G's suggestion to expand the fishery in a more conservative manner, the Board of Fisheries expanded the area currently open to king salmon fishing at the 2008 Upper Cook Inlet meeting. The expansion extended open waters approximately 1 1/2 miles downstream on the Knik River from the previously opened section of water.

ADF&G king salmon harvest numbers since the open area was expanded have been 594 and 499 king salmon respectively. Survey results from 2010 season are not yet available.

Note the average annual king salmon harvest number within the fishery for the entire 7 years ADF&G has records is 575 king salmon -- therefore, the 2008 expansion of the area open to king salmon fishing seems to have had little, if any, effect on overall annual king salmon harvest from this fishery, while providing anglers a larger area in which to spread out and enjoy the fishery.

ADF&G has concerns with the potential number of wild Matanuska River and Knik River drainage king salmon which may be harvested if the current area open to king salmon fishing was extended either to the Glenn Highway bridge (as proposed) or to an alternate smaller area bounded by the Alaska Railroad bridge. ADF&G currently has no data measuring how the proposed area expansion could change the harvest component of either stocked or wild king salmon.

Why might the proposed area expansion further maximize benefit from the stocked king salmon fishery, while providing minimal impact on wild king salmon stocks?

1. Stocked king salmon have been imprinted on water passing through the tailrace and flowing down a Knik River side channel and into the main river. It is believed by anglers experienced in this fishery, that the hatchery salmon may mill in the deep water down stream of the side channel before continuing their journey upstream. This would follow a similar hatchery fish behavior and angler harvesting pattern as has occurred for over 20 years below Willow Creek on the Sustina River and also below Crooked Creek on the Kasilof River. Note both of these fisheries extend considerably longer distances downstream along river main stems than Proposal 279 would allow.

2. While wild salmon may swim through this same river section, since they were not imprinted to home in on water out flowing from the tailrace, they would likely spend considerably less time here, as they journey upriver toward their spawning tributaries.

Proposals to maximize benefit from this fishery by increasing the area open to harvesting king salmon will likely continue to come before the Board, but ADF&G will have no new data showing the potential number of stocked and wild king salmon which may be harvested in the suggested area -- unless something is done.

At the very least, we suggest that a test or educational fishery fishery be conducted in this area. A small number (determined by either ADF&G or the Board) of permitted anglers could be allowed to fish the proposed area with all harvested king salmon taken to an ADF&G office (within 24 hours) to sample for the presence of a hatchery thermal mark. When 10 nonthermal marked (wild) king salmon had been harvested, ADF&G could close the permitted king season in the proposed area for the remainder of the year. Providing such a fishery would allow ADF&G to gain needed information at little cost to the Department, while at the same time providing economic benefit to the area. Impact to wild king salmon would be minimal. The fishery could sunset after 3 years in absence of Board action. ADF&G and future Board members world gain the needed data upon which to base future informed decisions.

