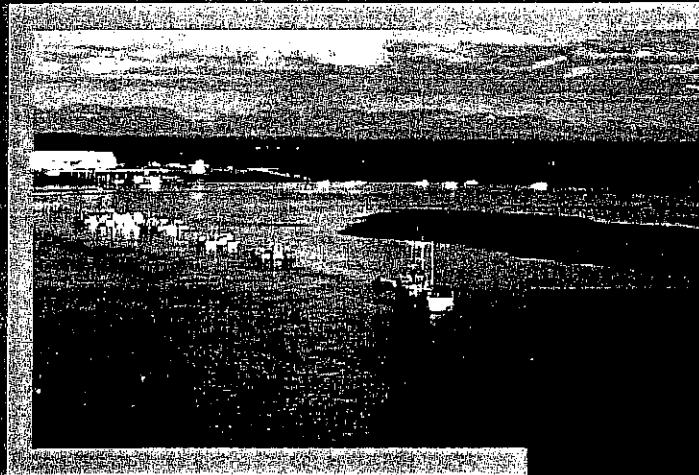
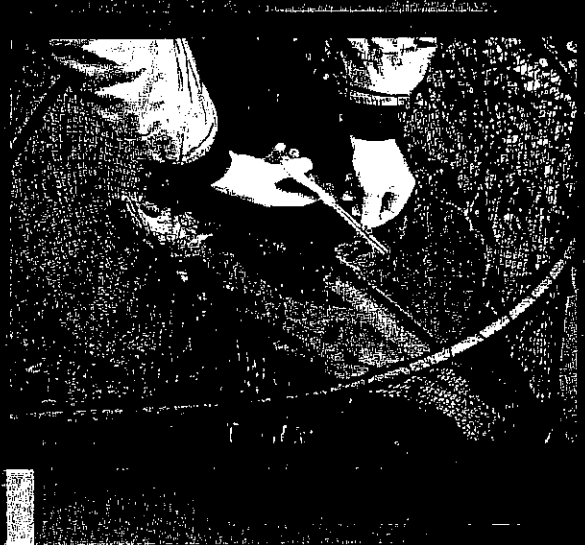


2008 Upper Cook Inlet Fishery Management Report to the Alaska Board of Fisheries



**Kenai River Sportfishing Association
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COMMENT# 27

PREFACE

The Kenai River Sportfishing Association (KRSA) is a membership-based, non-profit, conservation organization dedicated to preserving the greatest fishing river in the world – the Kenai – through habitat protection, education, and promotion of responsible fishing. The association supports sustainable and balanced management of upper Cook Inlet sport, commercial, and personal use salmon fisheries based on sound science and verifiable studies. Toward this end, the KRSA funds scientific research, seeks independent peer review of fishery management practices and proposals by scientific experts, and participates in public involvement processes for fish conservation and fishery regulation conducted by the Alaska Department of Fish and Game and the Alaska Board of Fisheries.

This report describes proposals introduced by KRSA for consideration by the Alaska Board of Fisheries in the 2007-2008 regulatory review for Upper Cook Inlet. KRSA has submitted a series of proposals for refining existing management plans and regulations based on: 1) evolving fishery demands, 2) problems encountered in recent years, and 3) new scientific data from recent research.

KRSA Proposals

- 77. Change Northern boundary of the Kasilof River set net fishing area (Blanchard Line). [pg. 16]**
- 87. Clarify end-of-season criteria for closure of sockeye commercial fisheries. [pg. 17]**
- 117. Establish escapement goals based on wild (not hatchery) fish. [pg. 14]**
- 120. Designate chum salmon as a *Stock of Concern*. [pg. 65]**
- 132. Clarify implementation priorities among management plans. [pg. 11]**
- 140. Clarify Yentna escapement goal priority. [pg. 20]**
- 164. Provide direction for August drift net fishery. [pg. 21]**
- 165. Sunset August west side driftnet fisheries for coho. [pg. 21]**
- 169. Revise Kasilof sockeye time and area regulations in the setnet fishery. [pg. 50]**
- 202. Establish weekend set net fishery window at runs under 2 million. [pg. 42]**
- 208. Provide authority to increase sport fishery bag limits at large sockeye runs. [pg. 43]**
- 215. Increase personal use annual limits at large sockeye runs. [pg. 27]**
- 228. Establish Kasilof king salmon sanctuary. [pg. 51]**
- 255. Increase bag limit for small Kenai Chinook. [pg. 55]**

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INTRODUCTION

The Alaska Board of Fisheries (Board) has developed a series of plans for Upper Cook Inlet (UCI) salmon fishery management. These plans recognize and seek to balance competing demands and values of different users to protect and optimize economic benefits to the region. Plans are the culmination of long experience in researching and managing these fisheries along with extensive policy deliberation, negotiation, and refinement during previous Board cycles.

In this report, the Kenai River Sportfishing Association (KRSA) presents a series of proposals for revision of Upper Cook Inlet fishery management plans for consideration by the Alaska Board of Fisheries. We also provide comments on other proposals before the Board of interest to KRSA. KRSA's proposals are discussed in the broader context of related issues including those raised in the 2007 UCI Committee issue paper (UCIC 2007) and in other proposals to the Board for consideration in 2008.

Evolving Needs & Values

The Cook Inlet watershed sustains one of the world's premier fisheries. The Kenai River is the recreational fishing and scenic centerpiece of this watershed and supports the state's most popular and economically important sport and personal use fisheries.

The Alaska fishery management system for Pacific salmon is now recognized as one of the most progressive and successful in the world. During the one hundred year history of the Cook Inlet salmon fishery, its management systems have been continually reworked and refined to achieve this distinction.

In the last decade, Upper Cook Inlet salmon fishery management has been particularly challenged by increasing demand and value in sport and personal use fisheries and declining economic value in the commercial fishery. Values of sport and personal use fisheries have exploded with the growth in popularity and participation by resident and nonresident anglers. At the same time, commercial fisheries have been hard hit by falling market demand and variable prices caused by competition from farmed salmon, other aquaculture, and globalization of markets.

Fishery management practices and priorities in UCI were historically slow to

recognize and adapt to increasing demand from sport and personal use fisheries in a region long dominated by commercial fishing interests. The greatest regional economic values are provided by maintaining both viable sport and commercial fisheries. A balance that effectively addresses all fishery needs has been difficult to achieve.

The Board has been charged with the difficult and practically thankless task of developing management policies, practices, and plans that recognize the role and value of all fishing interests as well as the fish themselves.

A Recipe for Conflict

The complexities of managing UCI salmon fisheries for commercial, sport, and personal use harvests and the competition between and among these user groups underlie numerous ongoing allocation disputes. Restrictions to provide for reasonable personal use and sport fishery opportunities can significantly impact the commercial fisheries. At the same time, management to maximize harvest in UCI commercial fisheries primarily targeting sockeye, results in significant catches of Chinook and coho valued highly by the sport fishery. Intensive commercial fishing can result in extended periods of low fish

availability in recreational and personal use fisheries.

State fisheries professionals and administrators now recognize that even though commercial and sport fisheries management share the common objectives of conservation and rehabilitation, the success of each fishery is measured by mutually conflicting standards.

Success in commercial fishery management is measured primarily in terms of pounds of fish produced over the long term (MSY management). This is achieved by providing harvest opportunity for all fish surplus to escapement and in-river needs. The process of doing this often results in extensive periods of commercial fishing to “mop up” surplus sockeye. Falling prices have also led to increasing pressure on commercial fishery managers to maximize harvest (within the limits of sustainability) in an attempt to compensate.

Success in recreational fisheries management is based on providing a

sustainable harvest and a meaningful supply of salmon in-river. Indicators of success in the recreational fishery include predictable opportunity, numbers of angler trips, and catch per unit effort rather than simply the total number of fish harvested. Successful in-river fisheries management is achieved when in-river users (sport and personal use fishermen) experience a reasonable likelihood of catching fish. This is accomplished by allowing a periodic supply of fish in-river over the entire course of the run and avoiding continuous commercial fishing that effectively intercepts in-river escapement.

Management strategies collide when commercial harvest allocations are set at levels where the number of fish escaping the commercial fishery and entering river systems is insufficient to provide sport anglers and personal use fisheries with consistent and meaningful levels of fishing opportunity throughout the run.

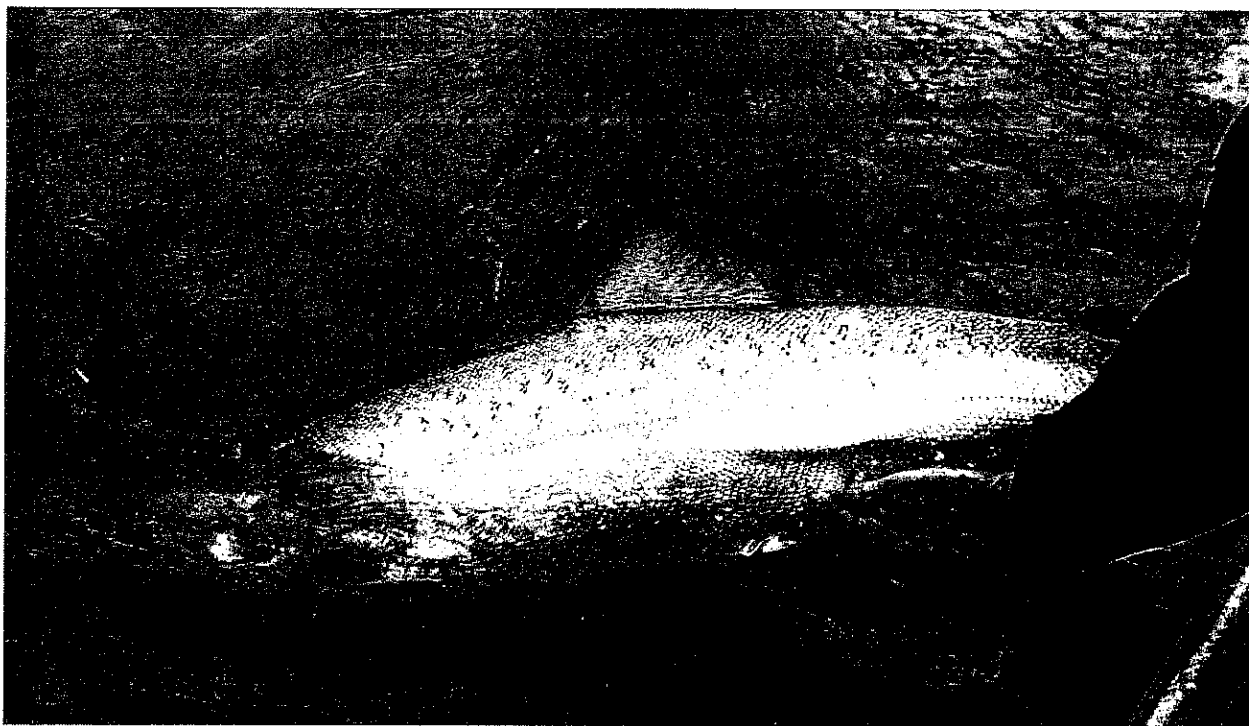


Figure 1. An early-run king salmon from the Kenai River.



Figure 2. Kenai sockeye recreational fishery near the mouth of the Russian River.

Sustainable Management

Protection of Alaska's unparalleled salmon runs and fisheries was assured in 2002 through adoption of a Statewide Sustainable Salmon Fisheries Policy [5 AAC 39.222] by the Alaska Department of Fish and Game and the Alaska Board of Fisheries. The goal of this policy is to ensure conservation of salmon and their required marine and aquatic habitats, protection of customary and traditional uses and other uses, and the sustained health of Alaska's fishing communities.

The policy was driven by the need to make more equitable harvest allocations for diverse user groups and also by the need to make Alaska's wild salmon competitive in national and international markets through "eco-labeling." Shortly after the Statewide Sustainable Salmon Fisheries Policy was adopted into regulation, the Marine Stewardship Council certified Alaska's salmon fisheries as sustainable; and salmon products from Alaska now carry this labeling.

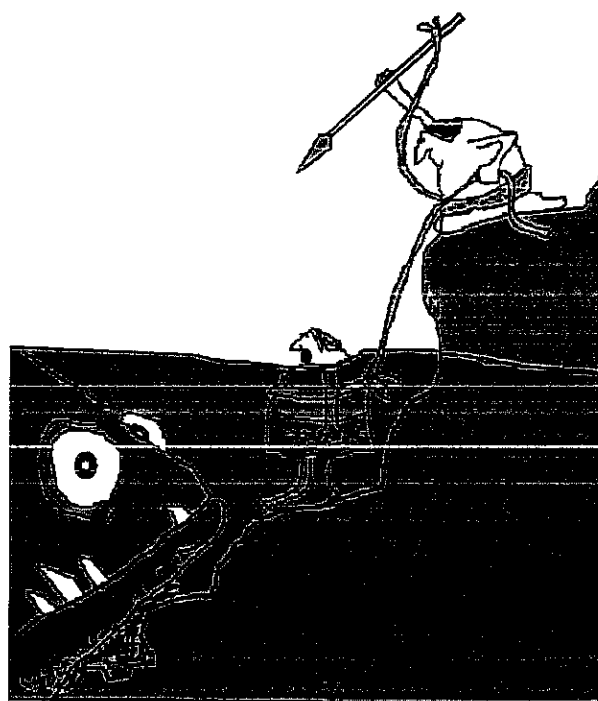
This essential advance was initiated in 1999 when Governor Knowles appointed a Board to effectively represent a range of interests extending beyond commercial fishing. This Board concluded that salmon management in Upper Cook Inlet is highly complex, that the data for scientific management of many salmon stocks in the region is insufficient, and that managing some salmon stocks for "maximum sustainable yield" inevitably places other salmon stocks at risk.

Current management in Upper Cook Inlet under the Sustainable Fisheries Policy is instituted through a series of "step down plans." These plans provide stock specific direction both for equitable allocations for commercial, sport and personal use fisheries and for escapement levels that have the potential to increase salmon yields over the long term. These plans set sockeye escapement goals relative to run size, make periodic closure windows for commercial fishing during the run mandatory, and make weak stock escapement a management priority over strong stock harvests.

UCI SALMON MANAGEMENT (UMBRELLA PLAN)

Background

- The Upper Cook Inlet Salmon Management Plan [5 AAC 21.363] is the granddaddy of the UCI plans. It was first adopted in the early 1980s to formalize the Board's management intent for inlet fisheries.
- This "Umbrella" plan identifies general management principles for all UCI salmon plans, rather than specific management directives.
- This plan has undergone extensive revision over the years as substantive guidance for specific fisheries has been moved into other plans.
- Most recently in February 2007, the Umbrella Plan was the subject of an emergency petition requesting clarification to the effect that achieving established escapement goals is the primary management objective.



Now Grog, Now!

UCI SALMON MANAGEMENT PLANS

5 AAC 21.363. Upper Cook Inlet Salmon Management Plan (Umbrella Plan)

- 5 AAC 21.353. Central District Drift Gillnet Management Plan
- 5 AAC 21.356. Cook Inlet Pink Salmon Management Plan
- 5 AAC 21.358. Northern District Salmon Management Plan
- 5 AAC 21.359. Kenai River Late-Run King Salmon Management Plan
- 5 AAC 21.360. Kenai River Late-Run Sockeye Salmon Management Plan
- 5 AAC 21.365. Kasilof River Salmon Management Plan
- 5 AAC 57.150. Russian River Sockeye Salmon Management Plan
- 5 AAC 57.160. Kenai River Early-Run King Salmon Management Plan
- 5 AAC 57.170. Kenai River Coho Salmon Management Plan
- 5 AAC 77.540. UCI Personal Use Salmon Fishery Management Plan

Issues

Issue 1. Lack of clear guidance regarding the relative priorities of specific plan objectives.

UCI management plans address a variety of biological and allocation objectives for different stocks and areas generally based on fishery time and area regulations. Due to the mixed stock nature of the fisheries, it is often not possible to meet all objectives in every plan. The question is which objectives take priority when all objectives cannot be met. For instance, which escapement goals take priority if not every escapement goal can be met? The answer is complicated because every decision has some allocation implication in UCI.

Issue 2. Use of Commissioner's emergency order authority.

The Umbrella Plan recognizes the commissioner's authority to depart from the management plans based on significant new information. ADFG has generally taken a conservative approach to out-of-plan actions under the commissioner's authority in part due to the allocative impacts of such actions. However, out-of-plan actions have been taken by the commissioner in each of the last three seasons. The issue paper notes that a lack of guidance in the Umbrella Plan regarding use of the Commissioner's authority has created conflict with the Department and the public.

Issue 3. Organizational structure of the plans.

The management plans are complex by intent and design but the organizational structure has also been complicated by specific revisions to one plan or another over the years. Specific plans make extensive references among each other. Proposals for plan reorganization range from simple housekeeping (such as renumbering the order) to more complicated revisions that could include substantive changes to specific objectives, priorities, or regulations.

Issue 4. Counting of hatchery fish toward escapement goals.

Hatchery fish are currently treated the same as wild fish in in-season escapement estimates in several systems. The question has been raised regarding whether this is biologically appropriate.

#1. Priorities of specific plan objectives

Which management objectives do you prioritize in years where you can't meet them all? It is not reasonable to expect that every objective can be met in every year because of variable and unpredictable fish run sizes and migration patterns. It is reasonable to ask the Board for clear direction on priorities among the potentially competing objectives in the management plans. Virtually every decision on UCI fishery management has both a biological and allocation effect. Allocation decisions are the responsibility of the Board. Lack of clear direction places ADFG in the difficult position of having to make allocative in-season management decisions that subject the Department to intense criticism and claims of favoritism or bias.

The overarching goal of UCI fishery management has been to provide optimum sustained yield (OSY) from mixed stock fisheries for the benefit of multiple user groups. Optimum sustained yield is defined in the Sustainable Salmon Policy [5 AAC 39.222 (f) (26)] as "an average yield from a salmon stock considered to be optimal in achieving a specific management objective other than maximum yield." Other management objectives can include: 1) achievement of a consistent level of sustained yield, 2) protection of less abundant or less productive salmon stock or species, 3) enhancement of catch per unit effort in sportfishery, 4) facilitation of non-consumptive use, 5) facilitation of subsistence use, or 6) achievement of a specific allocation. OSY incorporates biological, social and economic considerations into management (Hilborn and Walters 1992).

UCI management plans are complex because the objectives, needs, and values of these fisheries are complex. Rather than seeking to maximize the harvest of any single species or stock in any one fishery, the plans aim to optimize net fishery benefits among all users. This balancing necessarily involves tradeoffs among competing objectives. Plans were developed with stakeholder involvement and collectively represent delicate and agreed upon balances among user groups with respect to allocation of fishery resources. Although structured to address specific fisheries, the individual plans are not stand alone regulations. Prioritization of specific plan objectives can have complex effects on the biological and allocation balance of the existing plans.

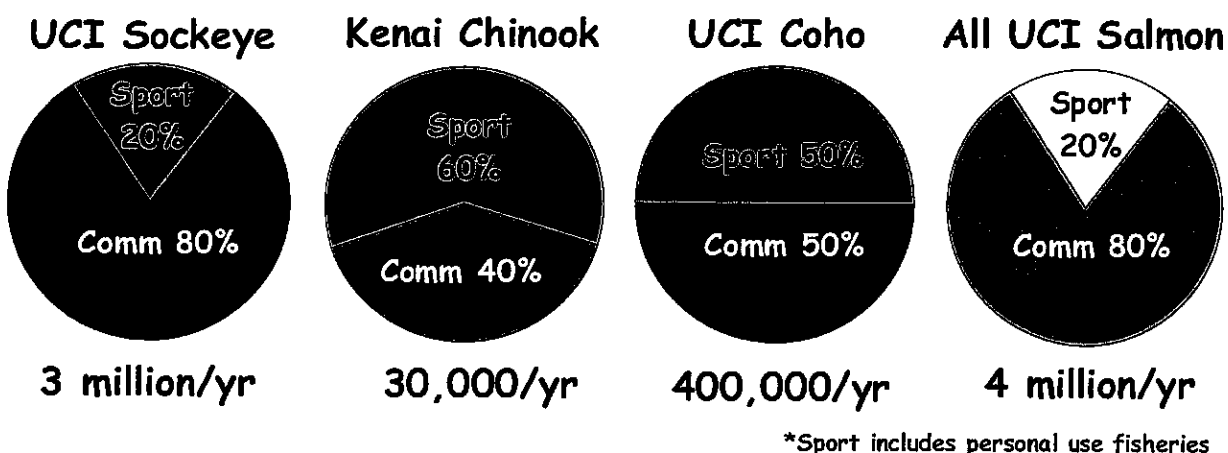


Figure 3. Recent 1999-2004 harvest shares of Upper Cook Inlet salmon among commercial, sport, and personal use fisheries as a result of current management plans.

Alternatives

Current plans contain a mixture of objectives and fishery time and area regulations. This section discusses the effects of prioritizing any given element.

Species Management Priorities. – Several plans designate management priorities for stocks. A commercial priority is assigned to Kenai late-run sockeye and Northern District chum, pink, and sockeye. A sport priority is assigned to Northern District coho, late-run Kenai king, and Kenai coho. Priorities identify management intent but are typically trumped by more specific plan directions during in-season management. No specific allocation targets or percentages have been identified by the Board based on these priorities.

Escapement goals. – Goals have been established for some but not all stocks. OEGs may be established by the Board to consider biological and allocative factors and may differ from the SEGs or BEGs established by ADFG. OEGs have been adopted for Kasilof, Kenai, and Yentna sockeye to meet minimum goals for each. Effects of prioritizing escapement vary depending on which goals drive the priority.

Maximum goals: Much of the push for prioritizing goals above is driven by “overescapement” concerns. If current goals accurately reflect system capacity, then overescapements represent foregone yield in the year of return and might also reduce future yields (Clark et al. 2007b). The accuracy of current sockeye goals is a source of much debate but pending returns from recent large escapements should help resolve this controversy. Prioritizing Kenai and Kasilof sockeye top end goals will result in: 1) increased allocation of sockeye, kings and coho to the commercial fishery, 2) continuing failure of Yentna sockeye to meet the low end of their goal, 3) unknown effects on stocks such as Kasilof kings for which no escapement goals have been established, and 4) reduced personal use and sport opportunity and harvest for all species in northern, Kenai, and Kasilof fisheries.

Minimum goals: While there is controversy on effects of overescapement, there is none on underescapement. It reduces future yield and can have long term impacts on the biological productivity of a stock. Prioritizing minimum escapements is likely to require reducing Central District commercial fisheries, particularly the drift fishery, to meet the Yentna goal. It will generally increase pressure to fish east-side set nets more heavily in order to limit sockeye escapement to the Kenai and Kasilof. In-river PU and sport fisheries may be hurt or helped depending on what is done in the set net fishery. The king sportfishery generally benefits from increased drift net effort because fewer kings are caught per sockeye than if the same sockeye were harvested in the set net fishery.

In-river/Sonar goals. – The Kenai late-run sockeye plan contains both OEG and in-river sonar goal ranges that vary with run size. The in-river goals provide for sockeye sport harvest upstream from the sonar monitoring site and also seek to share large runs among the fisheries. The effects of prioritizing either the in-river goals or the OEG vary depending on run size and whether we are talking about the top end or bottom end goals. Commercial fisheries generally benefit from increased fishing under an OEG priority. In-river fisheries generally benefit from an in-river goal priority.

Time/Area restrictions. – Plans include time and area restrictions designed to provide for desired escapements and allocations among the fisheries. The UCI plans have generally directed managers how to achieve an allocation intent rather than identifying explicit allocation targets or limitations. Without specific direction, management priorities for stocks have not been consistently met. Effects of time and area limitations are complex. User groups are continually seeking to shape this complex of regulations to their benefit. In general, complexity favors the

in-river fisheries as the commercial fishery has encountered more and more limitations and conditions on their effort. Simplicity tends to favor the commercial fisheries which have the advantage of fishing in front of in-river fisheries.