Andrew Couch, Matanuska Valley AC

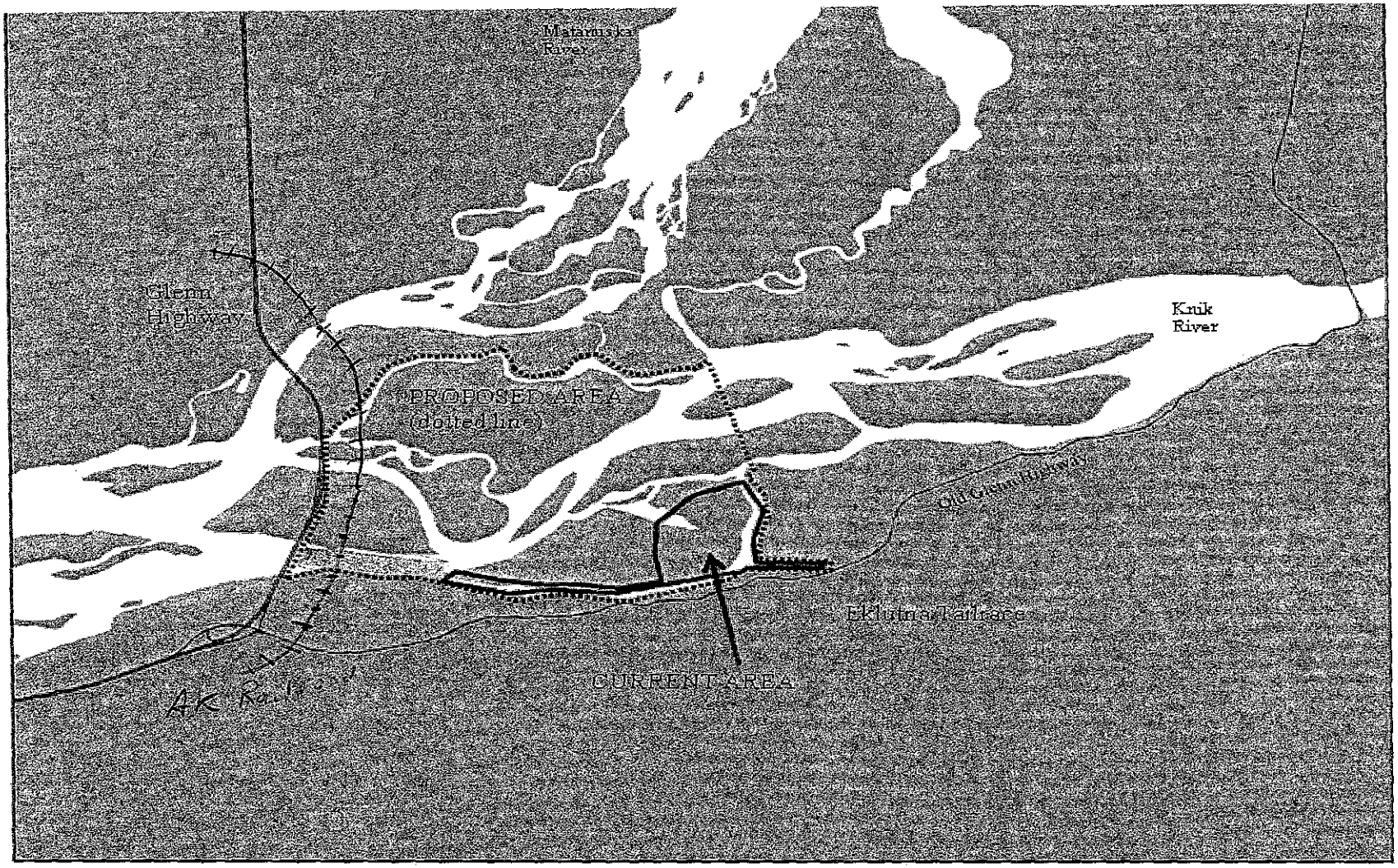


Figure 279-1. Proposed extension of the Eklutna Tailrace terminal king salmon fishery.

Yellow is Proposer's real area for expansion - test fishery.

Proposed changes to inriver goal and OEG's for Kenai and Kasilof sockeye salmon

Kenai late-run sockeye salmon escapement goals

Bendix Units

		Inriver Goal	
Tier		Lower	Upper
<2,000,000		650,000	850,000
2,000,000	4,000,000	750,000	950,000
>4,000,000		850,000	1,100,000
SEG		500,000	800,000
OEG		500,000	1,000,000

Didson Units

		Inriver Goal	
Tier		Lower[a]	Upper
<2,300,000		900,000	1,100,000
2,300,000	4,600,000	1,000,000	1,200,000
>4,600,000		1,100,000	1,350,000
SEG		700,000	1,200,000
OEG[b]		700,000	1,400,000

[a] BOF action added 50,000 to the inriver allocation of 150,000 in the lower tier.

[b] Upper OEG is 200,000 fish greater than the upper SEG.