Windows. – Windows are commercial closure periods designed to pass fish into in-river fisheries and escapements. They may be floating at the discretion of the commercial fishery manager or fixed at the end of the week to feed weekend fisheries. Windows have both allocation and biological effects. Windows increase the allocation of sockeye and kings to in-river fisheries. Biological benefits include protection of escapement of stocks that are not effectively monitored in-season (Yentna sockeye and Kasilof kings) and protection of stock diversity and productivity by distributing escapement throughout the run.

Recommendations

KRSA (Proposal 132) recommends adding language to the Umbrella Plan that explicitly establishes management plan priorities as follows.

1. Clarify management priorities among plans but postpone consideration of large substantive changes pending results of current research.

The plans are clearly working despite claims to the contrary. Commercial harvest has averaged 3.6 million sockeye/year over the last six years. That is similar to the 20-yr average and over one million fish/year greater than the previous six years (Figure 4).

If you believe in risks of sockeye “overescapement” and small fry sizes, then additional commercial fishing time and flexibility will be unnecessary in the next few years. Underescapement will be the driving concern because of recent large Kenai and Kasilof sockeye escapements.

Current research is expected to provide critical new data in the next few years. New information on sockeye stock composition in the commercial fishery, sockeye sonar accuracy in the Yentna and Kenai, Kasilof king status, and returns from recent large Kenai and Kasilof sockeye escapements has huge implications for fishery management. Large substantive changes in current plans would be premature and risky in light of the promise of much better information by the next Board cycle.

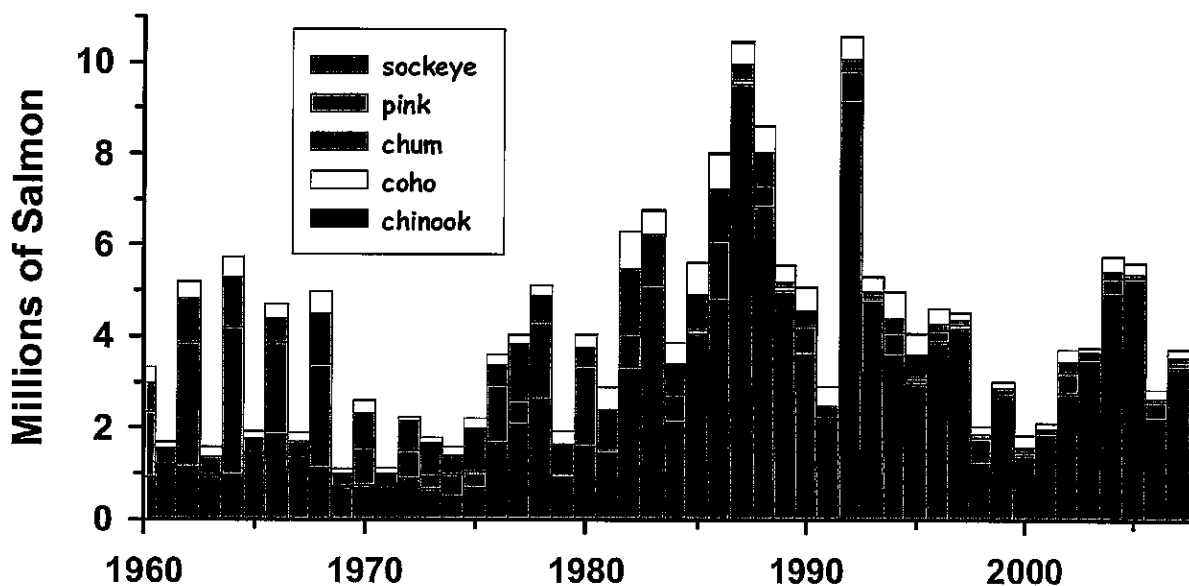


Figure 4. Trends in UCI commercial salmon harvest by species.

PROPOSAL 132

Amend the umbrella Salmon Management Plan to provide explicit direction on priorities as follows:

(f) Implementation priorities among specific management plans are as follows:

- (A) Achieving established escapement goals is the primary management objective unless otherwise specified.
- (B) Achieving the lower end of every optimal, biological, or sustainable escapement goal shall take priority over not exceeding the upper end of any optimal, biological, or sustainable escapement.
- (C) Fisheries shall be provided no less than a 51% harvest share of species and stocks designated for management priority of that fishery
- (D) Limitations on emergency order authority and fishery closure windows designated to distribute escapement throughout the run and to the balance allocation and opportunity among fisheries shall take priority over not exceeding the upper end of any optimum, biological, sustainable, or in-river escapement goal.

ISSUE: Upper Cook Inlet salmon management is governed by a number of management plans in regulation. Many of these plans overlap in time and area and may have objectives that compete with one another. Lack of explicit direction has led to confusion and subjective interpretations as to which objectives may have priority under different circumstances. Priority language considered by the BOF at the 2007 statewide meeting identifies escapement goals as the primary management objective within a specific plan but does not provide adequate direction to resolve questions of potentially competing objectives among plans.

2. Meet every escapement goal whenever possible.

The best thing, of course, is to meet every goal whenever possible. Escapement-based management is the cornerstone of salmon sustainability throughout Alaska. However, it is not always possible to meet every escapement goal.

Existing escapement goals may not provide adequate protection for every heavily-fished stock because not every stock has an escapement goal or a way to accurately assess escapement in-season. Thus, additional direction is needed on priorities.

3. Prioritize minimum escapement goals in every system as a bottom line.

Failure to meet minimum escapement goals has undebateable biological and yield impacts. Achieving minimum escapement goals in every system should be afforded the highest priority. Current management plans recognize the significance of the bottom end goals by directing that achieving the lower ends should take priority over not exceeding the upper end in other systems.

Despite this direction, Yentna sockeye have been chronically underescapement due to aggressive Central District fisheries to avoid exceeding Kenai or Kasilof top end goals. The low goal priority needs to be more explicitly affirmed.

4. Clarify species allocation priorities by fishery by adopting more specific objectives.

Escapement priorities identified in the management plans will have very significant fishery allocation implications. Proposals before the Board often seek to justify allocation changes based on biological arguments. For instance, proposals to prioritize Kenai and Kasilof sockeye escapement goals over every other objective in the inlet are essentially intended to increase allocation to the Central District commercial fisheries at the expense of escapements and PU and sport fisheries in the Northern District, Kenai River and Kasilof River.

Management plans currently identify fishery priorities by species but specific allocations have not been established by the Board. ADFG could more effectively manage for the allocation intent of the Board if more specific allocation targets were identified. At a minimum, fisheries should be afforded at least a majority share of the harvest of stocks designated for priority use by that fishery.

5. Mandate adherence to windows and time/area limitations if every system is making minimum goals and even if some are exceeding their upper ends.

Windows and time/area limitations are effective tool for achieving the biological and allocation objectives of Optimum Sustained Yield management in Upper Cook Inlet. The intent of management for OSY is to strike a fair and sustainable balance in allocation among the diverse fisheries rather than to maximize the harvest in any single fishery. OSY management recognizes that total fishery value is greatest where harvest and opportunity is shared among all fisheries. It accepts the inevitable tradeoffs among biological and allocation objectives.

Windows protect spawning escapements of poorly-monitored stocks and also benefit escapement by distributing the return across the breadth of the run. Intensive fisheries for Kenai and Kasilof sockeye pose an unknown risk to the sustainability and yield of poorly monitored stocks including Kasilof late-run kings and Susitna sockeye. Prioritizing escapement goals for Kenai and Kasilof sockeye stocks without adequate goals or protection for other king and sockeye stocks is contrary to precautionary management under the Sustainable Salmon [5 AAC 39.222] and Escapement Goal [5 AAC 39.223] policies.

Removal or deprioritization of windows and time/area restrictions will effectively increase allocation to the commercial fishery and reduce opportunity in Northern District, Kenai, and Kasilof personal use and sport fisheries. Removal or deprioritization of windows and time/area restrictions will also increase fishing rates on Kenai and Kasilof sockeye stocks that are already among the most heavily fished in the state according to ADFG's recent overescapement report (Clark et al. 2007b). Economic and social values of the personal use, sport, and commercial fisheries are all very high. Personal use and sport fisheries provided by current plans are consistent with the public demand for these opportunities.

Research and monitoring results over the next few years are expected to resolve the overescapement debate and provide a sound scientific basis for deciding whether changes are needed in existing plans. Effects of large Kenai and Kasilof sockeye escapements remain unclear. The recent report by Clark et al. (2007b) found that overescapements have a marginal effect on yield in comparison with total harvest and that there is no evidence for any sockeye stock that overescapements result in long term reductions to stock productivity. No Kenai sockeye escapement has ever failed to replace itself and increasing Kasilof sockeye escapements have produced increasing rather than decreasing returns. Recent large escapements could cost yield if current escapement goals reflect MSY but could also increase yield if current goals are too low.

#2. Commissioner's emergency order authority

The Board's UCI Subcommittee issue paper identified a lack of guidance in how the application of the Commissioner's order authority should be interpreted (UCIC 2007). There is a long history of challenges to the Board's authority to provide guidance in the form of management plans that guide actions by the Department. KPFA and UCIDA went so far as to file suit challenging regulations adopted at the 2002 Board meeting. The intent was to remove restrictions on the area comfish manager and increase the allocation and harvest in the commercial fishery. The decision by Judge Brown upheld the validity of the Board's regulation as well as the commissioner's authority to take out-of-plan action based on new information. The State's summary of this case is as follows:

Kenai Peninsula Fisherman's Assoc. & United Cook Inlet Drift Assoc. v. ADF&G, Frank Rue (Kenai Superior Court No. 3KN-02-524 (Judge Brown); our file no. 221-03-0008; state's attorneys: Lance Nelson & Jon Goltz; plaintiffs' attorney: Jonathan Bauer). Two commercial fishermen's associations sued the state to invalidate Board of Fisheries regulations restricting the emergency order authority over Cook Inlet sockeye salmon fishing and establishing the Kasilof River optimal escapement goal. In May and July 2003, Judge Brown granted partial summary judgment in favor of the state and partial summary judgment in favor of the defendants. The court upheld the validity of the challenged regulation, but granted partial summary judgment for the plaintiffs to make it clear that the regulation must be interpreted in light of Supreme Court precedent that allows the commissioner to issue emergency orders that contradict a Board regulation if the commissioner has new information.
(http://www.law.state.ak.us/departments/civil/nat_cases.html)

Recommendations

1. **KRSA recognizes Board's allocation authority and appreciates the commissioner's judicious use of his authority to take out-of-plan actions where necessary.**

The management plans provide necessary and appropriate guidance for in-season management consistent with conservation and allocation priorities identified by the Board. Past experience has repeatedly demonstrated that without this guidance, commercial fishery interests will aggressively pressure the system to maximize their harvests at the expense of sport and personal use fisheries and with significant risk to minimum escapement needs.

#3. Organizational structure of the plans

Current management plans reflect the collective wisdom of a series of fisheries Boards including current members as well as a generation of sport and commercial fishery managers. Plans have evolved over time to incorporate new information and adapt to different fish run and fishery situations. During each Board cycle, additional refinements are considered to address new developments and unforeseen situations. Even seemingly minor changes to the plans can have significant allocation implications. Any proposed changes in these plans warrant a comprehensive and systematic evaluation for a variety of fishery situations to ensure changes to address one management issue won't cause other problems down the line.

Recommendations

1. **Any allocative restructuring should come from individual changes in the plan rather than in the guise of a reformatting effort.**

The allocation implications of any proposed changes in the management plans need to be carefully considered. Revisions with transparent reorganization could conceivably clarify and improve the utility of the existing plans. However, we would object to a deceptive effort to cloak substantive changes under the guise of simplification and reorganization.

#4. Counting hatchery fish toward escapement goals

Fish Creek sockeye: Continuing poor returns in spite of hatchery supplementation are a source of particular concern (Figure 5). The local fishery has been severely restricted. Hatchery releases began in 1975 and currently average about 2 million per year (Chlupach & Kyle 1990, Dodson 2007). It was designated a Stock of Concern in 2002 (Shields 2007). Problems included hatchery effects, watershed development, and a coffer dam passage barrier at the lake outlet (Litchfield & Willette 2002). Improvements in fish culture methods and the lake outlet led to removal from a Stock of Concern in 2005 (Shields 2006). The stock has not responded. Hatchery fish confound the accuracy of assessments of wild population status.

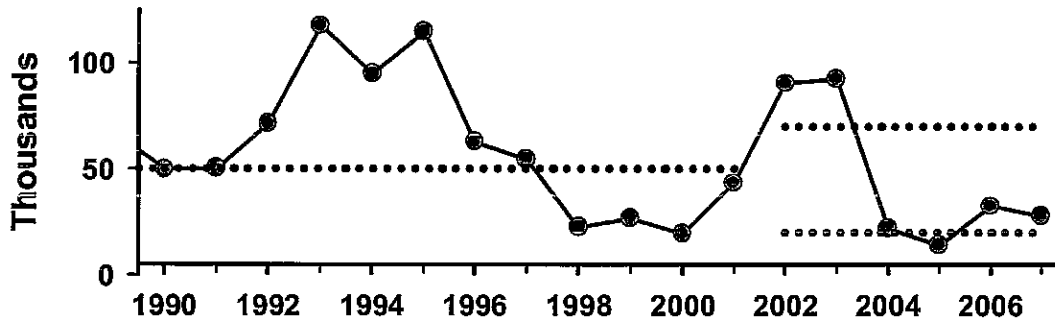


Figure 5. Annual sockeye escapement to Fish Creek relative to escapement goals (changed in 2002).

Kasilof sockeye: Large numbers of hatchery fish have contributed to recent overescapements. Releases ended in 2004 but significant returns are expected thru 2008. Releases into Tustumena Lake were generally 6 million per year from 1988-2004 down from 15 million per year from 1982-1987. Hatchery smolts have generally averaged less than a quarter of the outmigration but reached 50% in 2004 and 32% in 2005. The program was ended by a court ruling that a commercial enterprise is an inappropriate Federal wilderness activity.

Kenai sockeye: Several hundred thousand hatchery sockeye are released into Hidden Lake each year. Escapement goals are calculated independent of Hidden Lake returns but in-season management decisions are made based on sonar counts of the total return which include significant numbers of hatchery sockeye in some years. Returns of hatchery fish are highly variable but escapement of hatchery fish exceeded 70,000 in several years.

Recommendations

1. **KRSA recommends amending the Umbrella Plan to direct that escapement goals be met based solely on wild fish (Proposal 117).**

Failure to account for and control impacts of hatchery fish on wild production and mixed stock fisheries risk the sustainability of wild stocks.

PROPOSAL 117

Amend the umbrella Management Plan to direct that escapement goals be met based solely with wild fish.

ISSUE: Counting hatchery fish toward wild escapement goals is inaccurate, biologically inappropriate, and contrary to the Sustainable Fisheries Policy (5 AAC 39.222 (c) (1) (D)). Hatchery fish are currently counted toward achieving escapement goals for wild fish in a number of Upper Cook Inlet systems (Fish Creek sockeye, Kenai River sockeye, and Kasilof River sockeye). However, escapement goals are based on wild spawner numbers and hatchery fish often do not make effective contributions toward natural production. Counting hatchery fish masks the actual status of the wild stock and makes it appear that wild spawning goals are being met, when in fact they are not. Hatchery fish can also make it appear that escapement goals are being exceeded when they are not.

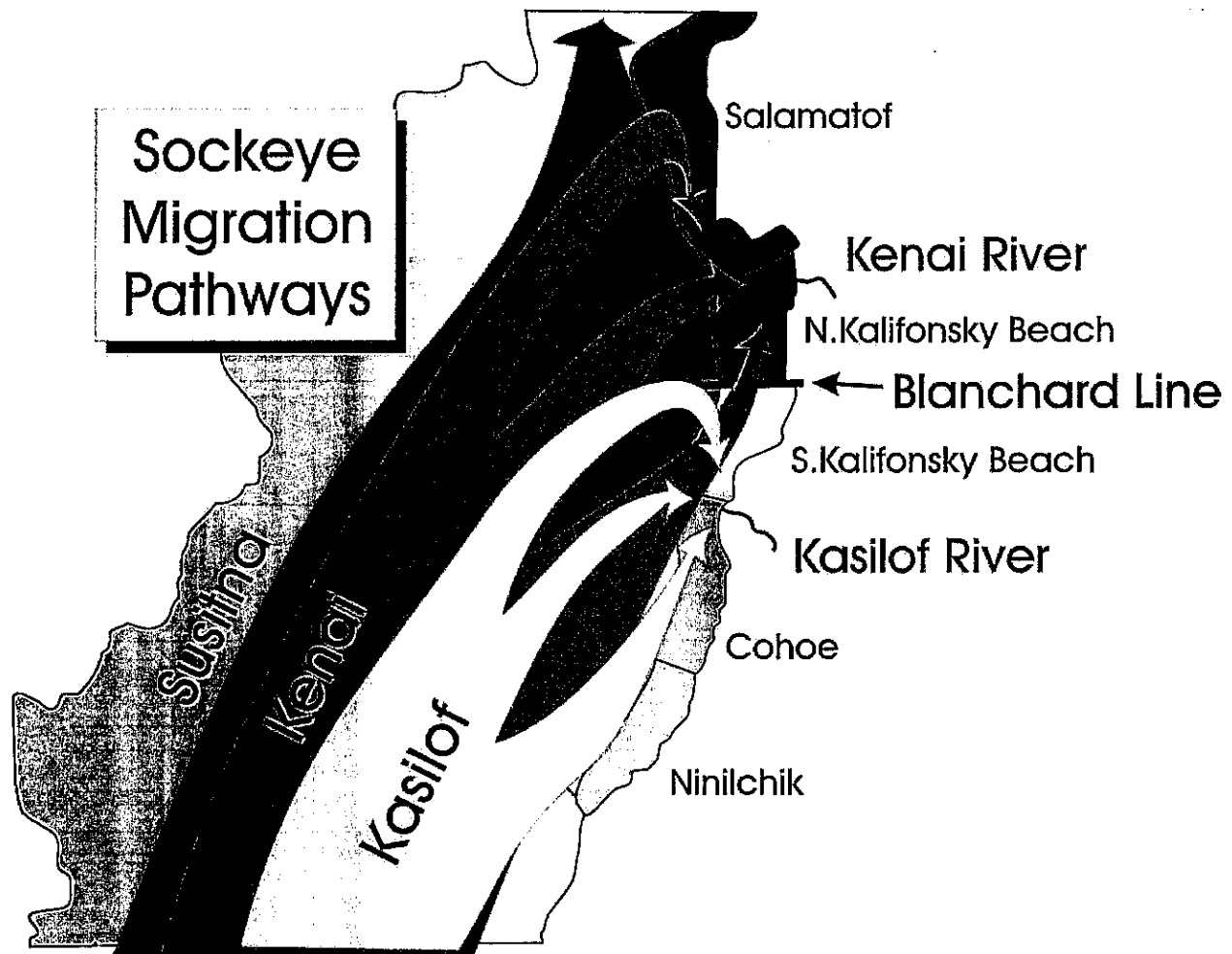
COMMERCIAL FISHING DISTRICTS & SEASONS

Issues

#1. Blanchard line.

The Blanchard line does not provide adequate protection of Kenai fish when Kasilof fisheries are opened to target Kasilof sockeye. Kenai fish can be heavily impacted by Kasilof fisheries in years when the Kasilof run is strong but the Kenai run is weak. Age composition and genetic data confirm that large numbers of Kenai fish are caught south of the Blanchard Line but that Kenai catch increases progressively north of the Kasilof mouth. Kenai River sonar counts also drop abruptly after Kasilof opens even when Kenai beaches are closed. Finally, coho tagged from the Kenai are caught in large numbers off Kasilof beaches.

Recent genetics studies also indicate that significant numbers of Yentna/Susitna sockeye are caught in the eastside set net fishery. According the recent genetics report (Habicht et al. 2007), "The SNP GSI [new genetic study] results support the conclusions from the SPA [scale pattern analysis used previously] that Susitna/Yentna sockeye salmon have contributed 0-28% of the East Side Sub-district set gill net harvests." In 2007, an estimated 59,900 Yentna sockeye were harvested in the Kasilof and Kenai set net area fishery. Catches of Yentna/Susitna sockeye increase progressively north of the Kasilof River.



Recommendations

- 1. KRSA recommends redefining the demarcation of the Kenai and Kasilof sections (the Blanchard Line) as a point one-half mile north of the north bank of the Kasilof River (Proposal 77).**

A new line will provide a more precise management tool for Kasilof target fisheries in years of smaller Kenai returns. Redefining the Kasilof fishery area to exclude areas more than one half mile north of the Kasilof River would be a much more effective strategy for selectively targeting Kasilof fish and avoiding Kenai fish.

This fishery would increase the percentage of Kasilof-bound fish in the sockeye catch while also reducing catches of Kenai-origin sockeye, Chinook, and coho. Managers will continue to have the option of opening all beaches when both runs are targeted.

A new line will also provide a more equitable allocation of the Kenai sockeye harvest among east-side set net fishers in years of low Kenai and high Kasilof sockeye run sizes. In those years, heavy fishing south of the Blanchard Line to target Kasilof fish also takes much of the Kenai sockeye harvest and reduces opportunities for set net fishers in the Kenai section.

PROPOSAL 77

Redefine the demarcation of the Kenai and Kasilof sections (the Blanchard Line) as a point one-half mile north of the north bank of the Kasilof River.

ISSUE: Current Kasilof set net management areas are not adequate. Excessive use of the Kasilof terminal fishing area in years of big Kasilof sockeye runs is ineffective for regulating Kasilof sockeye escapement and has caused a variety of fishery problems and conflicts, making it extremely unpopular with commercial fishers. However, the current Kasilof set net area is not adequate to protect Kenai fish when those runs are weak. The northern boundary of the Kasilof River set net fishing area (Blanchard line) does not provide adequate protection of Kenai fish during Kasilof sockeye target fisheries. The set net fishery from the Kasilof River mouth to the Blanchard Line is a mixed stock fishery for Kasilof and Kenai River sockeye and Chinook. Intensive Kasilof fisheries in big run years intercept large numbers of Kenai fish. Kenai escapements and fisheries suffer as a result. For instance, big Kasilof fisheries in 2006 would have caused Kenai sockeye escapement to fall short of goals if the run had been on time rather than late. Large king harvests in set net fisheries north of the Kasilof also add to the excessive harvest of this stock. Commercial fishery managers have consistently failed to implement effective management measures to limit king bycatch in sockeye target fisheries. Redefining the Kasilof area to exclude areas one-half mile north of the north bank of the Kasilof River would be much more effective strategy for selectively targeting Kasilof fish and avoiding Kenai fish, including kings.

#2. End of season trigger

Late July and early August represent a transition period for Kenai River fish runs and east-side set net fisheries where the sockeye run is rapidly fading and coho are increasing. The east-side set net fishery quickly reaches a point of diminishing returns where decreasing sockeye catches contribute marginal value relative to much larger catches earlier in the season. By July 29, the fishery has typically harvested over 90% of the sockeye it can expect to take for that year and by August 5 the fishery has typically reached 99% of its yearly harvest. While sockeye harvest is rapidly declining in late July, the early Kenai coho run is building and significant numbers of late-run Chinook are still present. After July 31, catch of other salmon rapidly approaches that of sockeye catch and the fishery increasingly becomes a mixed species fishery rather than a sockeye target fishery.

Recommendations

1. KRSA recommends clarification of plan language defining end of season triggers for the east-side set net fishery consistent with the Board's intent (Proposal 87).

Since 2005, multi-day fishing periods have been established for the east-side set net fishery during August. These extended periods have the effect of increasing harvest and reducing the chances of triggering the end of season provision adopted by the Board in 2005.

PROPOSAL 87

Clarify transition between sockeye management and coho management as follows: 5 AAC 21.310(b)(2)(c)(iii) Kenai, Kasilof, and East Forelands Sections: the season shall close August 10, unless closed earlier by emergency order after July 31, after the Department determines that less than five [ONE] percent of the season's total sockeye harvest has been taken per fishing period for two consecutive fishing periods; for purposes of this sub-subparagraph, "fishing period" means a time period open to commercial fishing without closure for at least 12 and not more than 24 hours.

ISSUE: During the January 2005 Upper Cook Inlet Finfish meeting, Department staff and members of the various user groups arrived at an approach to define when the Department would transition from sockeye salmon management. Although numerous approaches were discussed the one that was eventually agreed to was to define the termination of the commercial sockeye season to be when the commercial catch was 1 percent or less of the cumulative season total for 2 consecutive commercial fishing periods. This agreement was part of a complex set of negotiations and collaborative efforts among users. The Board took action on this approach and adopted it into regulation. Following that action ADF&G staff took steps intended to "clarify" the regulation and the result is the language we presently have in 5 AAC 21.310(b)(2)(C)(iii). This provision now contains language that was inserted during the editing process that, if followed to the letter, subverts the intent of the Board when it passed this regulation in January 2005. The inserted language redefines a fishing period to include "a time period open to commercial fishing without closure". Under this inserted language this could include several days rather than the daily periods upon which the 1 percent trigger was selected. There is no record that the language in question was ever formally acted on by the Board (RC or Amendment to the proposal by a Board member during deliberations) and although intended to help clarify the regulation the added language has the opposite effect.

CENTRAL DISTRICT DRIFT GILLNET FISHERY

Background

- The Central District Drift Net Fishery Management Plan [5 AAC 21.353] provides direction on fishery areas and dates.
- The fishery is open on regular Monday and Thursday 12-hour fishing periods beginning on the third Monday in June or June 19, whichever is later. Fishery periods may be modified by emergency order.
- From July 9 through July 15, the fishery is restricted to the Kenai and Kasilof corridors and Area 1 South of Kalgin Island. An additional fishing period may be opened when the Kenai sockeye run is greater than 2 million. Area restrictions are generally designed to allow passage of Northern District fish.
- From July 16 through July 31 (after the Kenai run strength is typically known), fishing areas are tied to the Kenai run strength.
- Limited west side drift fisheries are allowed after August 11.
- Sockeye harvest has averaged 1.4 million per year over the last 10 years (about 50% of the combined drift and east-side set net total).
- Coho harvest has averaged 100,000 per year over the last 10 years (about 80% of the combined drift and east-side set net total).
- The drift net fishery has regularly been restricted in recent years in order to reduce harvest of sockeye and coho bound for the Northern District. These restrictions have significantly reduced drift net fishery harvest shares of sockeye relative to the eastside set net fishery.

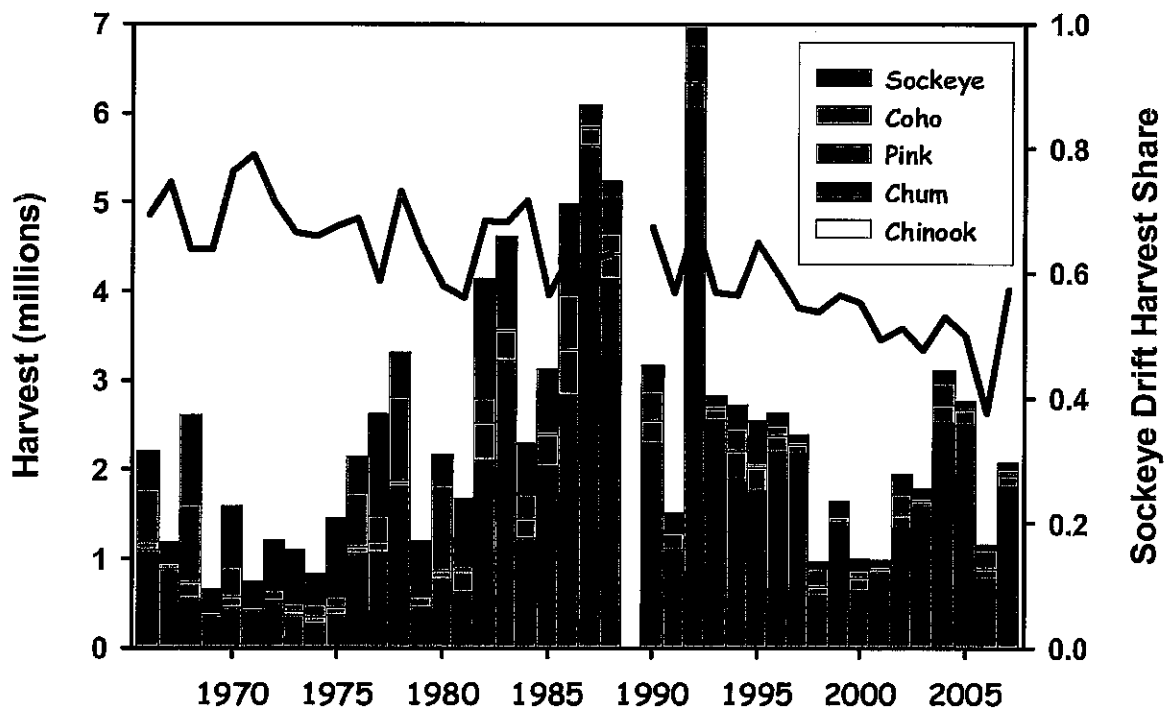


Figure 6. Harvest trends and harvest shares of sockeye in the Central District commercial drift net fishery. Harvest share is based on the drift net percentage of the combined drift and set net catch.

Issues

Issue 1. Restrictions to the drift gill net fishery taken in an attempt to achieve the Yentna sockeye escapement goal have contributed to recent large escapements of Kenai and Kasilof sockeye.

Drift net fisheries have been restricted in many years to pass Northern District fish.

Issue 2. Early season fisheries are often restricted by preseason forecasts that subsequently turn out to be wrong.

Early season fishing time and area is restricted based on the preseason run forecasts. During most years since 1999, the Kenai forecast has not been correct and the actual run strength has not been in the same tier as predicted. This has reduced opportunity and harvest in years when the return was greater than expected.

Issue 3. The Central District Drift Gillnet Fishery Management Plan currently provides no direction for fishing periods from August 1 through August 10.

The current text in (B) provides direction "from July 16 through July 31." Part (C) provides direction "from August 11 until closed by emergency order." This is an apparent oversight in language adopted in the previous UCI Board meeting.

Issue 4. The Westside drift net fishery established in 2005 is scheduled to sunset in 2007.

In a last minute amendment at the 2005 UCI BOF meeting, the Board revised the Central District Drift Gillnet Fishery Management Plan to remove coho fishing time restrictions on the drift fleet during August in areas of the western inlet. This change was enacted through the 2007 season.

#1. Restrictions to meet Yentna escapement goal

Yentna sockeye are counted to represent the Susitna return. This stock continues to be chronically underescaped. It has failed to reach minimum escapement goals in six of the last nine years. There are questions regarding the accuracy of the Yentna sonar and a research project has been initiated on this subject. Weir counts and preliminary information from the research project suggest that the Yentna sonar may be undercounting the actual return but it remains unclear if counts represent an accurately index of abundance. It has also been speculated that productivity of Yentna sockeye has declined due in an increasing trend in beavers (passage barriers) and pike (predators). In the meantime, the Yentna SEG remains established and fisheries in the Northern District are restricted based on annual counts relative to that goal.

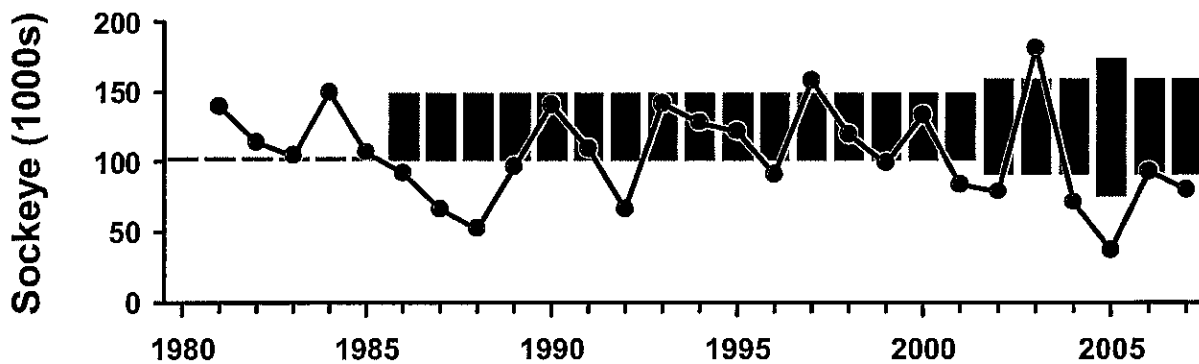


Figure 7. Historical Yentna sockeye escapements relative to goals.

Recent genetics studies confirm that significant numbers of Yentna/Susitna fish are harvested in Central District commercial fisheries (Habicht et al. 2007). Yentna/Susitna sockeye aren't a large fraction of the commercial harvest but the Central District fishery still appears to harvest the majority of the Yentna/Susitna return in some years. Yentna/Susitna sockeye were estimated to comprise up to 8%, 12%, and 15% of the July drift net harvest in 2005, 2006, and 2007, respectively. During 2007 over 140,000 Yentna sockeye were estimated to have been caught in sampled drift net fisheries. Only a portion of the fishery was sampled, hence, actual harvests were likely higher (Habicht et al. 2007). Total Central District commercial harvest of Yentna sockeye exceeded 200,000 fish in 2007. At the same time, the Yentna escapement goal of 90,000 was not met in 2007 with a count of only 79,901 sockeye, despite widespread restriction of Northern District fisheries.

Recommendations

- 1. KRSA recommends maintaining and clarifying the management priority of the lower end of the Yentna goal as specified in the Northern District Management Plan (Proposal 140).**

The Yentna sockeye escapement continues to fall short of the minimum goals in most years despite restrictions of Central drift and Northern District commercial fisheries. Current commercial fisheries management practices continue to sacrifice Yentna/Susitna sockeye escapement, yield, and fishing opportunity in order to maximize harvest of the more productive Kenai and Kasilof stocks.

As long as Northern District fisheries continue to be managed according to the established Yentna sockeye escapement goal, it continues to be appropriate for the Central District commercial fisheries to be restricted to achieve this goal. Either we are managing for escapements or we are not.

PROPOSAL 140

Clarify that achievement of the lower end of the Yentna escapement goal shall take priority over any upper Kenai escapement goal, be it the Kenai OEG or the run-strength-based in-river goal.

ISSUE: The Northern District Salmon Management Plan directs that achievement of the lower end of the Yentna River sockeye optimal escapement goal shall take priority over not exceeding the upper end of the Kenai River sockeye escapement goal. However, it is unclear to which goal in the Kenai the plan is referencing.

#2. Fishery restrictions due to preseason forecast errors

Drift net fisheries are managed during early July based on the preseason Kenai sockeye forecast. The fishery is limited to two regular periods unless over 2 million Kenai sockeye are forecast, in which case an extra 12 hour period is allowed. Kenai sockeye forecasts have been particularly inaccurate in recent years. As a result, the drift net fishery has been restricted in years when the actual return would otherwise have allowed them to fish.

Recommendations

- 1. KRSA recommends continued conservative management to ensure that minimum escapement goals are achieved for all stocks.**

Given continuing forecast accuracy problems for sockeye, conservative early season management is appropriate to ensure that minimum escapement goals are met for all stocks. The fishing power of the drift fleet was readily apparent in 2007 when the fishery caught almost 1 million sockeye during just two regular openers on July 16 and 19. These catches were atypical but they highlight the need for conservative management of this fishery prior to the time when run strength can accurately be determined.

#3. Fishery direction during August

The Central District Drift Gillnet Fishery Management Plan currently provides no direction for fishing periods from August 1 through August 10. In the absence of specific direction, management falls within the discretion of the Department.

Recommendations

1. **KRSA recommends clarification of the management intent to continue to manage the drift net fishery between July 31 and August 10 based on Kenai run strength (Proposal 164).**

This was apparently an oversight in revisions to the plan at the last Board meeting. The lack of direction places the Department in the position of having to make potentially allocative decisions among fisheries during early August.

PROPOSAL 164

Amend the regulation to correct omission in direction for drift gill net fisheries during August as follows:
5 AAC 21.353(a)(2)(B) from July 16 through **August 10** [JULY 31]...

ISSUE: The Central District Drift Gillnet Fishery Management Plan currently provides no direction for fishing periods from August 1 through August 10. The current text in (B) provides direction "from July 16 through July 31." Part (C) provides direction "from August 11 until closed by emergency order." This is an apparent oversight in language adopted in the previous UCI Board meeting.

#4. Westside fishery sunset

An August drift net fishery on the Westside of Cook Inlet was established in a last minute amendment at the 2005 Board meeting.

Recommendations

1. **KRSA recommends sunset of the provision for a west side drift net fishery in August (Proposal 165).**

This fishery does not make a significant contribution to UCI fishery values but can significantly affect local escapements and sport fisheries.

PROPOSAL 165

Sunset the provision for directed Westside Cook Inlet drift net fisheries after 2007 as per the current plan.

ISSUE: In a last minute amendment at the 2005 UCI BOF meeting, the Board revised the Central District Drift Gillnet Fishery Management Plan to remove coho fishing time restrictions on the drift fleet during August in areas of the western inlet. This change was enacted through the 2007 season. This fishery does not make a significant contribution to UCI fishery values but can significantly affect local escapements and sport fisheries.

PERSONAL USE SALMON FISHERY

Background

- ❑ The Personal Use Salmon Fishery Management Plan [5 AAC 77.540] governs the harvest of salmon in Upper Cook Inlet for personal use.
- ❑ The plan establishes seasons, area, harvest levels, reporting requirements, harvest permits, and allowable gear.
- ❑ PU fisheries are allowed in limited areas including Kenai River, Kasilof River, and Fish Creek. These fisheries are open only to Alaska residents and a special permit is required.

History

- ❑ The evolution of the PU fishery has a long history (Gamblin et al. 2002, Pappas & Marsh 2004). A PU dip net fishery management plan was initially adopted in 1981. Fisheries were initially opened when escapement was projected to exceed the goals.
- ❑ The modern PU fishery era was ushered in with the expansion of dip net opportunities at the 1996 Board meeting. Dip net opportunity was expanded by removal of the sonar trigger for opening to compensate for the gill net subsistence closure (Shields 2007). Gill net subsistence fisheries were allowed in most marine waters between 1991 and 1995.
- ❑ The Kenai and Kasilof dip net fisheries have proven very popular. Effort and harvest have increased steadily. A record 21,900 permits were issued in both 2004 and 2005 (Begich & Pauluk 2007).

Fisheries

- ❑ The Kenai dip net fishery occurs in the lower 5 miles of river, from the bank and from boats, during the last 3 weeks of July.
- ❑ Kasilof gill net and/or dip net (bank & boat) PU fisheries occur on beaches at the mouth and in the lowermost mile of river. The gill net fishery is open June 15-24. The dip net fishery is open June 25 – August 7.
- ❑ The Fish Creek dip net fishery opens by emergency order only when sockeye escapement is projected to exceed the 70,000 upper end of the escapement goal. This fishery has not opened since 2001.
- ❑ These fisheries only work when large daily fish numbers make effort worthwhile. Effort is typically low except during peak passage periods.
- ❑ Most of the PU effort comes from non-local residents. A City of Kenai survey in 2007 found that 90% of its dip netters reside outside the Kenai Peninsula.

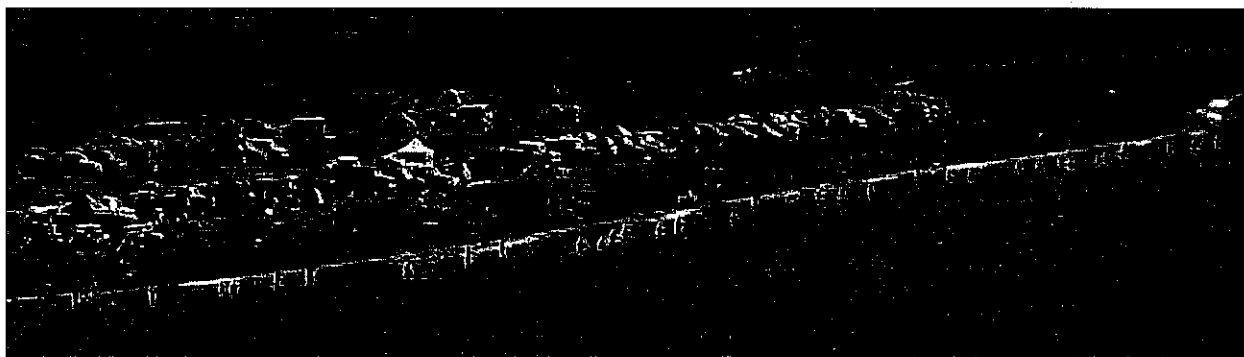


Figure 8. Personal use dip netters on the south bank of the Kenai River mouth in July 2005.

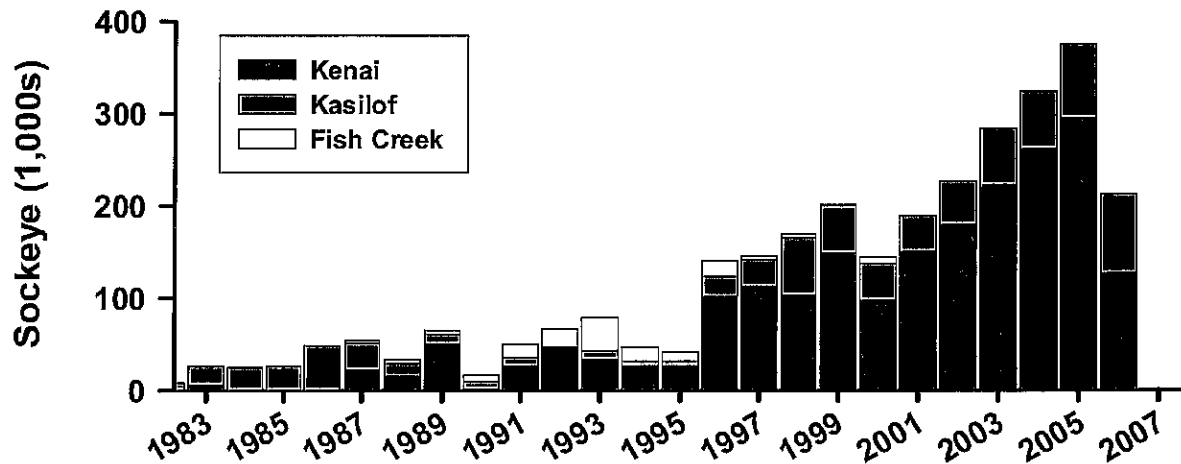


Figure 9. Personal use fishery harvest of sockeye, 1983-2007 (dip net & gill net combined)

Harvests

- Sockeye PU harvest has increased steadily, peaking at over 370,000 in 2005. Sockeye dominate but kings, coho, pinks, and chums are also caught.
- The majority of the PU harvest comes from the Kenai dip net fishery (typically $\frac{3}{4}$ of total).
- The majority of the Kasilof PU harvest occurs in the dip net fishery (typically about two thirds).
- Fish Creek PU harvest peaked at 37,000 in 1993 but has been zero since 2002.
- As many as 1,000 kings are taken in Kenai dip net fisheries in some years. On average one king is harvested for about every 300 sockeye.

Issues

Issue 1. Growth in the personal use fishery has resulted in increased harvest of sockeye that were previously allocated to commercial fisheries.

The commercial sector has submitted a series of proposals to limit or reduce the Kenai and Kasilof PU fisheries, based on the commercial fishery priority for sockeye. Proposals include direct limitations such as escapement triggers or reduced limits, and indirect limitations designed to reduce delivery of fish to the fishery.

Issue 2. The Department cannot use its emergency order authority to extend the personal use fishery beyond what is stated in the management plan.

The current season regulatory closure of July 31 for the Kenai River dip net fishery does not allow flexibility to harvest fish in a late-run year. It is also unclear if the Department can use its emergency order authority to increase or decrease time, area, bag limits, and possession limits of the personal use fishery in response to abundance.

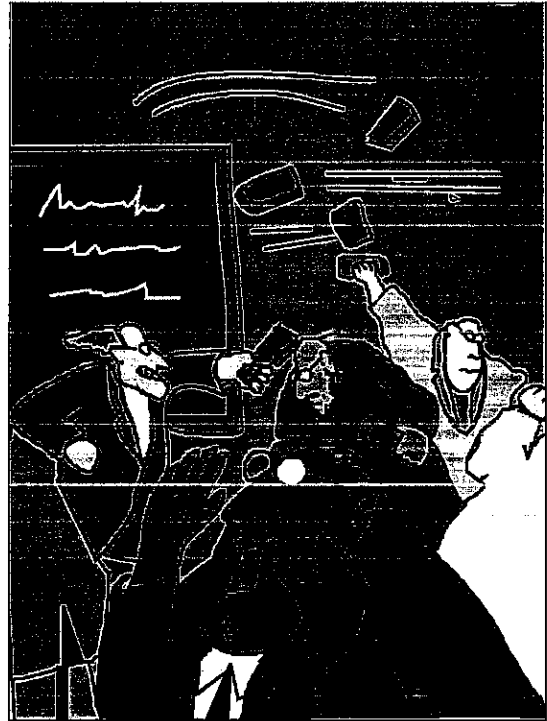
Issue 3. Implementation of motor type restrictions for dip netting from a vessel to reduce hydrocarbon pollution.

The Department of Natural Resources has approved regulations (for signature) within the Kenai River Special Management Area to phase in a requirement for all power boats to use four-stroke or DFI two-stroke motors in order to reduce hydrocarbon pollution. The effective area does not include the lower 4 miles of river downstream from the Warren Ames Bridge where the personal use boat fishery occurs.

#1. Allocation of sockeye to the Personal Use Fishery

Angler participation and harvest in personal use dip net fisheries have increased steadily since opportunities were expanded at the 1996 Board meeting. PU fishery permits have increased from 14,576 in 1996 to 21,900 in 2004 and 2005. Both PU and in-river sport fisheries for sockeye have also benefited from continuing large returns of sockeye into the rivers in recent years.

The noncommercial harvest share of Kenai sockeye has increased concurrent with growth in demand and opportunity in the in-river fisheries (Figure 10). Sockeye harvest rates (% of total run) in the Kenai personal use fishery have increased from <1% before 1991 to an average of 6% since 2000. Sockeye harvest rates in the Kenai sport fisheries have increased from just 4% prior to 1991 to an average of 8% since 2000. Prior to 1996, the non commercial harvest share (% of total harvest) of Kenai sockeye never exceeded 10%. Since 1996, the non commercial harvest share of Kenai sockeye has averaged 20%.



Fish fight!

Allocation and harvest of sockeye in the Kenai and Kasilof personal use and in-river sport fisheries is determined by the number of fish available in the rivers and the pattern of escapement. It takes large daily numbers of sockeye to make the fishery viable. For instance, Kenai sockeye counts of 15,000 – 25,000 are needed before catch rates are adequate to make fishing worthwhile. Because many in-river fishers are nonlocal and require some planning to make the trip, sustained high fish counts and high weekend counts are needed to build effort. Limited and unpredictable escapement patterns keep these in-river fisheries off balance and reduce effort, harvest, and allocation.