Kasilof sockeye salmon escapement goals

Bendix Units

Goal	Lower	Upper
BEG	150,000	250,000
OEG	150,000	300,000

Didson Units

Goal	Lower	Upper
BEG	160,000	340,000
OEG[a]	160,000	390,000

[a] Add 50,000 to upper BEG.

SOUTH K BEACH INDEPENDENT

RC 234

FISHERMEN'S ASSOCIATION

P.O. Box 1632 Kenai, Alaska 99611-1632 (907) 283-5098

Protecting and Preserving the Kasilof River Aquarian System

March 1, 2011

Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RE: Proposals 109,105,106 and 167

Attention: Chairman Vince Webster

SOKI is adamantly opposed to opening 244-32 earlier then what is proscribed in current regulation.

- *If the entire 244-32 district is open there is a possible potential off adding 62% more nets then are currently fishing in 244-31.*
- *If you fish only within 600ft you will be adding a potential increase of 59% more beach nets that are presently fishing on K-Beach.*
- *According to Table 107- 2 an average of 400 kings are harvested in the South K-Bch district within close proximity to the Kasilof River, some destined for this river prior to July 8th.*
- *Department comments acknowledge an average of 400 kings for this area from data 13 years ago, an arbitrary number of 200 was used as an estimate, about 50% of average, leaving a potential range of 200 – 400 potential harvest of king salmon.*
- *The North K-Beach area targets more Kenai bound sockeye and typically will harvest more sockeye per permit then South K-Beach in less available fishing days.*
- *Nets closer to the Kenai harvest more Kenai bound salmon.*
- *Minimum escapement goals will take longer to be reached restricting other districts from potential EO fishing time or be subjected to earlier closures.*
- *South K-Beach is open from June 25th for the directed Kasilof bound sockeye, not for Kenai bound stocks.*
- *This area shows the least concentration of any other stocks other then Kasilof sockeye by all genetic reports.*
- *South K-Beach must wait for the Kenai River to reach its minimum goal before it can harvest surplus Kasilof bound sockeye. The Kenai and Kasilof plans mandate that the Kasilof River escapement can exceed the BEG/MSY so that the Kenai River will reach its minimum SEG.*

The board already has taken action to place in to restriction for the entire Kenai and Kasilof sub districts a static 24 hour closure on Tuesdays for the sole purpose of letting King salmon escape into the Kenai River. This time of year sockeye escapements into the Kenai is fairly slow.

The amended language does not include the Salamantof or East Forelands districts as the over arching set net organization supported. In fact the proposals that the organization put forward in this issue have already been rejected by this BOF.

SOKI does believe some time consideration may be warranted and believes that by opening on the 7th of each July that this will maintain the same intent as the original reason for offsetting opening dates. This date will save this district three days of fishing on some years and allow them to fish on the first open period this year (2011).

We are concerned about the current management plan that specifies until July 8th that 244-31 will remain in the Kasilof management plan; we want to make sure that any change in time and area for 244-32 will not change the current Kasilof management plan language that applies to the Kasilof sub-district.

Thank you,

Paul A. Shadura II
SOKI member family cooperative

Proposal 105

RC 235

Members of the Alaska Board of Fish,

We are submitting documents that refute some of the allegations in RC 207. Genetic data from the 2005 -2008 (page 109), and the 2009 genetic report (page 52) illustrate Kasilof Sockeye harvest on North K-Beach. Some years the percentage of harvest exceeds 50%. The burden of allocation falls heavily on this sub-section, due to windows, the growing personal use fishery, and the increase of Kenai River goals for in-river sport needs. We are looking for some reasonable opportunity to regain lost harvest opportunity of Kasilof sockeye.