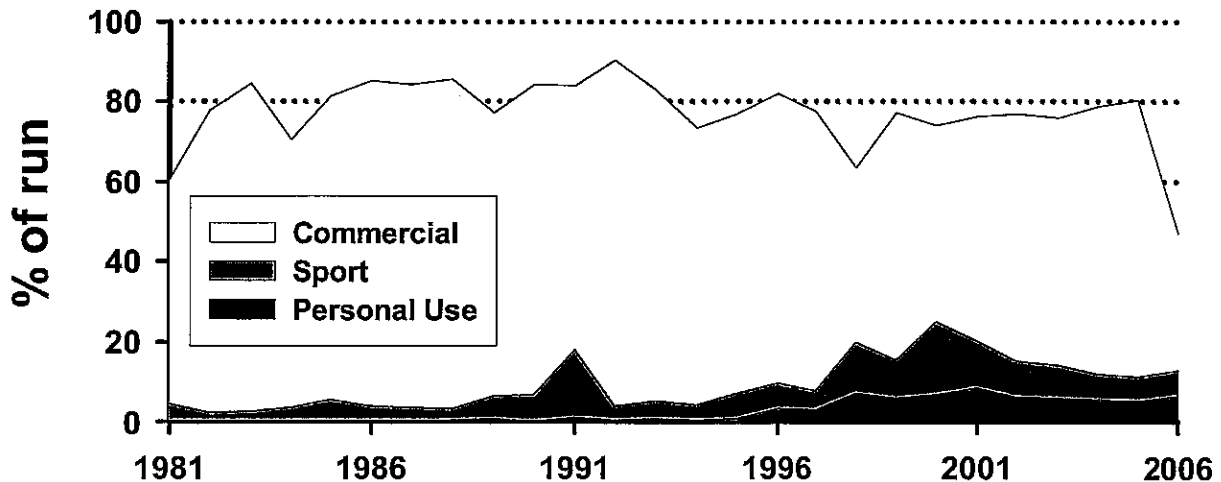


Figure 10. Harvest rates of Kenai sockeye in personal use, sport, and commercial fisheries, 1981 to present.

Recommendations

- 1. KRSA is opposed to proposals that seek to reduce the harvest potential of the sockeye personal use or in-river fishery in favor of commercial users.**

Personal use and sport fisheries for Kenai and Kasilof sockeye provided by current plans are consistent with the public demand for these opportunities. Significant allocation of sockeye harvest to the PU and sport fisheries is supported by the Board's allocation criteria (Box 1).

It is recognized that sockeye are designated by other management plans for a commercial fishery priority. However, the non-commercial harvest share of the commercial-priority sockeye is substantially less than the commercial share of the sport-priority Kenai late-run kings. The commercial fishery will continue to harvest the large majority of sockeye even if non-commercial sockeye harvests were significantly liberalized.

Box 1. Application of the Board's allocation criteria [AS 16.05.251(e)] to the Cook Inlet personal use and sport fisheries for sockeye.

- 1) The history of each personal use, sport, and commercial fishery;**
Personal use, sport, and commercial fisheries each have a long history in Upper Cook Inlet. All fisheries have evolved over time in response to changing values, demands, and opportunities. For instance, commercial fisheries have evolved with reduced dependence on chum and pink salmon and increased focus on the eastside set net fishery. The growth of the sockeye personal use and sportfishery results from increasing demand from the growing south central population. At the same time, the value of the commercial fishery is highly variable in part due to increased competition for the global seafood market.
- 2) The characteristics and number of participants in the fisheries;**
Personal use fishery permits have been issued to an average of 20,000 households per year since 2002. The Kenai and Russian rivers are the most heavily sport fished waters in the state, averaging over 300,000 angler days per year for all species (Begich & Pawluk 2007). At least 100,000 anglers fish each year in the Kenai River system (Haley et al. 1999). Cook Inlet commercial fisheries included 571 drift and 738 set gill net permits registered in 2003 (Shields 2007). Commercial fishers number about three operators and crew numbers per permit with an estimated 3,000 total commercial fishers in 1994 (ISER 1996).
- 3) The importance of each fishery for providing residents the opportunity to obtain fish for personal and family consumption;**
The Kenai and Kasilof personal use fisheries represent one of the few opportunities for a majority of Alaska residents to obtain fish for personal and family consumption.
- 4) The availability of alternative fisheries resources;**
The Kenai personal use and sport fisheries for sockeye are particularly important with the continuing closure of the Fish Creek personal use fishery. The only other alternative is the Chitna personal use fishery on the Copper River.
- 5) The importance of each fishery to the economy of the state;**
Recent economic analyses have highlighted the economic significance of commercial, personal use and sport fisheries to the state's economy. The Kenai fisheries are readily accessible to the nearly two-thirds of the state's population that lives in the Cook Inlet area. UCI commercial salmon fisheries account for a small fraction of the total Alaska salmon catch.
- 6) The importance of each fishery to the economy of the region and local area in which the fishery is located;**
Commercial, personal use, and sport fisheries for sockeye are all vital parts of the local Kenai economy. Ex-vessel value of the UCI commercial catch has averaged \$16 million over the last 10 years. The Kenai Peninsula Borough estimated the economic effect of sportfishing in the borough in 2003 at \$664 million.
- 7) The importance of each fishery in providing recreational opportunities for residents and nonresidents.**
Personal use and in-river sport fisheries provide significant recreational opportunities for Alaska residents. This fishery has grown into a tremendously popular family activity. These sockeye sport fisheries provide significant recreational opportunity for both residents and nonresidents.

#2. Department authority to extend PU

The Board’s UCI Subcommittee issue paper identified questions regarding the Department’s authority to increase or decrease PU fishery opportunities based on abundance (UCIC 2007). According to the issue paper, the Department cannot use its EO authority to extend the personal use fishing season beyond what is stated in the management plan.

The PU fishery management plan does allow increased fishing time from 17 hr/d to 24 hr/d in the Kenai fishery based on the Commissioner’s EO authority, when the Kenai run size is projected to exceed 2 million. This provision was implemented most recently in 2005 and 2007.

Kasilof PU fisheries have also been liberalized in some years based on abundance. In recent years, the Kasilof bank and boat dip net fishery area was expanded upstream by EO due to escapements in excess of the OEG.

PU annual limits are currently fixed by 5 AAC 77.525 at 25 salmon for the head of the household and 10 salmon for each dependent. The plan does not explicitly provide for increases based on abundance. It has been an internal Department policy with Board approval that bag and possession limits will not be increased in the absence of express direction from a plan (M. Minard, personal communication).

PU fishery ending dates are established by the plan with no provision for extension based on run size or timing. The Kenai fishery ends July 31. The Kasilof fishery ends August 7. Kenai sockeye are typically later timed than Kasilof sockeye (Figure 11). The Kenai ending date was originally established in 1996 to limit the harvest of coho. Kenai sockeye runs during the last three years have been timed later than average with large numbers entering in August. Escapements have also exceeded objectives in four of the last five years but the PU season was extended only in 2006 (from Aug 3 through Aug 10). This extension outside the plan time frame caused much confusion among anglers and which contributed to the lowest harvest in this fishery since 2000.

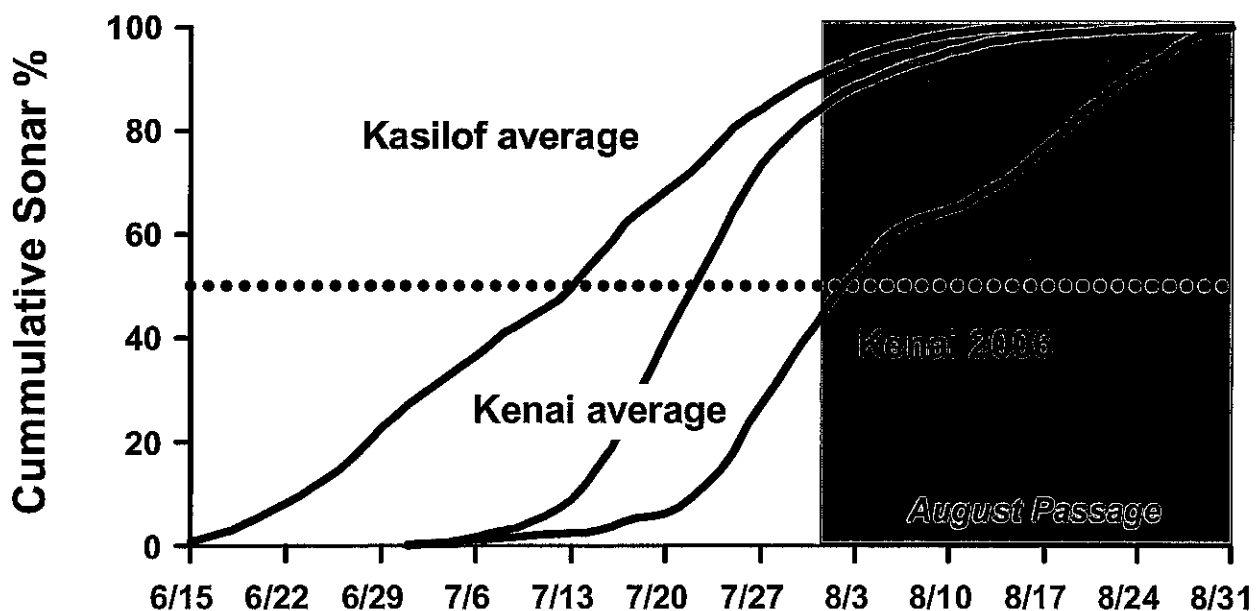


Figure 11. Passage timing of Kasilof and Kenai sockeye at the sonar and record late Kenai timing in 2006.

Recommendations

1. KRSA recommends amending the PU fishery management plan to clarify Department authority to expand annual limits, seasons, and areas based on sockeye abundance.

Increased PU opportunity would be an effective tool for regulating escapement in years when large runs of Kenai or Kasilof sockeye threaten to exceed goals. Increased harvest in the more terminal PU fishery can help address concerns over “overescapement” without the bycatch concerns of the set net fishery.

Commercial fisheries are already managed based on sockeye abundance and continue to fish in early August if significant numbers of sockeye are being harvested. An abundance-based approach to management of the PU fishery would be consistent with the commercial fishery approach to sockeye management.

The current PU management plan provides limited opportunity for abundance-based management. Managers lack the tools and direction to fully harness the fishing power of the PU fisheries to manage for a predetermined number of spawners. The commissioner has EO authority for modifying the fishery but more explicit direction in the management plan would facilitate use of this authority by local management staff.

Amendment of the PU management plan to clarify the Department’s authority to expand annual limits, seasons, and areas would clarify a Board intent to expand the fishery opportunity in years of high abundance.

KRSA has submitted Proposal #215 to increase personal use salmon limits in years when the Kenai in-river goal is exceeded. Most households do not reach their annual limits but some would welcome the opportunity to take more fish for personal use in years when there are surplus returns. There is no reason that the PU fishery should not be afforded the opportunity to harvest these additional fish.

Other proposals (e.g. #216) recommend time and area expansions in large run years that may also warrant consideration. For instance, the current Kenai PU fishery ending date (July 31) unnecessarily precludes PU harvest opportunity in August. Concerns for PU coho harvest that were the original impetus for the August closure date have not been borne out by actual coho catches which are far less than in early August commercial fisheries.

It is critical that PU fishery liberalization in large run years not be presented to anglers as a false opportunity. It will be counterproductive to raise expectations and demand if fishable numbers are not delivered to the fishery or if the schedule of commercial fishery opens results in sporadic and unpredictable numbers to which PU fishery effort cannot effectively respond.

PROPOSAL 215

Increased harvest opportunity in personal use fishery in Kenai and Kasilof rivers as follows:

5 AAC 77.540 (c)(1)(B) is amended to read:

- (i) The annual limit is as specified in 5 AAC 77.525, except that only one king salmon may be retained per household and,
- (ii) When sockeye salmon in-river run strength exceeds 850,000 sockeye salmon past the sonar counter at river mile 19, the annual head of household limit is 50 salmon and an additional 15 salmon for each dependant of the permit holder.

ISSUE: To provide the Department the authority to increase the annual limits in the Kenai and Kasilof Rivers personal use dip net fishery for salmon when sockeye salmon run strength allows.

#3. Hydrocarbons from the Personal Use Fishery

- Hydrocarbon levels exceed state water quality standards in the lower Kenai River (below Skilak Lake) during peak boat use days in July. This finding led to listing of lower Kenai River as a 303(d) impaired waterbody by the Alaska Department of Environmental Conservation in 2006.
- The older two-stroke motors that do not comply with current EPA pollution standards are the main culprit. Analysis and modeling by the Kenai Watershed Forum has estimated that upgrades to newer, cleaner motors will drastically reduce contaminant levels.
- In 2008, the Department of Natural Resources has approved regulations (for signature) within the Kenai River Special Management Area to phase in a requirement for all power boats to use four-stroke or DFI two-stroke motors beginning in 2008 in order to reduce hydrocarbon pollution.
- The lower five miles of river below the Warren Ames Bridge including the area of the PU boat fishery is not addressed by the DNR regulation.

Alternatives

There is wide agreement regarding the need to extend motor restrictions below the KRSMA based on similar proposals from many stakeholders including ADFG (#221), Kenai Area Fisherman's Coalition (#222), Richard Hahn (#291), Andy Szczensy (#292), Mel Erickson (#293), and City of Kenai, Kenai Peninsula Borough, City of Soldotna (#294).

This change will require boaters with old motors to purchase replacements in order to continue to participate in the PU boat fishery or the sportfishery. Some PU boaters do not participate in the sportfishery, hence, would not otherwise be affected by the DNR regulation.

Various effective dates can be considered. The DNR ban on non-DFI two-strokes in the KRSMA is effective in July for 2008 and 2009 and is year-round starting in 2010. ADFG has proposed a 2010 effective date for the dip net fishery. The City of Kenai, Kenai Peninsula Borough, and City of Soldotna have proposed regulation during July consistent with the DNR rules.

Various other remedies have been proposed to address this problem including odd/even fishing days based on registration number, a requirement to anchor while PU fishing, adding drift days, guide restrictions, and 35 HP restrictions. These alternatives do not directly address the pollution problem with the older two stroke motors and often have much broader fishery implications.

Recommendations

1. **KRSA supports the a consistent phase-in of a requirement for use of four-stroke or DFI two-stroke motors above and below the Warren Ames Bridge.**

Hydrocarbon pollution in the Kenai River coming from boat motors is a grave environmental concern.

The best available scientific information has shown that the single most effective remedy to this problem would be to require all power boats participating in sport and personal fishery to use four-stroke or DFI two-stroke motors.

Regulating motor type during participation in Kenai River personal use and sport fisheries is within the jurisdiction of the Board of Fisheries. In fact, the Board is uniquely situated to act across the multiple local jurisdictions in the lower Kenai below Skilak Lake.

The most direct and enforceable way to enact this regulation is to adopt language comparable to DNR's rules (e.g. proposal #292).

PINK SALMON FISHERY

Background

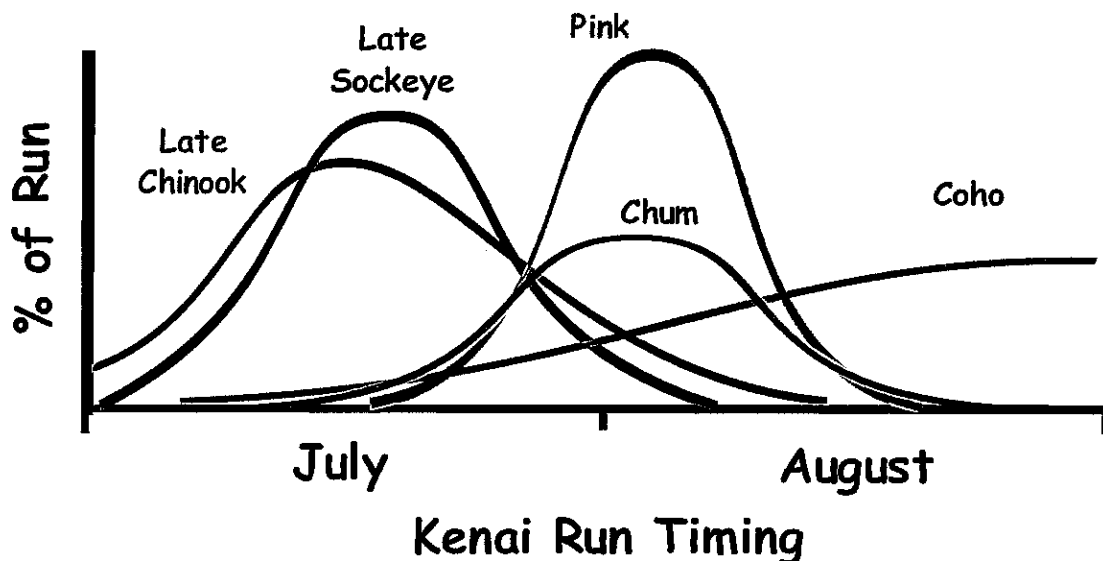
- A Cook Inlet Pink Salmon Management Plan [5 AAC 21.356] was adopted in 2002 and reauthorized in 2005 to provide fishery opportunity for this commercial priority species in August.
- This plan provides access to pink salmon and minimizes harvest of Northern District and Kenai coho consistent with the sportfishery priority for coho.
- The plan authorizes a drift net fishery after August 9 in an area off the Kenai and Kasilof.
- Pink salmon may be targeted in even years when runs are abundant and when coho escapement goals are met.
- Pink salmon are currently underutilized because of very low market value.

Runs

- Large numbers return to streams and rivers throughout the inlet. The Kenai and Susitna rivers have big populations.
- Pinks return in late July and early August, overlapping in run timing with sockeye, Chinook, coho, and chum runs.

Escapement

- Escapement of pink salmon is not indexed except in a few systems incidental to monitoring for other species.
- Anecdotal information suggests that runs have rebounding from effects of the 1986 flood.
- Declining harvest trends over time reflect a drop in effort for pink salmon as well as other changes in Cook Inlet commercial fisheries rather than a decline in pink salmon abundance.
- Escapement goals have not been established for pink salmon in Upper Cook Inlet.



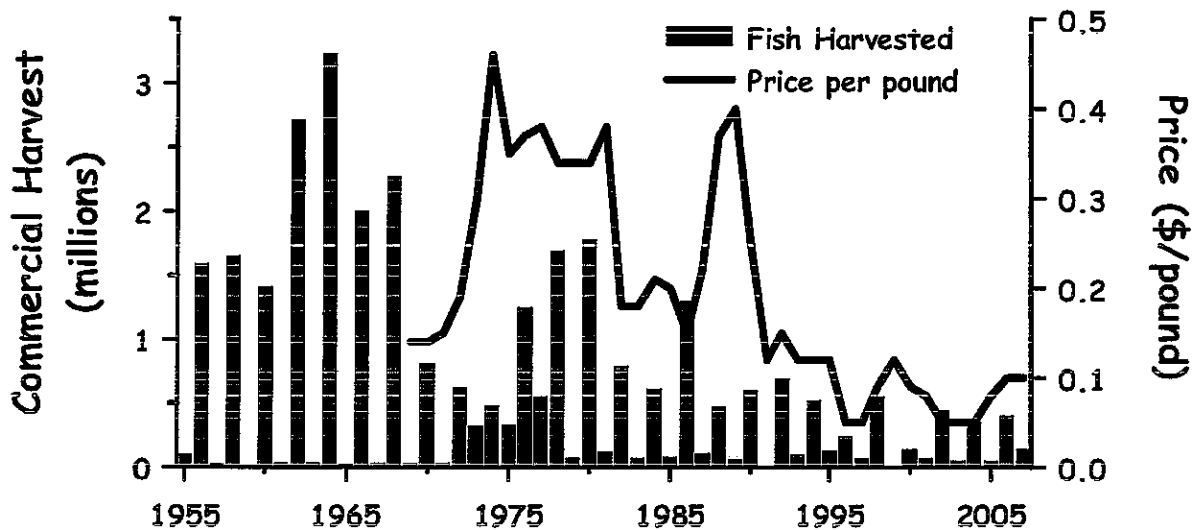


Figure 12. Trends in pink salmon harvest and value in Upper Cook Inlet commercial fisheries. (No price adjustments for inflation).

Fisheries

- ❑ Annual landings of pink salmon historically exceeded those of sockeye until the 1970s when sockeye numbers increased and pink markets began to fade.
- ❑ Total value of UCI pink salmon landings has dropped from a peak of over \$2 million per year in 1978 and 1980 to approximately \$70,000 in 2004 and \$175,000 in 2006.
- ❑ Pinks typically account for about 1% or less of the UCI commercial salmon ex-vessel value.
- ❑ Pink salmon prices have fallen as low as \$0.05/lb and were \$0.10/lb during the last couple years (\$0.36 per fish).
- ❑ Significant numbers of pinks continue to be harvested in sockeye target fisheries in the later part of July, particularly in the drift net fishery.
- ❑ Participation in the August pink fishery authorized by this plan has been very limited. In 2006, just 17,000 pinks were harvested during 3 periods (4% of the pink total for the year). In 2004, participation was practically nil on three open dates. In 2002, only four boats participated and only on the first period.

Issues

- Issue 1. Area description inadvertently omitted in prior plan revisions.**
ADFG has submitted a housekeeping proposal (#153) to add the area description back into the plan. Otherwise the Department will have to continue to describe the open area by emergency order.
- Issue 2. The plan does not provide for pink salmon fisheries in eastside set net areas and is too late to access Susitna river pink salmon stocks.**
This issue was raised by the east-side set net fishery that is seeking to expand fishing opportunities during mid to late August. The set net fishery is currently closed on August 10 or earlier when sockeye harvest declines in order to protect coho [5 AAC 21.310 (2)(C)(iii)].

#1. Omission of area descriptions

The Pink salmon plan provides an opportunity for target fisheries in drift net areas during August where historical data indicates that harvestable numbers of pink salmon can be accessed with limited impacts on coho.

Recommendations

1. Adopt ADFG proposal #153 to restore the area description as per the original plan:

(4) 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., a line from 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., a line from 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., and the western boundary of the Kenai and Kasilof Sections as described in 5 AAC 21.200(b)(2)(B) and (C).

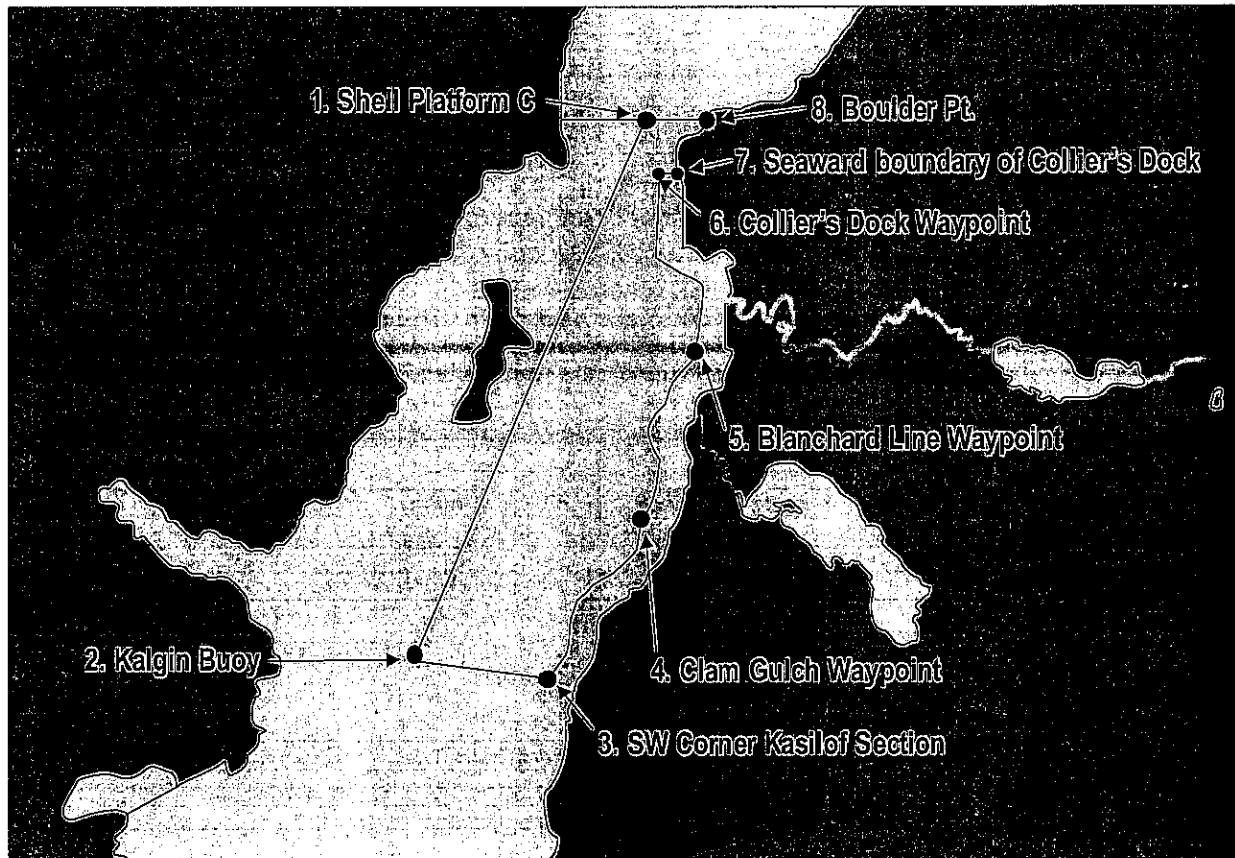


Figure 13. Pink salmon target fishery area authorized by the plan.