Thank you-Gary Hollier and Greg Johnson

ALASKA BOARD OF FISHERIES

Chairmen Webster and Board Members **PROPOSAL 105**

With respect to proposal 105 those setnet fisherman north of the Blanchard traditionally and historically began fishing on the first regular on or after June 25th. Subsequent to that the opening date was moved to on or after July 1 for all setnetters on the Eastside. This was done obstencibly to save King Harvest bound for the Kenai – even though the saving were minimal. At a later BOF meeting the opening date was revisited again to minimize King harvest, after much deliberation the then BOF moved the opening date in the Kenai Section to on or after July 8th(8th-11th)

Historically , remember we began June 25th now July 8th or as late as the 11th ... a minimum reduction of 13 to 16 days. The Board may reference RC 47 and RC 116 that will reinforce that the above Blanchard line Setnetters(North K-Beach) opportunity was eliminated in time and our forgone opportunity has simply been "Transferred" to the lower beach (South K-Beach) The Cost Savings" That have been supported by the Sports Lobby , simply never materialized. So in reality early Upper K-Beach harvest was eliminated for no real biological reason ... as is supported by this RC and RC 47.

We, the Upper K-Beach fisherman shared in what now is referred to as a "Traditional Fishery", our catch was reallocated to the Lower Beach. Should the Board seriously consider our Proposals it would simply be returning the harvest opportunity to the original harvesters. The lower beaches were not the original harvesters so in reality this isn't "taking" their opportunity it is simply returning the harvest to the traditional users as it was historically done for nearly 100 years.

- Three Step Down Options were provided in RC – 116 In the hope of some consideration of these proposals a 4TH option would be.

---------- Start date of JULY 4TH ---------

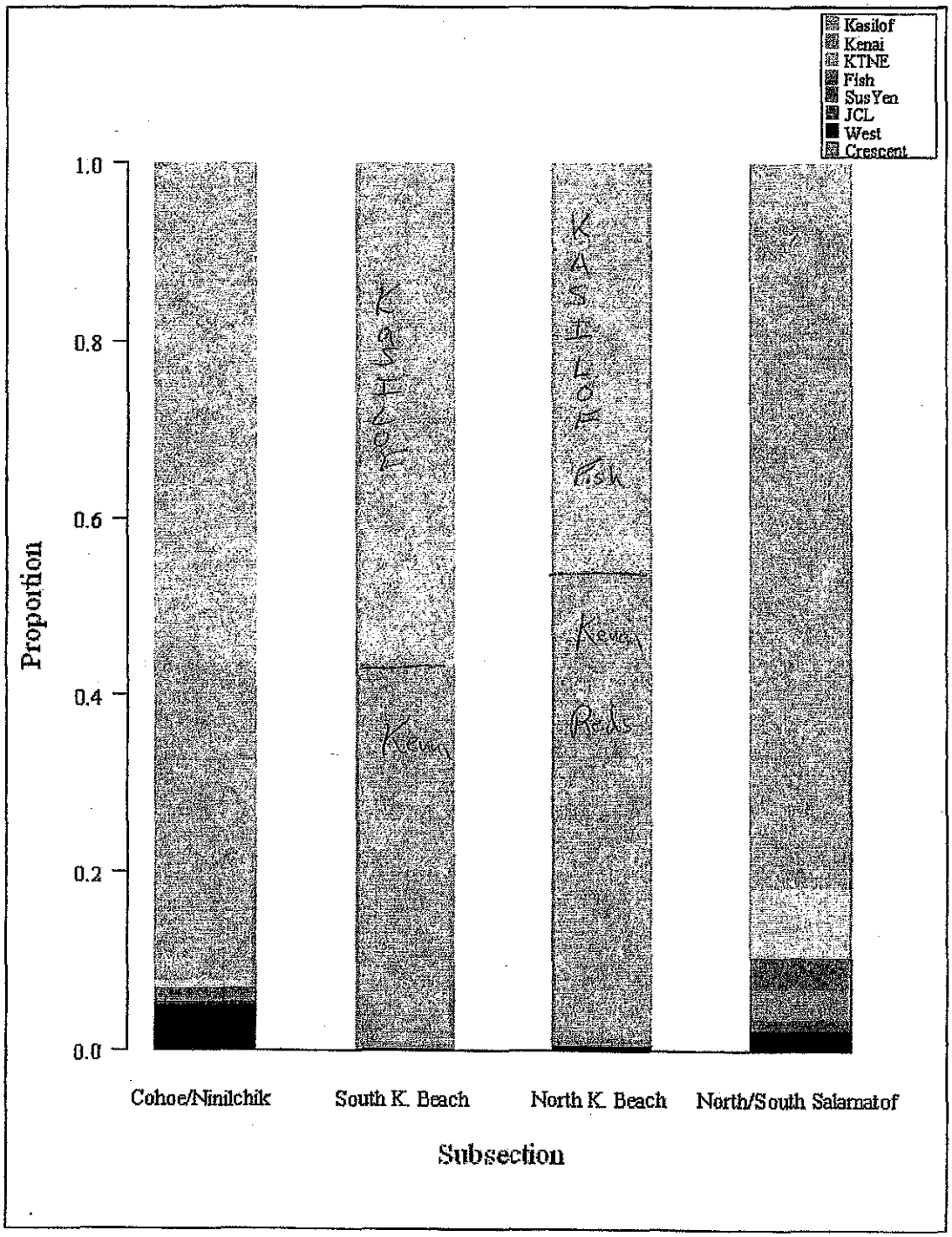
<u>1999 -2010 average</u>

North K Beach – 132,668 Sockeye Average days fished- 12

South K Beach - 250,656 Sockeye Average days fished- 24

A) SKB June 25-July 7 60,272 Sockeye
B) SKB July 1 –July 7 30,492 sockeye

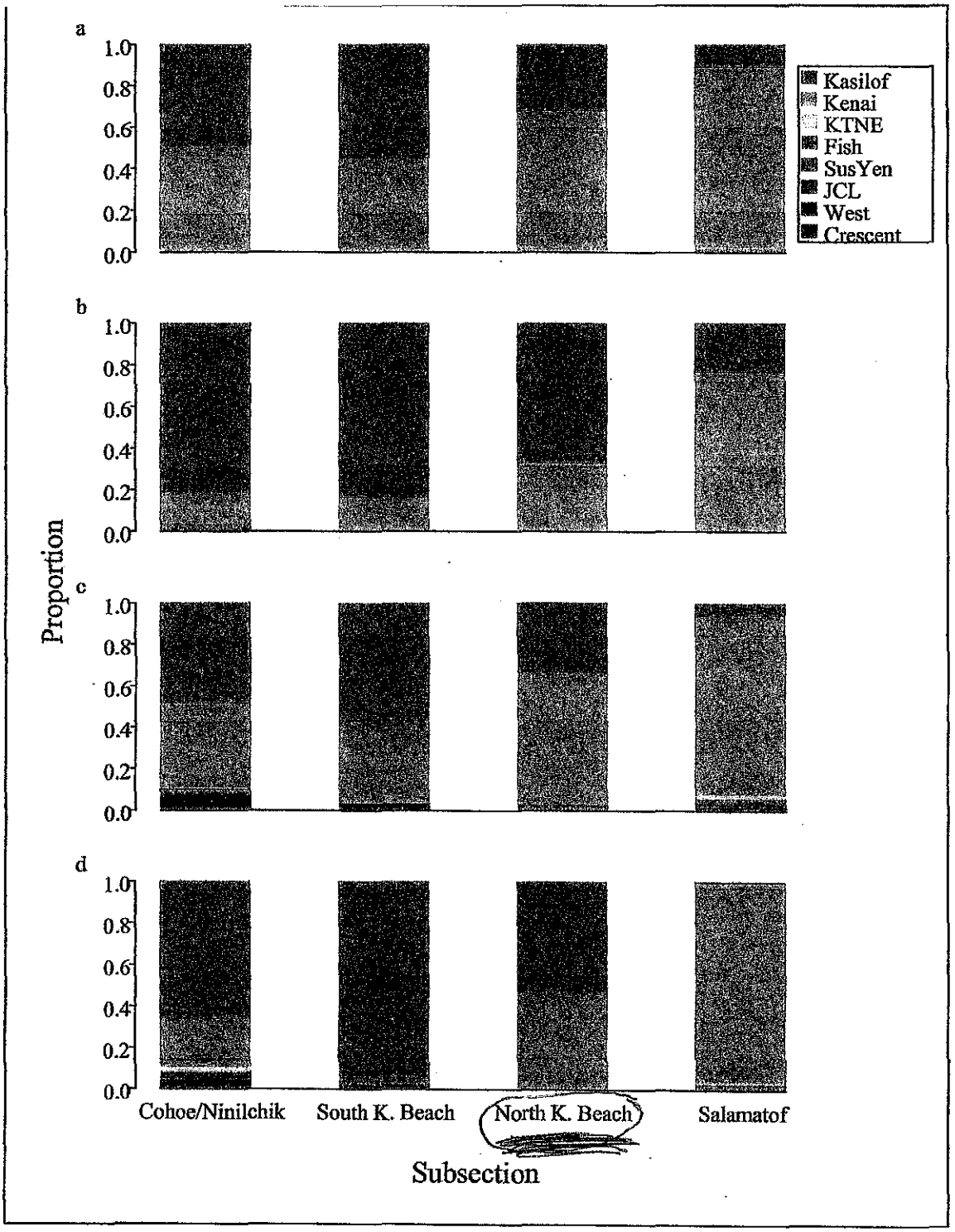
Ken Coleman North K-Beach Fisherman Since 1969