#2. August commercial fishery for pink salmon

Very low pink salmon values currently provide little incentive for commercial drifters to capitalize on pink salmon fishing opportunities afforded by this plan. In fact, low prices result in many drift gill netters actively avoiding harvest of pinks when other species are available (Fox and Shields 2003).

Coho have comprised a significant portion of the salmon harvest in the special pink salmon drift fishery authorized by this plan. In 2004, one coho was harvested for every 0.4 pinks. In 2006, the ratio was one coho for every 5 pinks. Total coho numbers have not been high because effort has been low.

Recent pink salmon harvest shares in the drift and east-side set net fisheries are similar to historical numbers. The set net fishery harvested 41% of the Upper Cook Inlet commercial pink total in 2002-2006 (Shields 2007). The 1996-2005 average ESSN share was 40% and the 1966-2006 average share was 37%.

Recommendations

1. KRSA recommends no action to expand east-side set net fisheries in August under the guise of a pink salmon fishery.

An August set net fishery would be a mixed species fishery catching large numbers of coho. This fishery would come just as coho are beginning to build to fishable numbers in the Kenai sportfishery and would delay and constrict coho fisheries in the river.

Significant coho catches in the east-side set net fishery in August would be contrary to the sport fish priority for Northern District and Kenai coho [5 AAC 21.360].

Risks of overharvest of coho in late July and early August commercial fisheries are exacerbated by the inability to estimate run size in-season and to regulate fisheries to protect escapements of these species. Concentrated commercial harvest of the early part of the coho run could also have long term biological impacts if these early fish are a unique substock.

Pink salmon have been a historically low value commercial enterprise. There is nothing changed in the market. The special August pink salmon drift net fishery has demonstrated that pink salmon values alone are not adequate to justify significant fishing effort based on pinks alone. Effort in the drift pink fishery has been very limited due to continuing poor prices for pinks. The lack of participation belies claims of a significant market for Cook Inlet pinks in August.

The set net fishery is already afforded significant fishing effort during the first 10 days of August in years when significant numbers of Kenai sockeye remain available. If it is true that Susitna fish have already passed the Central District drift net fishery by the middle of August, these Susitna sockeye will be similarly unavailable to any extended set net fishery dates.

KENAI LATE-RUN SOCKEYE SALMON

Background

- The Kenai River Late-run Sockeye Salmon Management Plan [5AAC 21.360] directs management of commercial, personal use, and sport fisheries for the dominant and most intensively managed fishery stock in the district.
- The plan identifies a commercial fishery priority for sockeye but directs that commercial fisheries shall minimize the harvest of the sport-priority coho and kings.
- The plan defines an optimum escapement goal, sonar goals, limitations on set net fishery time, and closure windows. Management is based on run strength. The plan seeks to distribute escapement evenly within the OEG range, in proportion to the size of the run.
- This complex plan attempts to strike a fair balance between biological and allocation objectives. Sonar goals and commercial closure windows provides an indirect allocation of sockeye to the personal use and sport fisheries. The plan also sets sportfishery times and bag limits.

Runs

- Kenai late-run sockeye run sizes have averaged 3.5 million for the last 20 years and ranged between 0.4 to 8.6 million (Figure 14).
- Over 80% of the run typically returns to the Kenai in July. The average median passage date is July 22 although runs during the last 3 years have been later than average. The 2006 run was the latest on record.

Fisheries

- Annual commercial harvest has averaged almost 2.5 million Kenai sockeye per year over the last 20 years.
- Kenai sockeye typically comprise 90% of the Upper Cook Inlet commercial sockeye harvest. They are among the most heavily fished sockeye stocks in Alaska (Clark et al. 2007b).

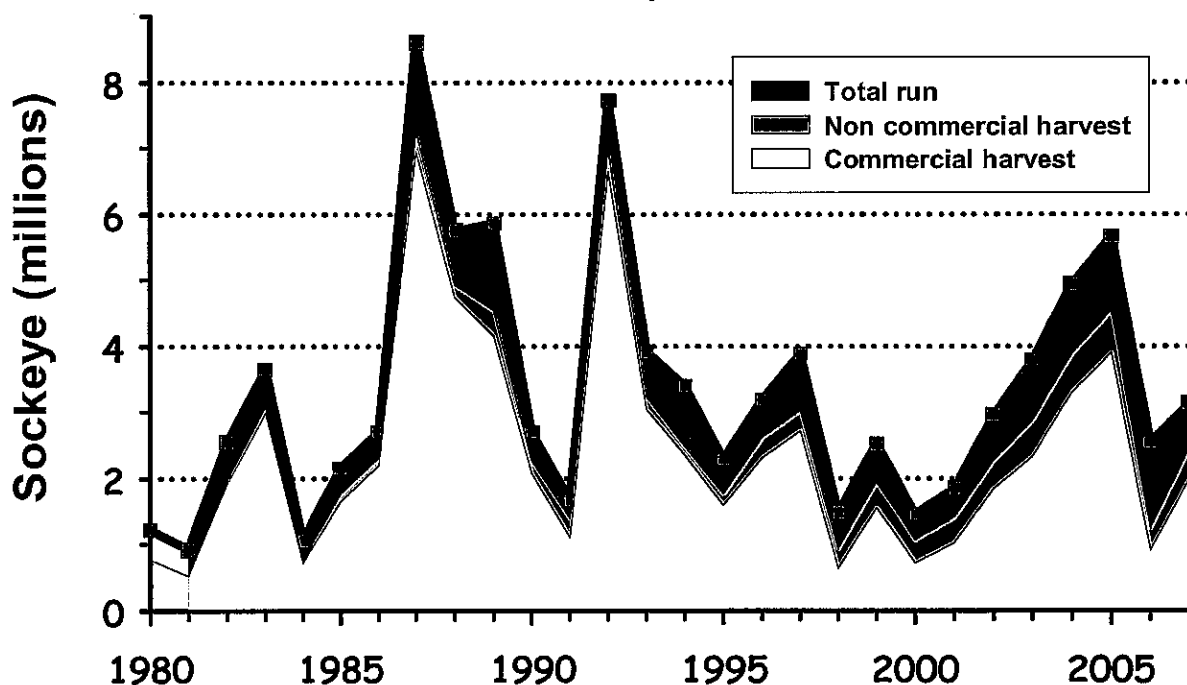


Figure 14. Kenai late-run sockeye run size and harvest, 1980-2007.

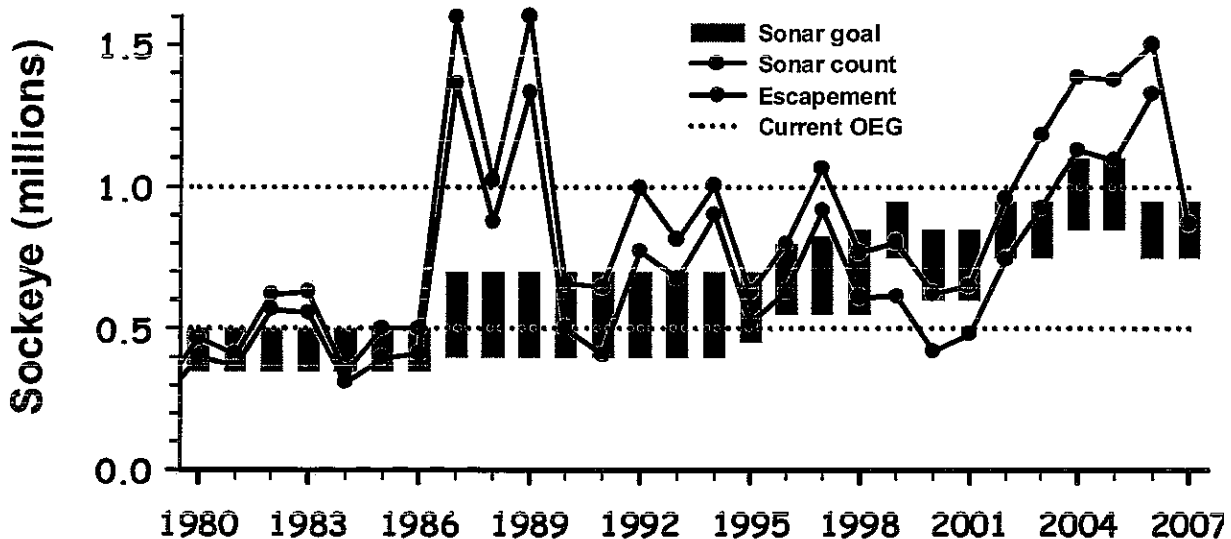


Figure 15, Recent sonar counts and spawning escapements of late-run Kenai sockeye relative to sonar and optimum escapement goals (sonar goals vary depending on run size).

Escapements

- Sustainable, Optimal, and In-river (sonar) goals have been established for this stock. SEGs are 500,000-800,000 for the Kenai mainstem and 30,000-110,000 for Russian River. The OEG is 500,000-1,000,000 (including Hidden Lake enhanced fish). Sonar goals vary based on run size.
- Escapement goals were increased in 1987 and 1996 as larger escapements provided better scientific information on the productivity of the system.
- Sonar counts over the last 20 years have averaged 967,000 and ranged from 625,000 to 1,600,000.
- Sonar goals have been exceeded in five of the last six years. The top end of the OEG (1 million) was exceeded in 2004 (1.1 million), 2005 (1.1 million), and 2006 (1.3 million).
- Mainstem spawning escapements have exceeded the SEG in three of the last four years after falling below the SEG in four of the preceding six years (primarily due to greater than expected sport harvest above the sonar.)

Ongoing Research

- A series of significant research or analysis programs are underway to address critical uncertainties and management controversies regarding Kenai sockeye. Results of these studies have the potential to significantly change what we think we know about this run.
- Sockeye sonar evaluation: Accuracy is being evaluated with a mark and recapture population analysis. Evaluations in other areas have found significant undercounting especially at large runs.
- Genetic stock identification: Powerful new genetic methods are being used to determine the accuracy of historical stock composition estimates in the commercial catch based on scale aging. Even small changes in allocation can significantly change the historical data upon which management has been based.
- Escapement goals: ADFG recently reviewed the science on the effects of large escapements (Clark et al. 2007b). Kenai returns over the next few years from recent large escapements should help resolve the raging controversy over appropriate escapement levels.

Issues

The Upper Cook Inlet committee of the Alaska Board of Fisheries in their 2007 issue paper identified at least six issues with the Kenai Late-run Sockeye Management Plan. Several of these, including definition of fishery priorities by species or clarification of the term “reasonable opportunity,” are global issues with application to all UCI management plans. These issues were discussed in our report under the Umbrella Plan [5 AAC 21.363]. The following issues involve application of Umbrella Plan guidance or other concerns specific to the late-run Kenai sockeye management plan.

Issue 1. Sustainable escapement goals.

The Board subcommittee issue paper and proposals to the Board from various parties have identified several concerns with current escapement objectives for late-run Kenai sockeye. One question is whether current optimum escapement goals are too high given concerns about the productivity of Kenai and Skilak Lakes (related to increased turbidity and small juvenile sizes.)

Issue 2. Priority among in-river and optimum escapement goals.¹

The BOF has adopted escapement goal, windows, and established fishing time restrictions. It is unclear whether the in-river goals or the OEG are the higher priority. This issue has been compounded by chronic sockeye forecast errors which have constrained management prior to early July until actual run strength can be gauged. It is also unclear what sport and personal use fishery actions are required to meet escapement objectives (UCIC 2007). A related issue is whether current in-river goals are consistent with current or desired sport harvest above the sonar, in light of growth in the in-river sockeye sportfishery.

Issue 3. Commercial fishery windows and extra fishing time.

The priority of windows relative to escapement goals is a fundamental question in the Kenai as well as Kasilof sockeye management plans. The controversy revolves around tradeoffs between the biological benefits and risks of windows against the ever-present backdrop of their allocation effects. In-river fisheries generally benefit from and favor windows because of the consistent fishery opportunity they provide. The set net fishery generally opposes windows because of the constraint on their fishing opportunity.

Issue 4. The Department lacks the authority to make in-season adjustments to bag and possession limits.

The management plan sets the sport bag and possession limit at three salmon and provides for increasing the limit to six when the run exceeds two million. When bag and possession limits are set in management plans, the Department cannot use its emergency order authority to increase or decrease limits unless allowed by the management plan (UCIC 2007). Thus, the Department has been constrained from decreasing limits rather than closing the fishery at small runs or increasing limits to increase harvest and help regulate large escapements.

¹ See discussion of Umbrella Plan [5 AAC 21.363] for global discussion of priorities common to UCI plans.

#1. Sustainable escapement goals

The effects of large Kenai sockeye escapements have been a source of bitter controversy in Upper Cook Inlet for at least the last decade. The commercial fishing industry believes that large escapements unnecessarily sacrifice yield in the year of return and in future returns. Other parties have questioned the scientific basis for this hypothesis and its use as an allocative argument. The fundamental question is whether mainstem Kenai spawner escapements exceeding the current SEG of 500,000-800,000 will decrease, increase or have no effect on future returns and yield. The problem is that the current spawner-recruit data do not include enough information on large escapements to know for sure.

The current SEG is based on historical stock-recruitment data that includes returns from escapements up to 1.3 million. These large escapements have produced above average to record high returns and no late-run Kenai sockeye escapement has ever failed to replace itself (Figure 16). In fact, the only two Kenai sockeye escapements exceeding one million fish in the historical record produced above-average returns of four million and nine million fish. A Department review of this data prior to the 2005 Board meeting found that the existing data were inadequate to determine whether the escapement goal range includes MSY (Clark et al. 2007a). This led to a reclassification of the Kenai escapement goal by the Department from a BEG to an SEG.

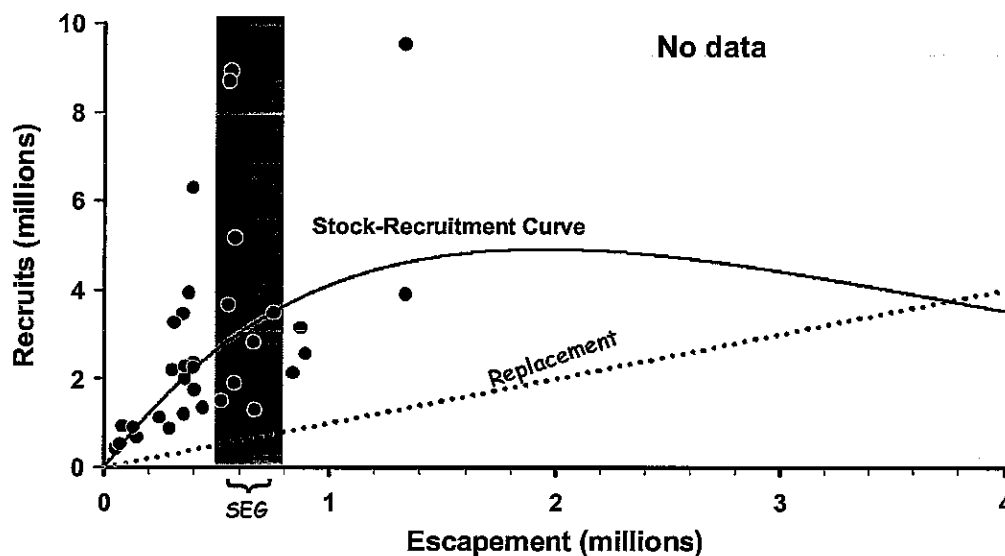


Figure 16. Late-run Kenai sockeye stock recruitment.

Arguments for yield and conservation risks of large sockeye escapements have been supported by research on juvenile sockeye and limnology in Skilak Lake during the late 1980s and early 1990s. This research found that large numbers of spawner escapements resulted in large numbers of fry and smaller average fry size due to competition for limited food. Although the small fry were abundant, overwinter survival was reduced which could result in lower net productivity if the survival tradeoff with number was strong enough. Concerns have been heightened by recent observations of elevated turbidity and even smaller fry sizes in Skilak Lake.

At the same time, returns from brood years immediately after large escapements following the Exxon Valdez closures produced less-than-average returns. This led to the development of a brood-year interaction model, which predicted severe reductions in runs and yield due to large escapements. Beamesderfer et al. (2005) analyzed the scientific basis of the brood year interaction model and found that it was not supported by more recent data. Clark et al. (2007a)

found that, while the brood year interaction model provided the best statistical fit to the available spawner-recruit data, the fundamental assumptions of the model were suspect.

A comprehensive review of the biological and fishery related aspects of overescapement was subsequently completed by the Department in response to statewide concern over this issue (Clark et al. 2007b). This review found that escapements exceeding goals reduced yields if the goals accurately reflect the capacity of the system. Escapements that exceeded goals resulted in higher subsequent yields when existing goals did not encompass MSY. Short term losses in yield due to overescapement where goals included MSY were typically small (5% or less of the annual run, 10% in the Kenai). Some evidence was found for delayed density dependence in some stocks but there was no evidence for long-term stock collapse due to large escapements. A similar review of overescapement in British Columbia sockeye and pink stocks by Walters et al. (2004) similarly found no evidence for anything like a “collapse” or “near-collapse” of production following runs with very large numbers of spawners.

Recommendations

1. KRSA recommends no changes in the current Kenai late-run sockeye OEG pending completion of ongoing research and data from returns from recent large escapements.

In the next few years, we will see the results of current research on the accuracy of the Kenai sockeye sonar and estimates of sockeye stock composition in the commercial harvest. This research has the potential to significantly change or qualify the basic census numbers on Kenai sockeye upon which management is based.

We will see returns from recent large escapements where data is lacking. These returns should provide adequate contrast in the stock-recruitment relationship to identify maximum production levels. This information should help resolve whether the current SEG should be a BEG or conversely if higher escapements increase rather than decrease sockeye yields.

We will see whether recent small fry sizes significantly affect sockeye returns and if changes in turbidity of Skilak Lake are a trend or simply normal environmental variability related to flood frequency. This information should help clarify why adult return data have failed to corroborate brood-year interaction and small fry size hypotheses to date.

There is little or no risk of postponing decisions on the OEG until the needed data are available. Over the next few years, sockeye returns will be low if overescapement risks are real or they will continue in the present range in which case overescapement is not the problem it has been made out to be. In either case, escapement-related risks to future yields are very low.

If current escapement goals accurately reflect MSY and small fry sizes have a big impact, we would expect less-than-average returns in the next few years from high escapements of 1.1 to 1.3 million fish per year in 2004 - 2006 and small fry sizes beginning in 2003. Recruits from these fish will drive returns for the next three to five years. If overescapement risks are real, then expected runs will be low enough that underescapement rather than overescapement is the concern.

Given current uncertainty in Kenai productivity identified in recent overescapement reviews led by the Department’s senior comfish (Clark et al. 2007a) and sportfish (Clark et al 2007b) scientists, critical new research and stock-recruitment information expected to become available in the next few years, and the low overescapement risk from numbers expected over the next few years, it is not appropriate to change the Kenai sockeye OEG at this time.

#2. Priority of in-river and optimal escapement goals

The global issue of competing priorities within and among the management plans was discussed under the Umbrella Plan. Whatever is done will also need to be reflected in the Kenai late-run sockeye plan. The following discussion addresses the related issue of the relative priority of the OEG and the in-river (sonar) escapement goal ranges which is specific to the Kenai plan.

The Kenai plan identifies an overarching OEG and in-river goals for the sonar counter at river mile 19. The in-river goals are designed to distribute escapements throughout the OEG range for biological purposes (i.e. higher spawning escapements during bigger runs). The in-river goals also provide a de facto allocation for sport fish harvest upstream from the sonar.

Table 1. Escapement goals currently identified in the Kenai late-run sockeye management plan.

Run strength	OEG [†]	Sonar goal	Difference (vs. min.)
< 2 million	500,000-1,000,000	650,000-850,000	150,000-250,000
2-4 million	500,000-1,000,000	750,000-950,000	250,000-450,000
> 4 million	500,000-1,000,000	850,000-1,100,000	350,000-600,000

[†]includes mainstem SEG (500,000-800,000), Russian late-run SEG (30,000-110,000) & Hidden Lake hatchery returns.

One recent problem related to the sonar goal is that it is unclear whether the in-river goal or the OEG take precedence. Thus, it is unclear what management response is appropriate when counts are exceeding the upper end of the sonar goal but not the OEG. The season ended this way only once in recent times (2002), but this was also an issue from 2003 through 2006 when counts passed the top end of the in-river goals on their way to going over the top of the OEG.

A second problem is that the current sonar goals do not always ensure escapements above the low end of the OEG. Escapements of mainstem spawners past the sportfishery upstream from the sonar fell short of minimum goal for four years in a row from 1998 to 2001 when relatively low numbers of sockeye were delivered to the sonar. The sockeye sportfishery has demonstrated a capability to harvest significant numbers of sockeye upstream from the sonar.

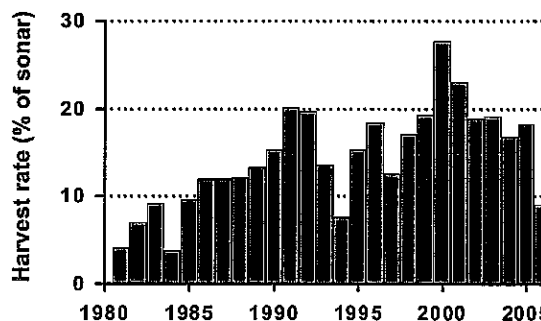


Figure 17. Mainstem sport harvest rate of sockeye upstream from the Kenai sonar.

Recommendations

1. KRSA recommends that the issue of in-river vs. OEG priorities be resolved by recalibrating the in-river goal ranges based on recent data.

In-river sonar escapement goals have important biological benefits for distributing the return throughout the escapement goal range. They also describe the Board's allocation intent to share the benefits of large sockeye runs with in-river fisheries.

The priority conflict reflects the need to update sonar goal ranges based on current harvest data for the mainstem sockeye sportfishery upstream from the sonar.

To avoid conflicts between the top of the sonar goals and the top of the OEG, the top ends of the sonar goals should be increased at moderate to high sockeye runs. The alternative is to significantly liberalize the in-river sockeye sportfishery.

To ensure that minimum OEGs are met, lower end of the in-river goals should be increased for low to moderate sockeye runs. The alternative is to place further restrictions on the in-river sockeye sportfishery.

#3. Fishery windows & extra fishing time

The global issue of competing priorities within and among the management plans was discussed under the Umbrella Plan. Whatever is done there will also need to be reflected in the Kenai late-run sockeye plan. The following discussion addresses issues of fishery windows and extra fishing time specific to the Kenai plan.



The Kenai late-run sockeye plan includes designated commercial fishery closure periods and limitations on commercial fishing time, both related to run size. These regulations have biological and allocative effects. They are designed to help distribute escapement throughout the run and to deliver fish to in-river fisheries. Restrictions are liberalized at higher run sizes to allow increased commercial fishery flexibility to access harvestable surpluses.

Table 2. Fishing time and windows identified in the Kenai late-run sockeye management plan.

Run strength	Commercial fishing time (per week)				Prescriptive window	Additional window
	Regular Periods	Extra EO	Total	Example		
< 2 million	12 hr ea. (Mon & Thu.)	24 hr	48 hr	4 d x 12 hr	None ¹	None ¹
2-4 million	12 hr ea. (Mon & Thu.)	51 hr	75 hr	5 d x 15 hr	36 hr	24 hr
> 4 million	12 hr ea. (Mon & Thu.)	84 hr	108 hr	6 d x 18 hr	36 hr	None

¹EO time limitations were assumed to provide fishery windows.

The fishing power of the set net fleet is very high. Most of the fish available in the fishery area are caught on any given day. Catches are greatest on the first day of fishing following a break. Catch rates fall off rapidly on consecutive days. Commercial fishery harvest is maximized with consistent openers throughout the week with only 12-24 hour breaks to rest and reload. Windows of less than 24 hours do not typically provide enough time for a new influx of fish to transit the commercial fishing area into the river but can reload the beach for the next fishery opener. The exception is late in the season when fish are moving through the inlet more rapidly.

Kenai personal use and sport fisheries are severely impacted by sustained periods of set net fishing along the east-side beaches. Windows of 36 hours (3 tides) are generally needed to pass significant numbers of fish into the river. In-river fisheries depend on a regular influx of fish to provide a reasonable opportunity to catch a fish. Intensive commercial fishing generally results in extended periods of poor catch rates in the river, particularly for sockeye. Sporadic and unpredictable commercial openers also keep in-river fisheries “off balance” by decreasing the predictability of fish availability. The result is reduced effort, reduced harvest, a reduced harvest allocation to in-river fisheries, and an increased chance of exceeding escapement goals.

At the 2005 Board meeting, a mandatory window was established to begin late Thursday or on Fridays to provide an influx of fish for the weekend PU and sport fisheries. This has proven particularly popular for people intending to drive down for a weekend of PU or sport sockeye fishing. When people are provided with a predictable fishing opportunity, we have seen that they can catch a lot of sockeye which provides another option for helping to regulate escapement.

There is a clear cause-and-effect relationship between fishery openers, windows, and subsequent sonar counts during the typical sockeye return pattern (Figure 18). Windows obviously will not deliver fish to the river if no fish are moving through the inlet. Conversely, good sockeye sonar counts also occur in spite of commercial openers when the fish are moving quickly, as in the late runs of the last two years. In practice, windows have a much more significant effect on delivery of fish to the river than current limitations on commercial fishing time. During large runs, the allowable commercial fishing time (108 hrs) is such that the set net fishery could fish over 15 hours per day, 7 days a week – more than enough time to fish both tides. The fishing time can also be stacked late or early in the week at the beginning and end of the run for maximum effect. Windows on the other hand provide a real constraint on the commercial fishery that can't otherwise be managed around.

The most significant effects of windows are allocative. Windows reduce sockeye and king harvest in the commercial set net fishery and increase opportunity and harvest in the PU and sport fisheries. The net effect of the windows is an implicit reallocation of a greater harvest share of sockeye and kings to the PU and sport fisheries.

Windows provide biological benefits as well. Windows help protect escapements of stocks that are not monitored in-season (such as Kasilof late-run kings). Windows ensure that escapement is distributed throughout the run, which protects the inherent genetic and life history diversity and productivity of this stock.

In addition to the obvious allocation objections to windows by the commercial industry, a number of biological or yield based concerns have been raised. These primarily involve an increased risk of “overescapement” and resulting loss of yield. Comfish managers have complained that these regulations unnecessarily constrain their flexibility to manage for escapement goals. It has been suggested that windows increase the chances of missing unpredictable large pulses of fish onto the beach, into the river, and over the escapement goal. It has also been suggested that windows actually increase rather than decrease king harvest in the set net fishery by forcing the managers to fish more hours to make up for limitations on their ability to fish when large numbers of sockeye are available. None of these objections are supported by the available information or by fishery modeling conducted by KRSA.

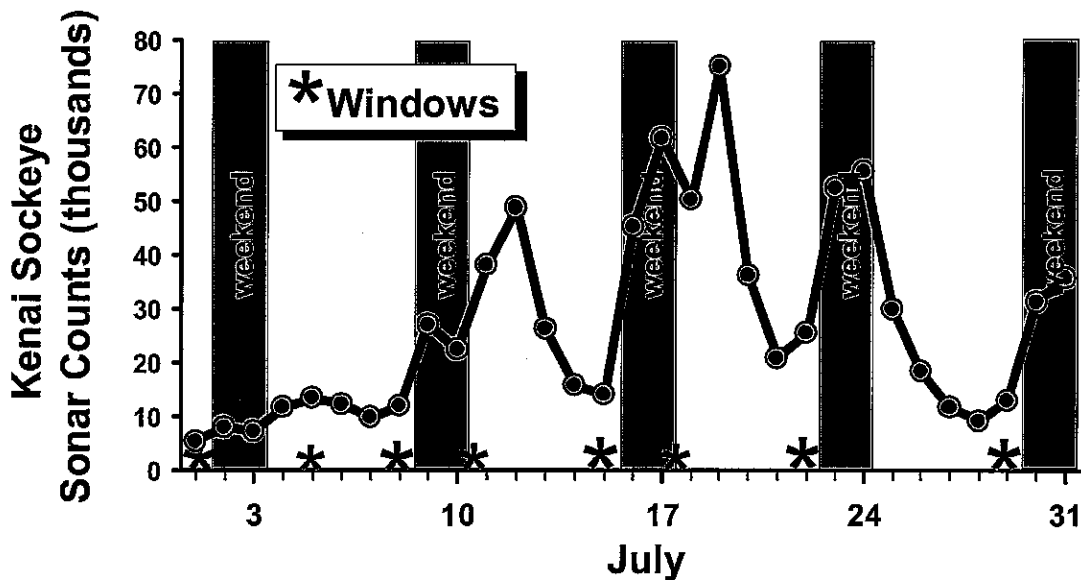


Figure 18. Example of the effectiveness of prescriptive fishery windows in providing weekend sockeye escapements into the Kenai River in an average-timed run year (2005).

Recommendations

1. KRSA recommends no reductions in fishery window provisions of the Kenai Late-run Sockeye Management Plan.

Windows are working exactly as intended. They break up extended periods of commercial fishing and ensure consistent delivery of sockeye and kings into the river. They provide fish needed to support a reasonable opportunity for harvest in the Kenai personal use and sport fisheries. They share harvestable surpluses among the fisheries. They help sustain personal use and recreational fisheries that provide very large economic value to the region. They reduce the commercial harvest of Chinook. They also provide biological benefits by protecting natural diversity and escapement of stocks that are poorly monitored.

Windows feed people as well as fisheries. They have been particularly effective in providing fish for the sockeye personal use and sport fisheries. With the prescriptive Friday window, sport and personal use sockeye anglers can now plan a weekend fishing trip to the Kenai and know that their trip will not be disrupted by an unanticipated opening of the commercial fishery. These fisheries have proven to be particularly important for residents of Anchorage and Mat-Su areas because of continuing closures of Northern District fisheries for sockeye. The very high participation in these fisheries reflects the scope of the demand for access to fishable populations.

Personal use and sport fisheries for Kenai and Kasilof sockeye provided by current plans are consistent with the public demand for these opportunities. Significant allocation of sockeye harvest to the PU and sport fisheries is supported by the Board's allocation criteria (Box 1). The commercial fishery continues to harvest the large majority of sockeye consistent with their management priority for sockeye. Repeal of fishery windows will effectively allocate a greater share of Kenai late-run sockeye and kings to the commercial set net fishery.

Windows and EO limitations are not responsible for recent failures to maintain Kenai sockeye spawning escapements within prescribed goal ranges. Kenai sockeye management has a long history of failure to regulate escapements within goals that precedes the formalization of windows in 2002 (Figure 19). These failures reflect normal natural variability in the run size, timing, and movement patterns; a consistent inability to accurately forecast run size; and significant uncertainty in the accuracy of current sonar estimates, stock composition of the very large commercial harvest, and the stock-recruitment relationship. Against this backdrop, any potential future yield effects of windows are marginal.

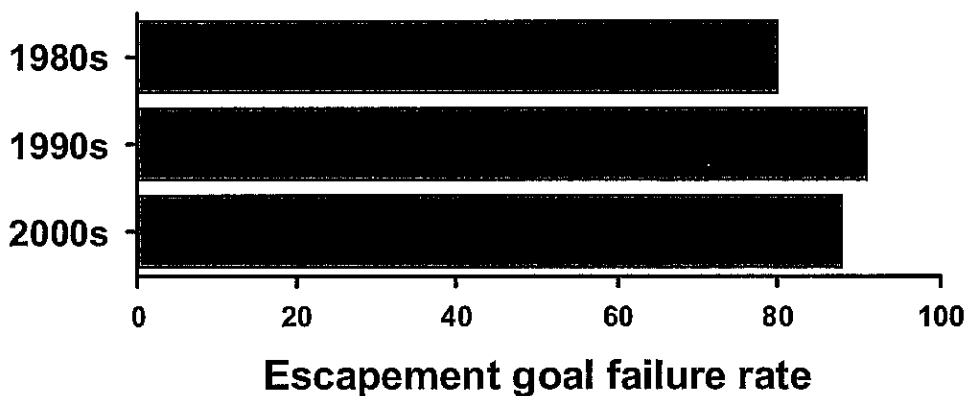


Figure 19. Percentage of years by decade in which Kenai late-run sockeye escapements have been outside either enumeration or escapement goals.

2. **KRSA recommends increasing the current non-prescriptive window at run strengths of 2-4 million from 24-hr to 36-hr and making it prescriptive to begin on late Monday or early Tuesday (Proposal #202).**

At runs of 2-4 million, the plan currently provides for one prescriptive 36-hour weekend window and one "floating" 24-hour window. However, the 24-hour has very limited benefit to terminal fisheries because it is typically not long enough to allow significant numbers of fish to transit the commercial fishing area. It primarily serves to reload the beaches for the next commercial period. Further, the second window can be set on Sundays after a Friday window at the front and the back end of the sockeye run when limited numbers of fish are available. Lengthening this window to 36-hours and making it prescriptive to begin late Monday or early Tuesday will ensure this window provides the intended fishery and escapement benefits.

3. **KRSA recommends establishing a 48-hour weekend window at run strengths under 2 million (Proposal #202).**

The current plan does not specify a window length or date at run sizes under 2 million Kenai sockeye. Window periods were expected to result automatically from fishing time limitations (two regular 12-hour periods plus up to 24 hrs of EO time). However, the plan does not preclude use of this EO time on Friday or Saturday which is disruptive to weekend fisheries. Recent fishery practices have demonstrated the need for more explicit management direction consistent with the Board's allocation intent.

PROPOSAL 202

Amend windows provisions as follows:

1) At run strengths of less than 2,000,000 sockeye salmon, add "(C) the Upper Subdistrict will be closed for one continuous 48-hour period per week beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday and for an additional continuous 36-period per week beginning between 7:00 p.m. Monday and 7:00 a.m. Tuesday."

2) At run strengths of 2,000,000 to 4,000,000 sockeye salmon, revise as "(C) the Upper Subdistrict will be closed for one continuous 36-hour period per week beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday and for an additional [24] 36 hour period [DURING THE SAME MANAGEMENT WEEK] per week beginning between 7:00 pm Monday and 7:00 a.m. Tuesday."

ISSUE: *The Kenai River Late-Run Sockeye Management Plan does not provide direction for the weekly timing of fishery escapement/allocation windows at sockeye run strengths of less than 2 million. Nor is the additional 24-hour window at run strengths of 2 to 4 million sockeye adequate to provide the intended benefits. Emergency order openers timed for Friday or Saturday disrupt in-river fishing opportunity on the weekend. A 24-hour window merely reloads the beaches for the set net fishery and does not provide for adequate in-river escapement to meet the management intent of windows.*

#4. Department authority for bag & possession limits

The Kenai sockeye sportfishery attracts large numbers of anglers in years when sockeye numbers are high enough to support a reasonable catch rate. Kenai River fisheries occur from the mouth to the upper river. Harvest in Kenai mainstem sport fisheries has averaged 225,000 sockeye/year over the last 10 years and reached almost 300,000 sockeye per year in 2004 and 2005.

When bag and possession limits are set in management plans, the Department cannot use its emergency order authority to otherwise increase or decrease limits (UCIC 2007). The plan currently provides limited flexibility for the Department to reduce or increase bag or possession limits based on abundance. Proposals are before the Board to amend the plan to provide increased management flexibility based on abundance.

Kenai sockeye run size	Current limits		Proposed limits		Proposal reference
	Bag	Possession	Bag	Possession	
< 2 million	3	3	0-3	0-3	#206 (ADFG)
2-4 million	6	6	6	12	#208 (KRSA)
> 4million	6	6	9	18	#208 (KRSA)

Recommendations

- KRSA recommends adoption of proposals #206 (by ADFG) and #208 (by KRSA) for plan revisions to provide management flexibility to reduce or increase Kenai sockeye sportfishery bag and possession limits for sockeye based on abundance.**

Without specific plan direction, the management flexibility of the Department is limited for decreasing or increasing sockeye sport bag and possession limits based on run size. In low return years, the flexibility to reduce limits rather than closing the fishery will reduce unnecessary disruptions of the sportfishery. In large return years, fishery opportunity is unnecessarily foregone under current limits and increased limits will be a useful tool for regulating spawning escapements at desired levels.

An increase in possession limits to two daily limits is proposed to allow for people camping in the area to fish on consecutive days.

The commercial fishery priority for sockeye is recognized. The commercial fishery will continue to take the large majority of the Kenai sockeye harvest even with the very modest increases in Kenai sport fish harvests resulting from the proposed change. Significant allocation of sockeye harvest to the PU and sport fisheries is supported by the Board's allocation criteria (Box 1).

PROPOSAL 208

Allow additional harvest opportunity when in-river sockeye abundance warrants as follows:

(h) Subject to the requirement of achieving the lower end of the optimal escapement goal, the Department shall manage the sportfishery on the Kenai River, except that portion of the Kenai River from its confluence with the Russian River to an ADF&G regulatory marker located 1,800 yards downstream, as follows:

- fishing will occur seven days per week, 24 hours per day; and
- the bag and possession limit for the sportfishery is three sockeye salmon, unless the Department determines that the abundance of late-run sockeye exceeds two million salmon, at which time the commissioner, by emergency order, increase the bag [AND POSSESSION] limit to six sockeye salmon daily and 12 [6] in possession.
- If abundance of late-run sockeye exceeds four million salmon, the commissioner may, by emergency order, increase the bag limit to nine sockeye salmon daily and 18 in possession.**

ISSUE: Provide the Department authority to increase sockeye salmon sport bag and possession limits during periods of large in-river abundance. This authority needs to be explicitly stated in the management plan.

KASILOF SALMON

Background

- The Kasilof River Salmon Management Plan [5AAC 21.365] governs the harvest of Kasilof River salmon in excess to spawning escapement needs.
- The plan identifies a Board intent to harvest Kasilof salmon (primarily sockeye) in the fisheries that historically fished them.
- The plan defines an optimum escapement goal, limitations on set net fishery time, and set net fishery closure windows. It also includes limitations on guides to regulate effort.
- Linkages to the Kenai sockeye management plan are expressly included in the Kasilof plan because Kasilof set net fisheries catch significant numbers of Kenai sockeye and Chinook during July.

Runs

- Kasilof sockeye run sizes have averaged 900,000 and ranged between 500,000 and 1.7 million over the last 20 years (Figure 20).
- The average median sonar passage date is July 14 (8 days earlier than the Kenai). About ¼ of the run typically returns in June. The 2005 run was among the earliest on record. The 2006 and 2007 runs were among the latest on record.
- A Kasilof sockeye enhancement program was ended in 2004 by a court ruling that a commercial enterprise was an inappropriate Federal wilderness activity. Releases into Tustumena Lake were generally six million per year from 1988-2004 and about 15 million per year from 1982-1987. Hatchery smolts have generally averaged less than a quarter of the outmigration, but reached 50% in 2004 and 32% in 2005. Significant returns of hatchery fish are expected thru 2008.

Fisheries

- Annual commercial harvest has averaged about 600,000 Kasilof sockeye per year over the last 10 years. A record harvest of 1.2 million Kasilof sockeye occurred in 2006.
- Kasilof sockeye typically comprise 18% of the Upper Cook Inlet commercial sockeye harvest but in 2006 they reached 55% of the total. Like Kenai run, they are among the most heavily fished sockeye stocks in Alaska (Clark et al. 2007b).

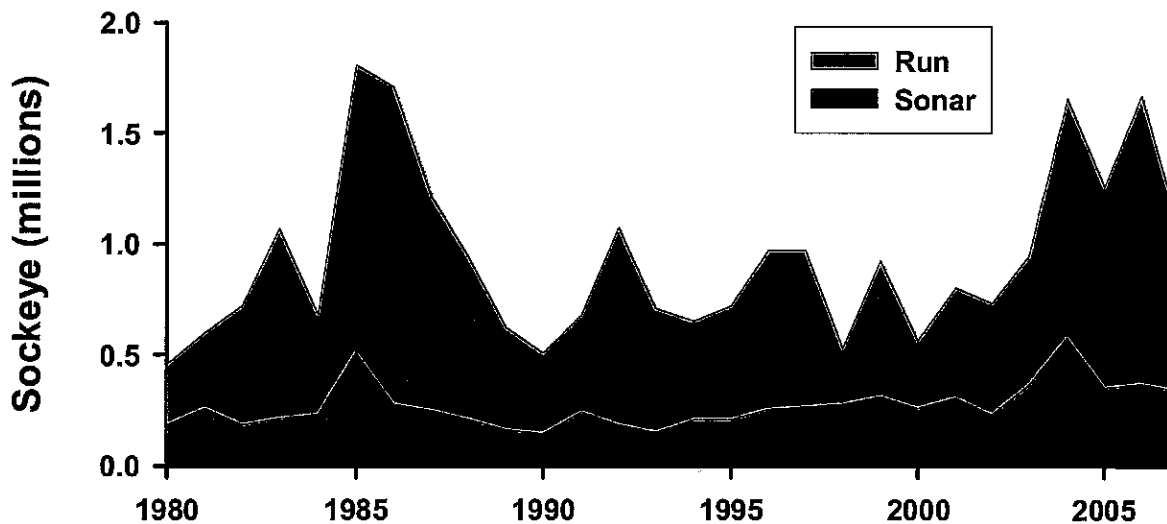


Figure 20. Trends in Kasilof late-run sockeye run size and sonar counts.

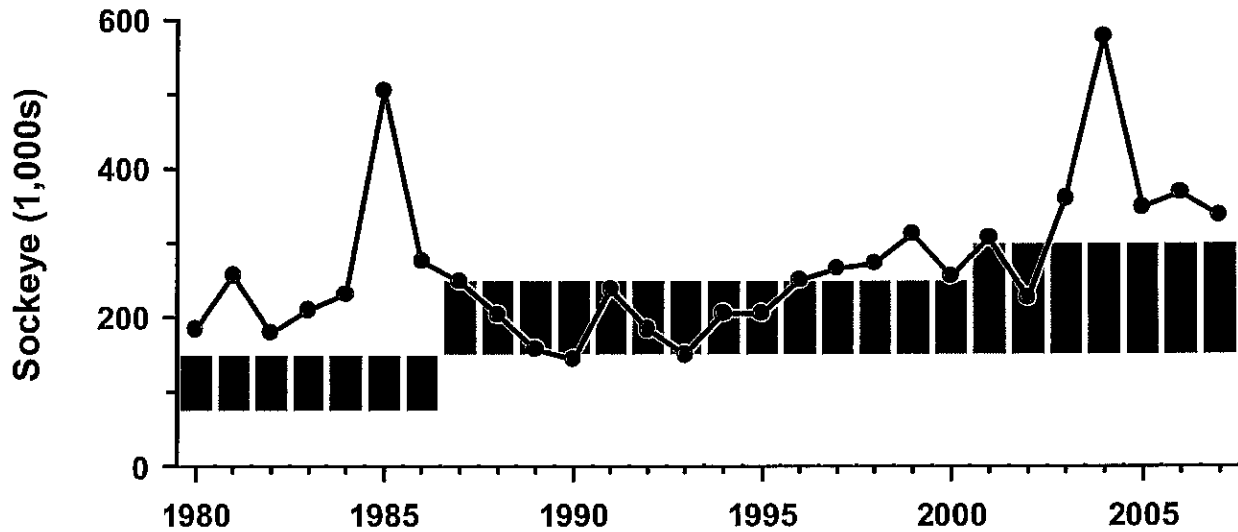


Figure 21. Recent sonar counts of Kasilof sockeye relative to sonar escapement goals.

Escapements

- Biological and Optimal goals have been established for this stock. The BEG is 150,000-250,000. The upper goal was increased for an OEG of 150,000-300,000 to provide flexibility to meet Kenai objectives.
- Escapement goals were increased in 1987 as larger escapements provided better scientific information on the productivity of the system.
- Sonar counts have averaged 337,000 and ranged from 256,000 to 577,600 over the last 10 years.
- Sonar goals have exceeded escapement goals in 9 of the last 10 years (Figure 21).
- Increasing Kasilof escapements have produced increasing rather than decreasing runs. At the same time average smolt size has been increasing (Figure 22).
- Data on production from spawning escapements over 300,000 is limited to a single point. Uncertainty in the accuracy of current escapement goals should be reduced by return data from recent large escapements over the next few years.

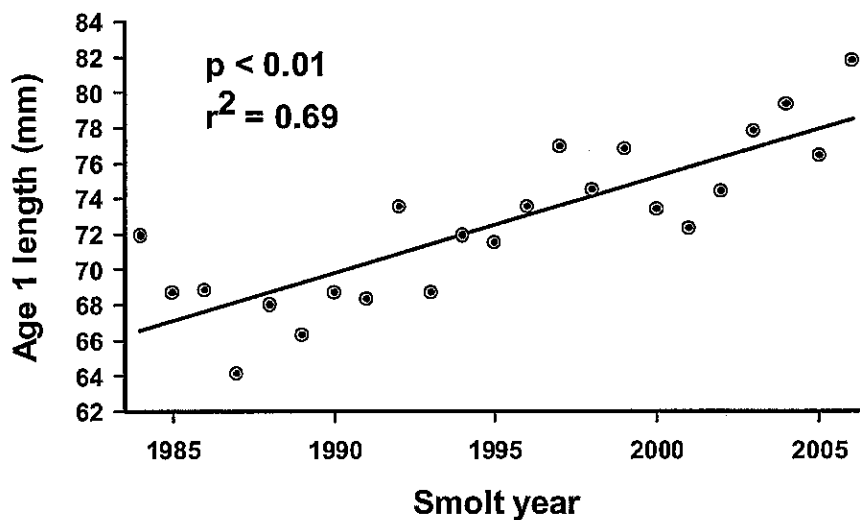


Figure 22. Relationship between average smolt length and year for Kasilof sockeye (1984-2006 data).

Issues

Issue 1. Lack of management flexibility to limit sockeye escapement.

The Board subcommittee issue paper and proposals to the Board from various parties have raised the question of whether the current Kasilof plan provides sufficient flexibility to harvest excess fish in light of the OEG being exceeded in four of the last five years. The spectrum of concerns includes the June 25 opening date, the available fishing time prior to July 9, the 48-hour window, and limitations on Kasilof fisheries to protect Kenai escapement.

Issue 2. Overuse of the terminal fishery area.

Frequent use of the Kenai River Special Harvest Area during recent years has led to complaints in all fishery sectors. This area was not used from 1986 through 2004 but has been used extensively since due to large Kasilof sockeye returns. Concentrated use by the commercial fishery has led to user conflicts. Nearly continuous openers have severely constrained opportunities in the PU and sport fisheries.

Issue 3. In-river fisheries & late-run king escapements.

Commercial fisheries at or near the mouth of the Kasilof River in late June and through much of July have drastically reduced what was historically a productive and popular in-river Chinook salmon sportfishery (UCIC 2007). The harvest of significant numbers of Kenai Chinook in Kasilof set net fisheries also contributes to the disproportionate commercial harvest share of Chinook relative to their sportfishery priority.

Issue 4. Set net fishery closure dates.

The Kasilof sockeye management plan currently includes no provision for orderly closure. Continuing Kasilof set net fisheries beyond the timeframe of the Kasilof sockeye return affects opportunity among Kenai area set netters and in Kenai River PU and sport fisheries.

Issue 5. Lack of Kasilof king spawning sanctuaries.