Note: There are 2 subdistricts for each section and they are displayed from south to north.

Figure 6.–Stock composition estimates for the Kasilof and Kenai/EF sections set gillnet fisheries (Central District, Upper Subdistrict) divided into subsections from 2009.

In 2009 close to 50% of the North-K-Beach harvest was comprised of Kasilof Sockeye.



2005

2006

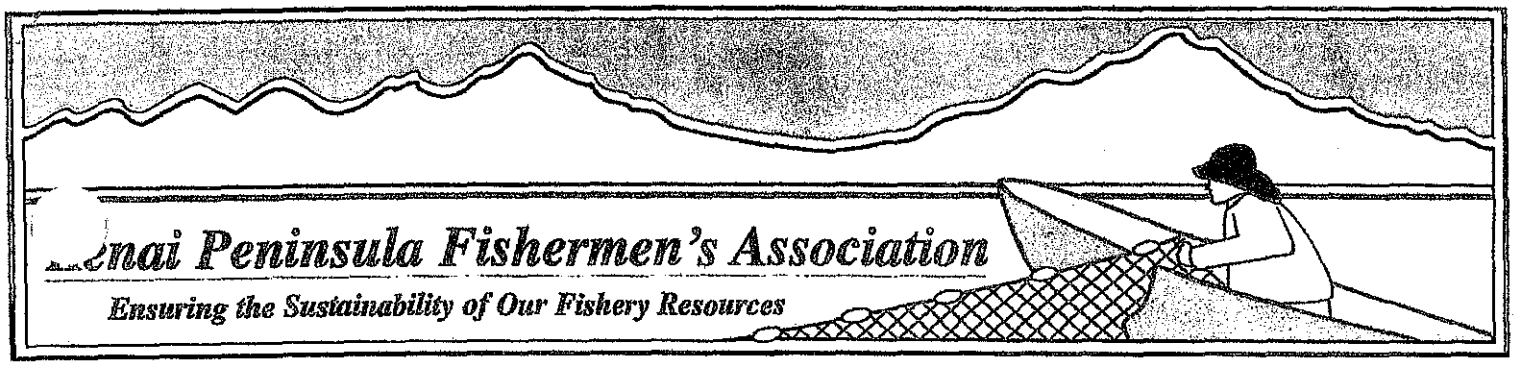
2007

2008

Note: There are 2 subdistricts for each section and they are displayed from south to north.

Figure 10.–Stock composition estimates for the Kasilof and Kenai Section set gillnet fisheries (Central District, East Side Subdistrict) divided into subsection from a) 2005, b) 2006, c) 2007, and d) 2008.

In 2006 and 2008, 50% or higher of Kasilof sockeye, where harvested in the North K-Beach sections



43961 Kalifornsky Beach Road • Suite F • Soldotna, Alaska 99669-8276
(907) 262-2492 • Fax: (907) 262-2898 • E Mail: kpfa@alaska.net

Dear Chairman Webster and Members of the Board of Fish,

Kenai Peninsula Fisherman's Association, Board of Directors, who are made up of a cross section of East Side Setnetters, oppose RC 207. They unanimously support proposal 105 or 167, in some form, which would open North Kalifonsky Beach (244-32) with an opening date of July 1.

KPFA President

Rob Williams

Substitute language for proposal 109:

5 AAC 21.310. Fishing Seasons. (b)(2)(C) is amended by adding a new sub-subparagraph to read:

(b) Salmon may be taken only as follows:

...

(2) Central District, for set gillnet:

....

(C) Upper Subdistrict:

....

(iv) south of the mouth of the Kenai River and the Kasilof Section (244-32) from July 4 through August 15 with one 35 fathom set gillnet;

Submitted by Mel Morris BOF

RC 237

Submitted by Karl Johnstone BOF

Substitute language for proposal 172:

Whereas the term "Personal Use" is defined in regulation and Title 16 of the Alaska Statutes, and

Whereas the definition in regulation is more restrictive than in statute, and

Whereas the Board of Fish may not re-define the term "Personal Use" statewide at this meeting because of lack of proper notice,

Now therefore the Board of Fisheries delegates to the Commissioner of Fish and Game the authority to repeal the term "Personal Use" in regulation.

Signed_____

Date:_____

Board Generated Proposal G

5 AAC 21.310(b)(2)(C)(iii) is amended to read:

(iii) Kenai, Kasilof, and East Forelands Sections: the season will close August 15, unless closed earlier by emergency order after July 31, if the department determines that less than one percent of the season's total sockeye harvest has been taken per fishing period; from August 11 through August 15, the fishery is open for regular periods only; for purposes of this sub-subparagraph "fishing period" means a time period open to commercial fishing **not to exceed 24-hours** [WITHOUT CLOSURE].

RC 239

KENAI AREA FISHERMAN'S COALITION

Issue: Proposal 247 – Drift Boat Monday Motorized Exception to Exit the Kenai River Fishery

Amendment: The purpose of this amendment is to define an acceptable drift boat motor option to make the lower 8 RM more accessible to drift boat users and allow them the capacity to exit the river more safely. This wording is similar to the methodology used as an acceptable practice that has worked well on the Kasilof River.

Language:

Original – Under the heading: "Drift-only Mondays downstream of Skilak Lake" change to read: Downstream of Skilak Lake no one may fish from a motorized vessel on Mondays (except Memorial Day) during May, June and July. **Except on drift boat only days motors may be used downstream of Cunningham Park (approx. RM 6.6) for downstream navigation only after fishing from the boat has stopped for that trip.** (FOR THE PURPOSE OF THIS REGULATION, A MOTORIZED VESSEL IS ONE THAT HAS A MOTOR ON BOARD)

New: Under the heading: "Drift-only Mondays downstream of Skilak Lake" change to read: Downstream of Skilak Lake no one may fish from a motorized vessel on Mondays (except Memorial Day) during May, June and July. **Except on drift boat only days drift boats with a single motor** on board **~~attached~~ of 10hp or less may be used downstream of Cunningham Park (approx. RM 6.6) for downstream navigation only after fishing from the boat has stopped for that trip.**

Note: We believe this proposal change is consistent with current regulations on the Kasilof River. Therefore, this proposal supersedes our previously submitted RC 199.

Dwight Kramer
KAFC - Chairman