New data on Kasilof late-run king salmon has identified a significant population which spawns in the mainstream below Tustumena Lake. Current regulations do not allow sportfishing for king salmon in mainstem spawning areas upstream from the Sterling Highway Bridge after June 30, but do not specifically identify the significance of these areas to escapement and may not provide adequate protection in the face of any potential future fisheries.

#1. Management flexibility to limit sockeye escapements

Kasilof sockeye fisheries have been managed with out-of-plan actions in recent years to avoid exceeding the current escapement goal. In spite of intensive sockeye fisheries and very high harvest rates, the upper end of the OEG has been consistently exceeded.

It is unclear whether the sockeye escapement issue is a problem of overly-restrictive fishery regulations or a problem with the current biological escapement goal. Increasing Kasilof sockeye escapements have increased rather than decreased returns as would be expected if the current BEG accurately reflected MSY production levels. While the current BEG (150,000-250,000) is sustainable, it may not represent a Biological Escapement Goal providing the greatest potential for maximum sustained yield.

The productive capacity of the Kasilof system for sockeye is unknown because data on returns from large escapements is lacking. Complete adult return data is limited to a single 1985 point for returns greater than 300,000. That point may no longer be representative of current conditions due to the termination of the hatchery program and increasing productivity in the system implied by the increasing trend in smolt size. Recent returns from escapements above the current BEG fell well above the expected level (Figure 23).

At the same time, recent large escapements produced increasing rather than decreasing numbers of juveniles (Figure 24). No obvious relationships are apparent between numbers and sizes of Kasilof smolts. Juvenile size has not decreased at large escapements or large smolt numbers in contrast to Kenai sockeye (Figure 22). It is unclear whether this trend reflects changing environmental conditions for sockeye rearing in Lake Tustumena or is related to changes in hatchery effects over time. Improving rearing conditions would explain the changing stock-recruitment dynamics and violate a fundamental assumption of the stock-recruitment analysis (that the productivity relationship is stable).

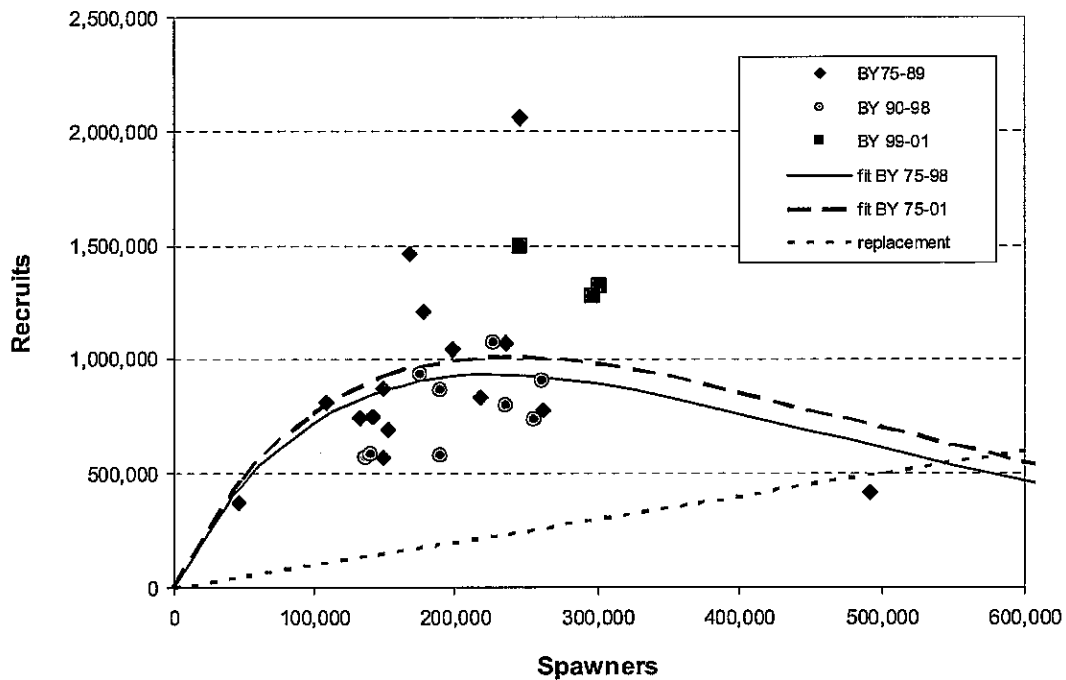


Figure 23. Stock-recruitment data and fitted Ricker curves for Kasilof sockeye.

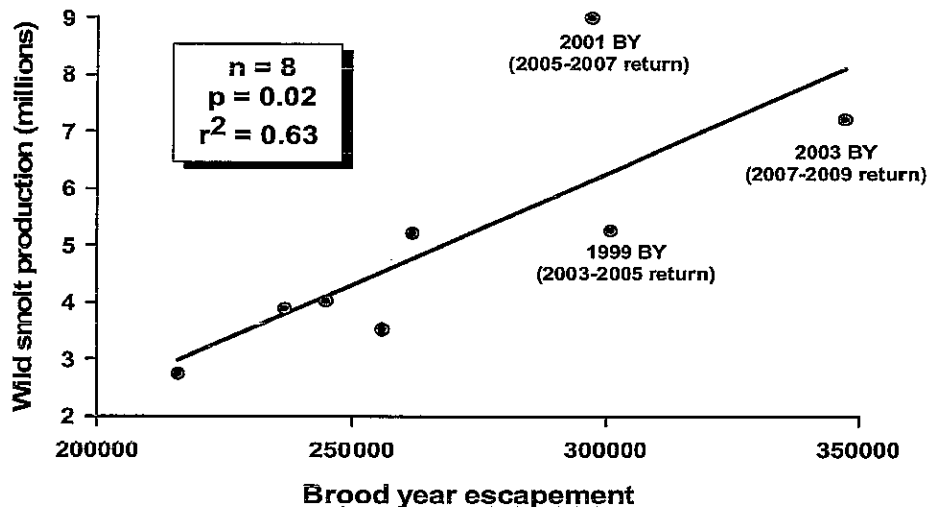


Figure 24. Relationship between escapement and wild smolt production for 1998-2006 smolt year data (1996-2003 brood years) from Dodson (2007).

Both of the last two comprehensive escapement goal reviews by ADFG (Bue and Edmundson 2002, Hasbrouck and Edmundson 2005) estimated a wider range for MSY escapements than the existing BEG range. The MSY estimate continues to increase in numbers that are meaningful as more adult run size data is available from larger escapements. Neither review recommended changes based on the expectation of significant new information from continuing large escapements. Kasilof sockeye productivity patterns remain uncertain but significant new data is expected to help resolve this question over the next few years.

Recommendations

1. KRSA recommends increasing the Kasilof sockeye OEG from 150,000-300,000 to 200,000-350,000 (Proposal 169).

A revised OEG will provide management flexibility for meeting the lower end of the Kenai goals, provide reasonable opportunity to harvest sockeye and Chinook in the Kasilof PU and sport fisheries, and protect Kasilof late-run Chinook from overharvest in the absence of an escapement goal or in-season monitoring of run size.

This change is consistent with recent adult return and smolt production data that indicates that escapements in this range do not significantly reduce future yields of Kasilof sockeye.

Other changes to increase management flexibility for harvesting Kasilof sockeye is not appropriate at this time, given the uncertainty in current Kasilof sockeye escapement goals and the likelihood of significant return data expected in the next few years from recent large escapements.

Current data ranges and corresponding escapement goals may be an artifact of long term management to limit escapements to within the goal range. If so, Kasilof fisheries management is caught in the lag interval between higher returns produced by the higher escapements and the time when the returning broods are fully counted and translated into higher escapement goals. These escapements represent an investment in determining the real capacity of the system that can pay dividends in future yields if productivity is greater than has previously been estimated.

#2. Terminal fishery area

There has been widespread dissatisfaction among all user groups with recent use of the Kenai River Special Harvest Area (KRSHA) to access large Kasilof sockeye runs. At the same time, early fisheries in the Kenai set net area have been limited early in the season by uncertain run strength. The Kenai runs have been uncharacteristically late in recent years. When early July numbers are low, the fishery is restricted to ensure that minimum escapement goals are met in case the run is low rather than late. The current management plans provide limited alternatives for accessing large returns of Kasilof sockeye under these circumstances.

Recommendations

- 1. KRSA recognizes the need for increased Kasilof sockeye harvest opportunity in years when escapements will exceed the OEG and recommends redefining the Kasilof River Special Harvest Area (Proposal 169).**

We recommend changing the KRSHA to include those waters of the Kasilof section within one-half mile of shore south of a point one-half mile north of the north bank of the Kasilof River. This change will provide a much larger set net area for accessing Kasilof fish but will concentrate the harvest in areas where Kasilof sockeye predominate. It will avoid the user conflict problems in the current KRSHA and keep a river mouth fishery from corking the Kasilof PU and sport fisheries in years of large sockeye returns.

#3. In-river fisheries & late-run king escapements

Recent research has identified a significant population of late-run Chinook in the Kasilof. However, escapement is not monitored in-season and escapement goals have not been established to ensure that this stock is being harvested at a sustainable level. Intensive Kasilof sockeye fisheries severely impact the in-river Chinook sportfishery and may be overfishing late-run Kasilof Chinook to the point of reduced yield.

Recommendations

- 1. KRSA recommends replacing the current 48-hr window with two 36-hr windows in order to provide for Chinook escapement and in-river fisheries (Proposal 169).**

Reducing the current Kasilof window from 48 to 36 hours recognizes the need for increased management flexibility in the case of continuing large sockeye returns. The two 36 hour windows are needed to provide for sustainable escapement levels and in-river sportfishery opportunities for Kasilof kings.

#4. Set net fishery closure

There is currently no provision for closure of the Kasilof set net fishery after the Kasilof sockeye run has passed. Over 90% of Kasilof sockeye have typically entered the river by August 1. Kasilof area set net fisheries are typically afforded a greater harvest opportunity for sockeye than Kenai area fisheries due to the earlier timing of the Kasilof run. The Kasilof fishery fishes early on the strength of the Kasilof run and later on the strength of the Kenai run. The Kenai fishery is typically not provided equivalent opportunity when the Kenai run is low or late.

Recommendations

- 1. KRSA recommends closure of the Kasilof set net fisheries effective August 1 except when Kenai or Kasilof OEGs are in danger of being exceeded (Proposal 169).**

Harvests in Kasilof area set net fisheries after August 1 are dominated by Kenai rather than Kasilof fish and can significantly reduce fishing opportunities in Kenai set net areas and in Kenai River fisheries.

PROPOSAL 169

Increase OEG based on updated Kasilof data and modify fishing periods as follows:

1. Maintain recent large Kasilof sockeye salmon runs by increasing the OEG based on updated data showing large returns from high escapements.

(b)...the Kasilof River optimal escapement goal range of [150,000] 200,000 to [300,000] 350,000 sockeye salmon.

2. Increase the size of the Kasilof River Special Harvest area to provide an orderly commercial fishery and regulate Kasilof sockeye escapement where necessary in poor Kenai run years.

(f) The commissioner may, by emergency order, open the Kasilof River Special Harvest Area to the taking of salmon by gill nets when it is projected that the Kasilof River sockeye salmon escapement will exceed [275,000 FISH] **the OEG**. The Kasilof River Special Harvest Area is defined as those waters within [ONE AND] one-half miles of shore [THE NAVIGATIONAL LIGHT LOCATED ON THE SOUTH BANK OF THE KASILOF RIVER], **in proportions of the Kasilof section south of a point one-half mile north of the north 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 GILL NETTING UNDER 5 AAC 21.330 (b)(3)(c)(ii) and (b)(3)(c)(iii)].

3. Protect escapement of Kasilof king salmon and provide in-river sport and personal use opportunity in the face of intensive fisheries on large sockeye runs by use of commercial fishery windows.

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

(B) the fishery shall be closed for at least one continuous 48-hour period per week **in order to provide for Chinook escapement and in-river fisheries.**

(c)(3) beginning July 8,...

(A) **the fishery in the Kasilof section, including the special harvest area, will be closed for not less than one continuous 36-hour period per week beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday and for an additional continuous 36-hour period per week, regardless of Kasilof sockeye run strength, in order to provide for Chinook escapement and in-river fisheries. Kasilof window closures shall be concurrent with Kenai window closures when Kenai closures are in effect.**

(c)(4) after July 15,...

(A) **the fishery in the Kasilof section, including the special harvest area, will be closed for not less than one continuous 36-hour period per week beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday and for an additional continuous 36-hour period per week, regardless of Kasilof sockeye run strength, in order to provide for Chinook escapement and in-river fisheries. Kasilof window closures shall be concurrent with Kenai window closures when Kenai closures are in effect.**

4. Provide for an orderly end of season closure of the Kasilof area set net fishery after the Kasilof sockeye run has passed in order to provide appropriate opportunity to Kenai area set net and in-river fisheries.

(c)(5) **Close Kasilof area set net fisheries after August 1, except when the Kasilof or Kenai OEGs are projected to be exceeded. In that case, close Kasilof sections as per 5 AAC 31.310(b).**

ISSUE: The Kasilof River Salmon Management Plan needs to be revised to accommodate issues arising from an increasing trend in Kasilof sockeye in recent years. The terminal fishing area does not provide for a traditional and orderly commercial fishery in years of big Kasilof run years when the Kasilof section is restricted to protect a weak Kenai run. Intensive commercial sockeye fisheries on recent large runs have also eliminated significant in-river sportfishing opportunities for Chinook and are likely to overfish Kasilof Chinook to below sustained yield or maximum sustained yield levels. Chinook escapement data is inadequate to develop escapement goals necessary for direct regulations of fisheries and so indirect protection measures such as fishery windows are necessary. Further, intensive commercial fisheries in the terminal area have eliminated significant personal use fishery opportunity in the Kasilof. Finally, the current sockeye OEG also does not provide adequate protection for large escapements needed to ensure continuing large runs and requires adjustments.

#5. Kasilof king sanctuaries

This proposal addresses 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

Recommendations

- 1. KRSA recommends establishing the Kasilof River mainstem upstream from the Sterling Highway Bridge as a king salmon spawning sanctuary (Proposal 228).**

This is a precautionary change based on recent findings in the Kasilof Chinook research study. There is not currently a significant problem in this area but this change will avoid future problems in this area.

PROPOSAL 228

Specifically designate the Kasilof River mainstem between the Sterling Highway Bridge and Tustumena Lake as a king salmon spawning sanctuary from July 1 through August 31.

ISSUE: New data on Kasilof late-run king salmon has identified a significant population which spawns in the mainstream below Tustumena Lake. Current regulations do not allow sportfishing for king salmon in current mainstem spawning areas upstream from the Sterling Highway Bridge after June 30, but do not specifically identify the significance of these areas to escapement and may not provide adequate protection in the face of any potential future fisheries. Adequate protection of spawners is particularly important in the Kasilof in the absence of designated escapement goals or effective annual in-season monitoring.

KENAI EARLY-RUN KING SALMON

Background

- The Kenai Early-Run King Salmon Management Plan [5 AAC 57.160] was adopted by the Board to ensure an adequate escapement of early-run king salmon into the Kenai and Kasilof Rivers, to conserve the unique large size early-run king salmon in the Kenai River, and to provide the Department with management guidelines.
- Kenai king salmon are among the premier sport fish in the world and are renowned for their large size. The early-run enters the Kenai River from late April through June. The late-run enters the Kenai River from late June through August. Early-run fish are tributary spawners while late-run fish spawn in the Kenai River mainstem.
- The Board adopted an OEG of 5,300 to 9,000 Kenai early-run king salmon in 2005. Escapements have exceeded the goal in eight of the past ten years (Figure 25).
- The Board adopted a slot limit for the sportfishery in 2003 in response to data indicating a decline in the number of large kings (Figure 26). Only king salmon that are less than 44 inches in length or 55 inches or greater in length may be retained from January 1 - June 30 downstream from Skilak Lake, and from July 1 - July 14 upstream from the Soldotna Bridge and in the lower Moose River.
- Three sanctuary areas near the mouth of spawning tributaries are closed to sportfishing through July 14 to protect early-run king salmon holding in the mainstem. Radio-telemetry studies conducted in 1989-1991 demonstrated that early-run fish remain in the mainstem for long periods of time before moving into spawning tributaries.

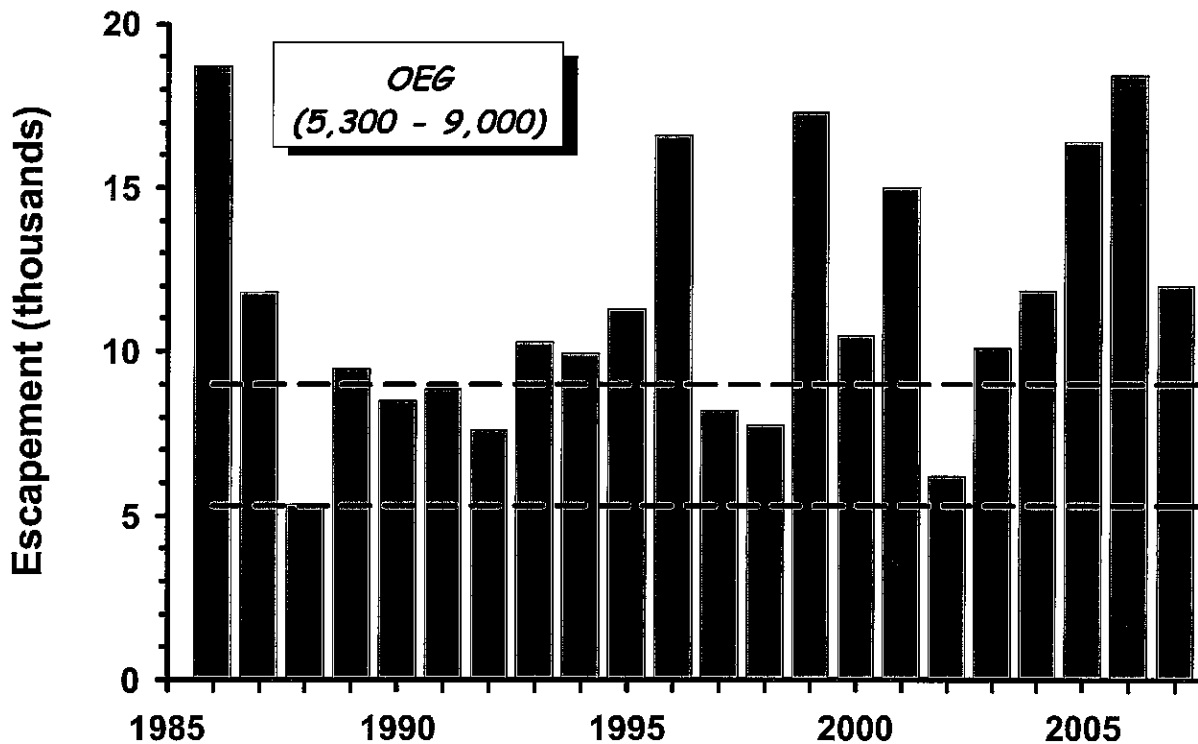


Figure 25. The escapement of Kenai River early-run king salmon compared to the current OEG, 1986-2007.

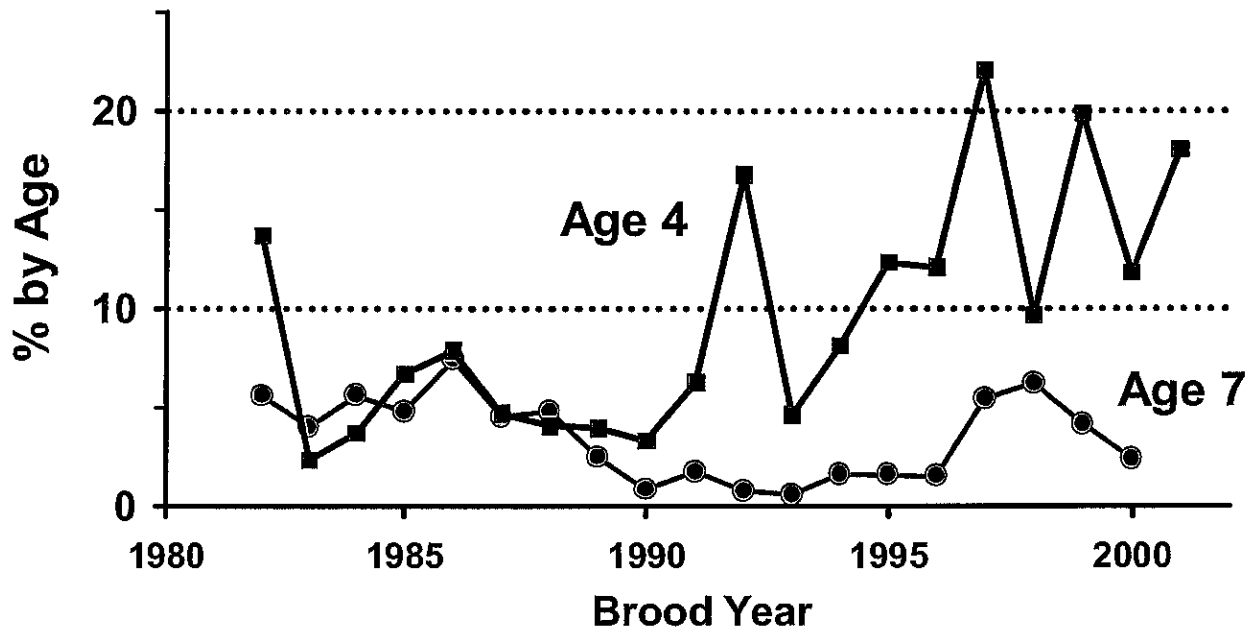


Figure 26. Percentages of age-7 and age-4 early-run king salmon in the Kenai River.

Issues

Issue 1. Sport fishery non-retention of smaller king salmon.

Current regulations for the Kenai River allow anglers to keep one king salmon 20 inches or greater in length per day and in possession. In addition, there is an annual limit of two king salmon 20 inches or greater in length. As a result of these restrictions, many anglers release smaller king salmon in order to have the opportunity to harvest a larger fish. Consequently, smaller, primarily age-4 king salmon are not harvested in proportion to their abundance. The number and proportion of age-4 early-run king salmon returning to the Kenai River has been increasing over time.

Issue 2. Slot limit.

The current slot limit for Kenai River early-run king salmon was intended to reduce size-selective harvest of older-aged fish. Ideally, all ages would be harvested in proportion to their abundance. Recent data indicates that the slot limit regulation has shifted the harvest toward age-5 fish including many more females. The biological justification for the current slot limit is in question.

Issue 3. Sanctuary Areas.

Early-run king salmon continue to stage in the Kenai River near tributary mouths outside current seasonal closure periods. In addition, the Killey River is very dynamic and has multiple river mouths which are not all protected by the seasonal closures. Some anglers are concentrating on staging ripe and spawning fish in these areas, catching and releasing significant numbers, and sorting for large fish.

#1. Non-retention of smaller king salmon

Current regulations discourage anglers from harvesting age-4 king salmon because of their smaller size. As a result, they are not harvested in proportion to their abundance (Figure 27). In addition, the percent of age-4 fish in the escapement has been increasing. The overwhelming majority of these small kings are male (Table 3) and thus provide very little to the reproductive potential of the stock.

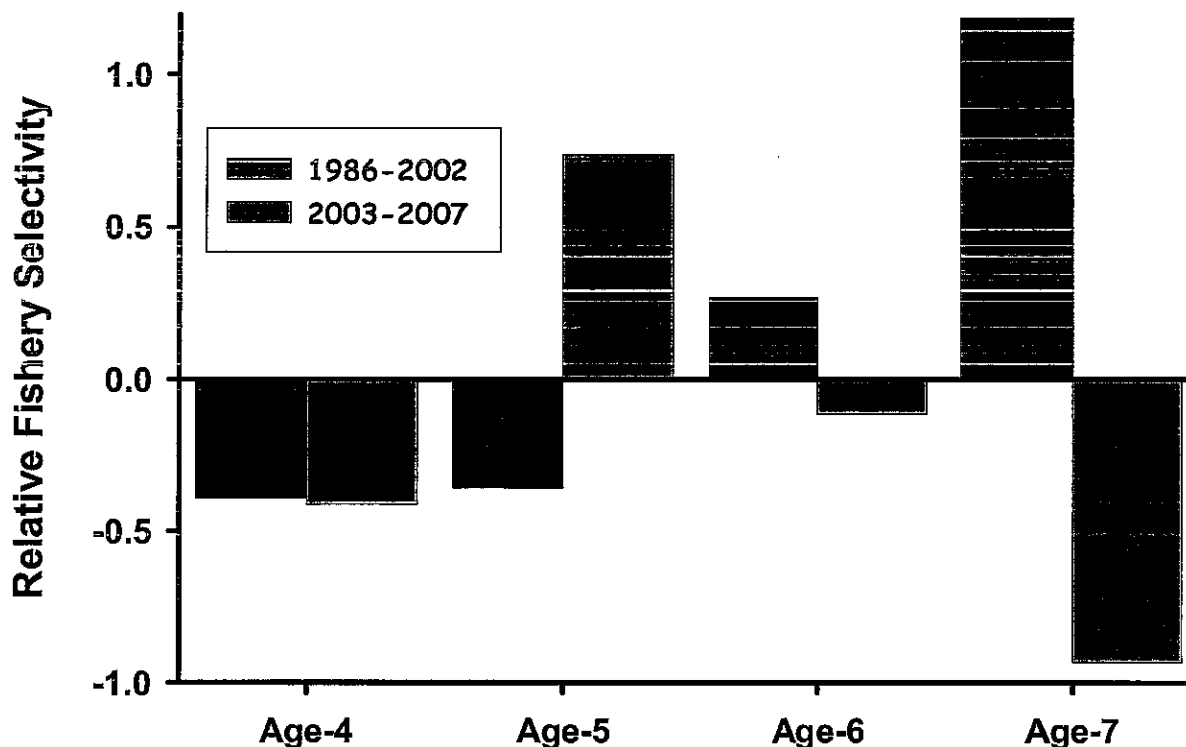


Figure 27. Relative age-selective harvest of the Kenai River sportfishery on the early run of Chinook salmon before (1986-2002) and after (2003-2007) the slot limit was in effect. Bars above the line show where anglers are selecting for an age (i.e. where the proportion in the harvest is greater than the proportion in the run). Bars below the line show where anglers are selecting against an age. Relative selectivity is [(proportion in creel / proportion in run) - 1]. Data provided by ADF&G.

Table 3. Number sampled and proportion of female king salmon in the Kenai River in-river run (in-river net), 1986-2003. The vast majority of age-3 and age-4 king salmon are male.

Age	Early-run		Late-run		Combined	
	Number	%Females	Number	%Females	Number	%Females
3	16	6%	30	3%	46	4%
4	824	10%	1,193	17%	2,017	15%
5	2,564	42%	2,333	37%	4,897	39%
6	4,701	58%	6,435	56%	11,136	57%
7	420	39%	519	42%	939	40%

Recommendations

- KRSA recommends amending regulations for king salmon in the Kenai River to allow anglers to keep 10 fish less than 20 inches in length, one fish per day between 20 and 28 inches in length, and one per day greater than 28 inches in length. Only fish greater than 28 inches in length would be included in the annual limit (Proposal 255).**

Increasing the harvest of age-4 king salmon makes biological sense. These fish are currently under-harvested relative to larger king salmon and contribute very little to the reproductive potential of the population. Very few age-5 fish are less than 28 inches in length (Figure 28), so this regulation would not significantly increase the harvest of older fish. Failure to increase harvest of these fish will likely change the age and size composition of this stock over time.

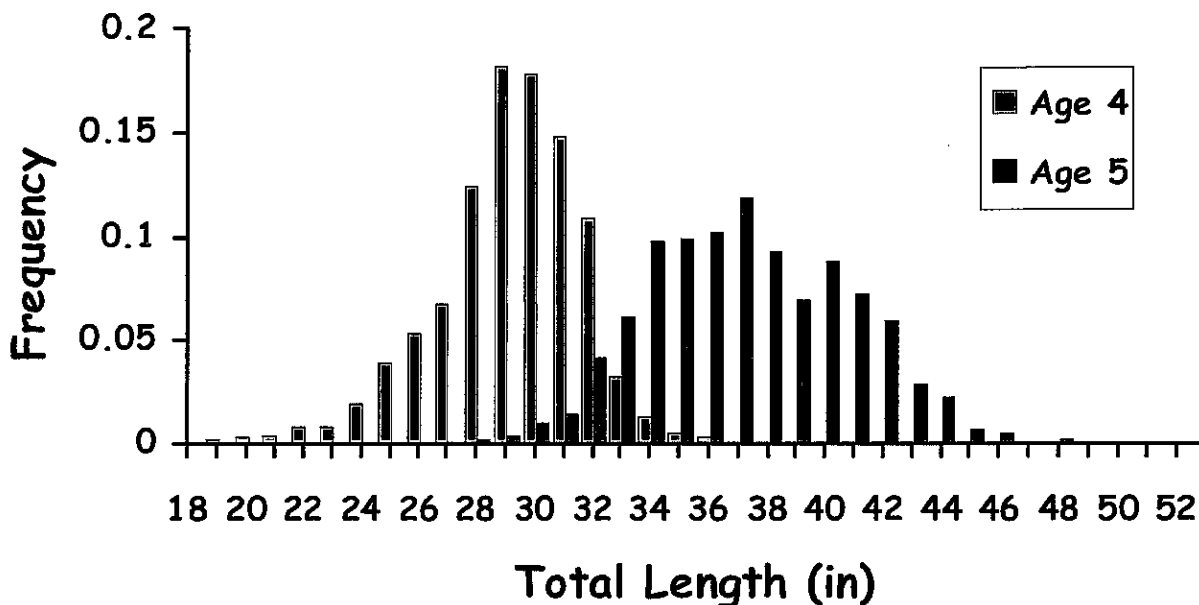


Figure 28. Kenai Chinook length distribution based on in-river net and creel survey data, 1986-2003 (early and late runs combined).

PROPOSAL 255

Amend 5 AAC 57.120 such that the allowable limits for king salmon in the Kenai River are 10 fish less than 20 inches in length, one fish per day between 20 and 28 inches in length, one per day greater than 28 inches in length. Only fish greater than 28 inches in length are included in the annual limit.

ISSUE: *The smaller age-4 king salmon in the return are frequently released by anglers and are not harvested in proportion to their abundance. As a result, numbers of these small fish are increasing over time. However, these smaller kings are almost entirely males which do not significantly contribute to the reproduction potential of the population. Fishery selection which shifts the age composition toward these small fish will reduce production, yield, and numbers of large kings over the long term.*

#2. Slot limit

The current slot limit was adopted in 2003 to reduce angler selectivity for larger, older-aged early-run king salmon under the assumption that age and size of parents are heritable. The first opportunity to observe the effect of this regulation on the population will be in 2010 when age-7 fish return. However, the percent of age-7 early-run king salmon in the Kenai River return has improved in recent years (Figure 26) well before you would expect to see a response due to the slot limit regulation. This begs the question of whether the earlier decline in the number of older fish was due to fishery selectivity or due to environmental conditions.

The slot limit has actually exacerbated the problem it was intended to fix. The regulation was intended to address angler selectivity on big fish. Fisheries that selectively harvest for or against certain size, sex, or age compositions can change size and age compositions over time. A growing body of scientific evidence has highlighted the risks of fishery selectivity to the long term diversity and productivity of salmon. That is why fishery managers strive to distribute harvest evenly among all age and size groups. The unanticipated problem is that the harvest is now concentrated on fish just under the slot size (Figure 27) which includes large numbers of females (Figure 29). At the same time, the smaller kings, which anglers are typically much less likely to keep, continue to be significantly underharvested in proportion to their numbers. The slot limit has thus replaced a small level of fishery selectivity on large fish with a much bigger selectivity problem on average size fish.

This regulation has also unnecessarily reduced harvest opportunity due to regular escapements in excess of the optimal escapement goals. Even with the earlier openings of the fishery to bait, escapement goals have frequently been exceeded in recent years (Figure 25). The escapement is increasingly made up of the smaller age-4 fish (typically males) that while biologically important, are not critical to future production.

Recommendations

1. KRSA recommends eliminating the slot limit (Proposal 261).

The slot limit regulation has caused unintended and detrimental biological and fishery consequences. The biological problems outweigh the intended biological benefits and sportfishery opportunity has been unnecessarily limited by this regulation.

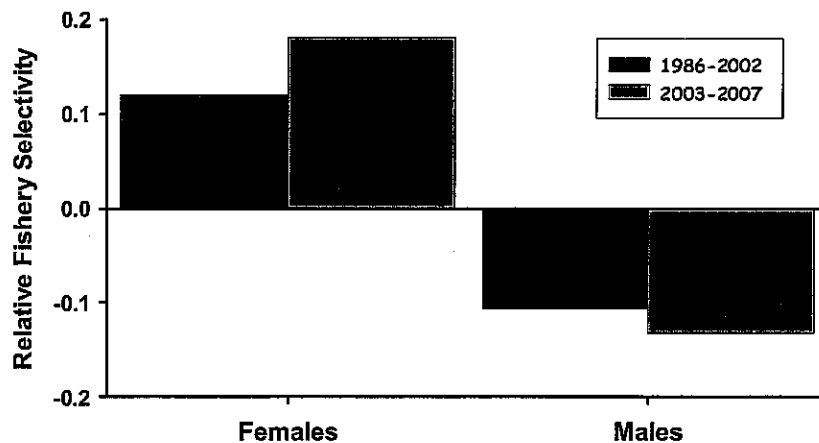


Figure 29. Relative sex-selective harvest of the Kenai River sportfishery on the early run of Chinook salmon before (1986-2002) and after (2003-2007) the slot limit was in effect. Bars above the line show where anglers are selecting for a sex (i.e. where the proportion in the harvest is greater than the proportion in the run). Bars below the line show where anglers are selecting against a sex. Relative selectivity is [(proportion in creel / proportion in run) - 1].

#3. Sanctuary areas

The Killey River has a very braided channel and has numerous mouths entering the Kenai River. The current sanctuary does not cover all these river mouths. Radio-telemetry data conducted between 1989 and 1991 indicated that early-run spawners held in the Kenai River upstream of the current Killey sanctuary area prior to moving into spawning tributaries (Upper Killey area marked in dark blue in Figure 30). In addition, the telemetry studies indicated that 9% of the early-run spawners moved into spawning tributaries after July 14 (Figure 31). Some anglers are concentrating on staging ripe and spawning fish in these areas, catching and releasing significant numbers, and sorting for large fish. This can lead to excessive catch and release mortality of early-run fish.

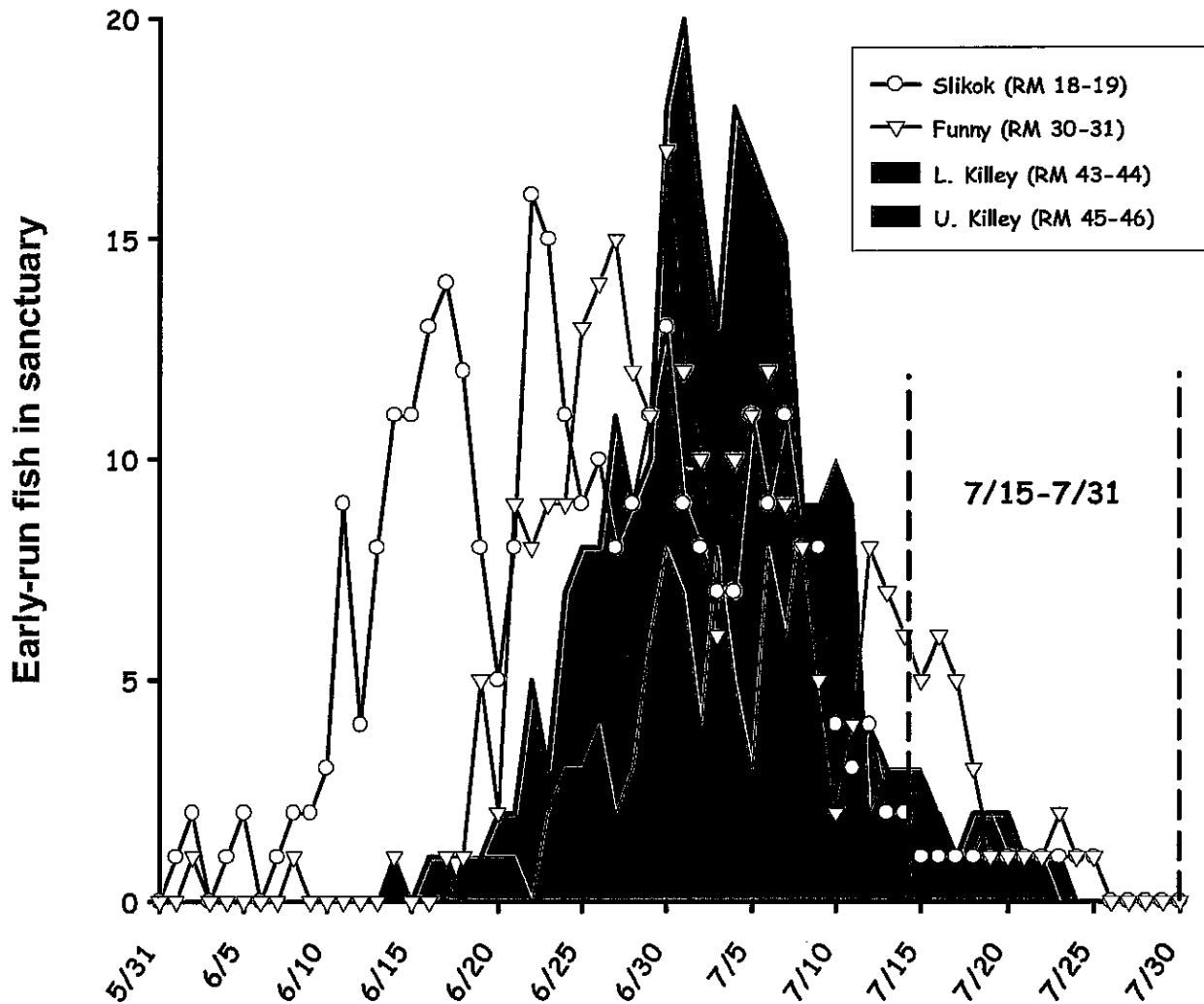


Figure 30. Number of radio-tagged early-run Kenai River Chinook salmon holding in sanctuary areas, by day. Data taken from Bendock and Alexandersdottir 1990-1992.

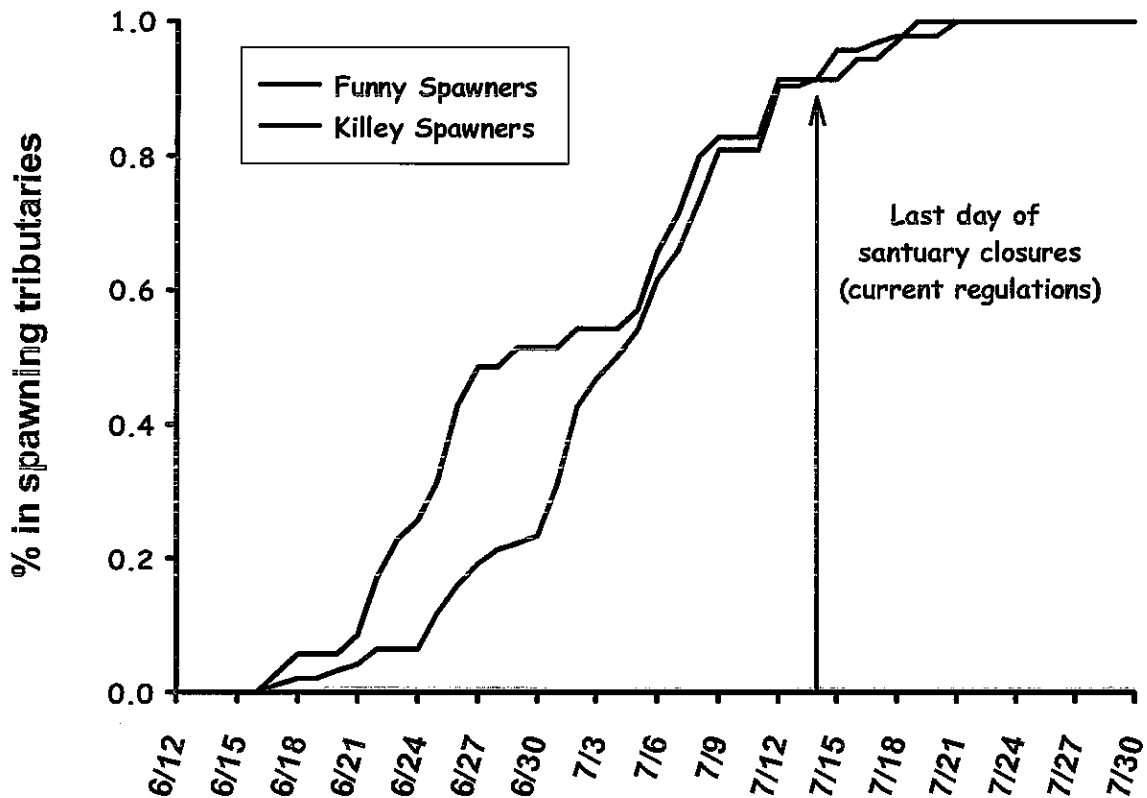


Figure 31. The cumulative percentage of radio-tagged early-run Kenai River Chinook salmon arriving at their spawning tributaries by date. Data taken from Bendock and Alexandersdottir 1990-1992.

Recommendations

1. KRSA recommends adding area around the Killey River sanctuary and extending the sanctuary closures through July 31 (Proposal 269).

Extension of the sanctuary closure dates increases protection of spawning early-run king salmon. Current seasonal closures to king salmon fishing in the lower Kenai River at the mouths of Slikok Creek, Funny River, and lower Killey River are not adequate to protect early-run spawners staging at the mouths of these creeks. King telemetry data indicates that early-run fish continue to stage near tributary mouths outside current seasonal closure areas and closure periods. Some anglers are concentrating on staging ripe and spawning fish in these areas, catching and releasing significant numbers, and sorting for large fish.

Areas of particular concern include the upper Killey River mouth where dynamic channel changes have altered fish entry patterns and the College Hole downstream from Slikok Creek. Benefits of slot limits for protection of the large early-run fish and sanctuary closures prior to July 14 are eroded by harvest and catch and release mortality of fish in staging areas outside of existing sanctuaries and in tributary mouth areas after they open in July.

KENAI LATE-RUN KING SALMON

Background

- Kenai king salmon are among the premier sport fish in the world and are renowned for their large size. There are two distinct runs of king salmon in the Kenai River. The early-run enters the Kenai River from late April through June, and the late-run enters the Kenai River from late June through August. Early-run fish are primarily tributary spawners while late-run fish spawn in the Kenai River mainstem.
- The Kenai Late-Run King Salmon Management Plan [5 AAC 21.359] was adopted by the Board in 1988 and was amended in 1990, 1999, to ensure an adequate escapement of late-run king salmon into the Kenai River system and to provide management guidelines to the Department. The plan states that “the Department shall manage the late-run Kenai River king salmon stocks primarily for sport and guided sport uses”.
- Kenai River late-run kings are harvested in directed sockeye commercial fisheries in the Central District. The Kenai River Late-Run Sockeye Salmon Management Plan [5 AAC 21.360] directs the Department to manage commercial fisheries to minimize harvest of late-run Kenai River king salmon.
- The current BEG of 17,800 to 35,700 Kenai late-run king salmon was adopted by the Board in 1999. Escapements have been within this range in nine of the past ten years (Figure 32).

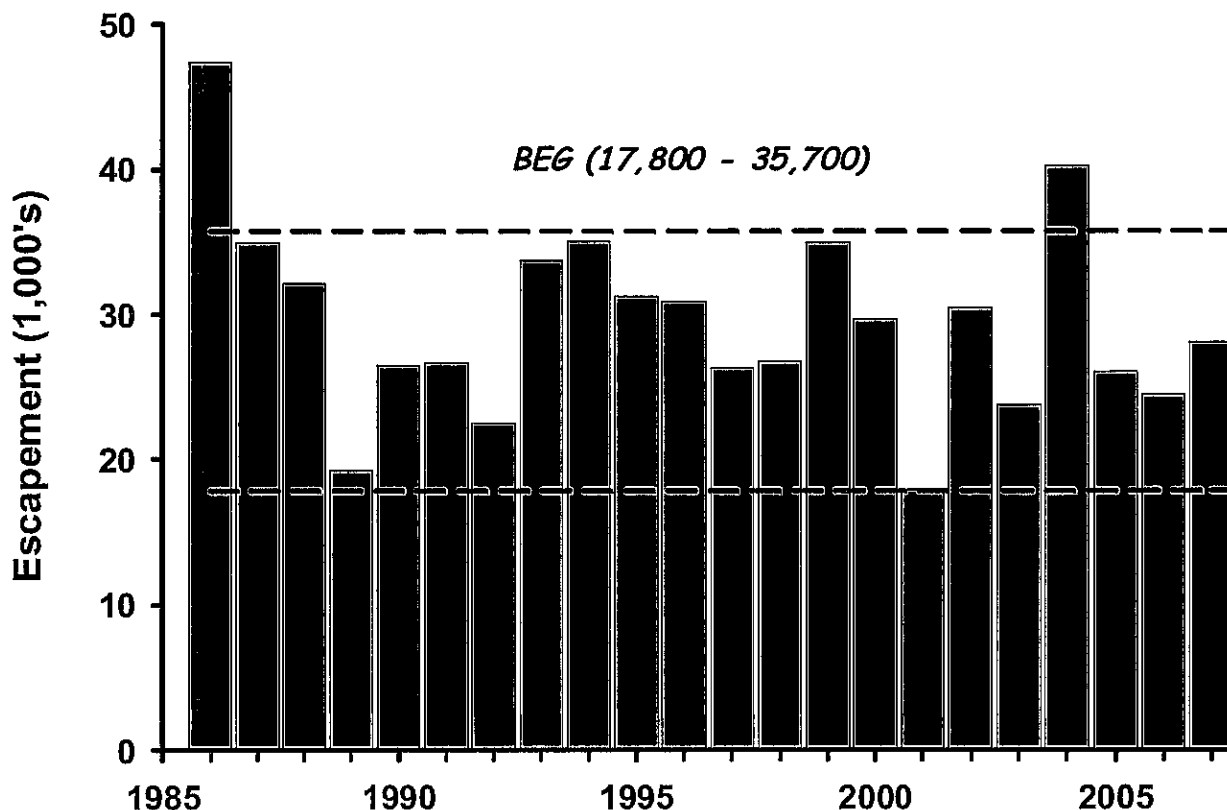


Figure 32. The escapement of Kenai River late-run king salmon compared to the current BEG, 1986-2007. The 2007 escapement was approximated using average in-river exploitation rates, other data taken from Begich and Pawluk (2007).

Issues

#1. Commercial harvest of late-run king salmon

Despite the sport fish priority for late-run Kenai kings, the commercial harvest equals or exceeds the sportfishery catch except in years of low sockeye returns (Figure 33). Thousands of Kenai king salmon are caught each year in Upper Cook Inlet commercial sockeye fisheries. Proposals that seek to weaken provisions in the Kenai Late-Run King Salmon and Kenai Late-Run Sockeye Salmon Management Plans in order to increase commercial sockeye salmon harvest will also increase king bycatch.

Commercial exploitation rates on Kenai king salmon have ranged between 8-35% of the total run, and averaged 25% in recent years. Commercial harvest share was 40-65% from 1986-1997, decreased to 20-40% during smaller sockeye returns in 1998-2001, and increased again with larger sockeye fisheries in 2002-2005. The 2004 and 2005 UCI king salmon harvests around 23,000 were the largest observed in the last 15 years. The east-side set net fishery typically accounts for 70% of the commercially-caught king salmon in Upper Cook Inlet.

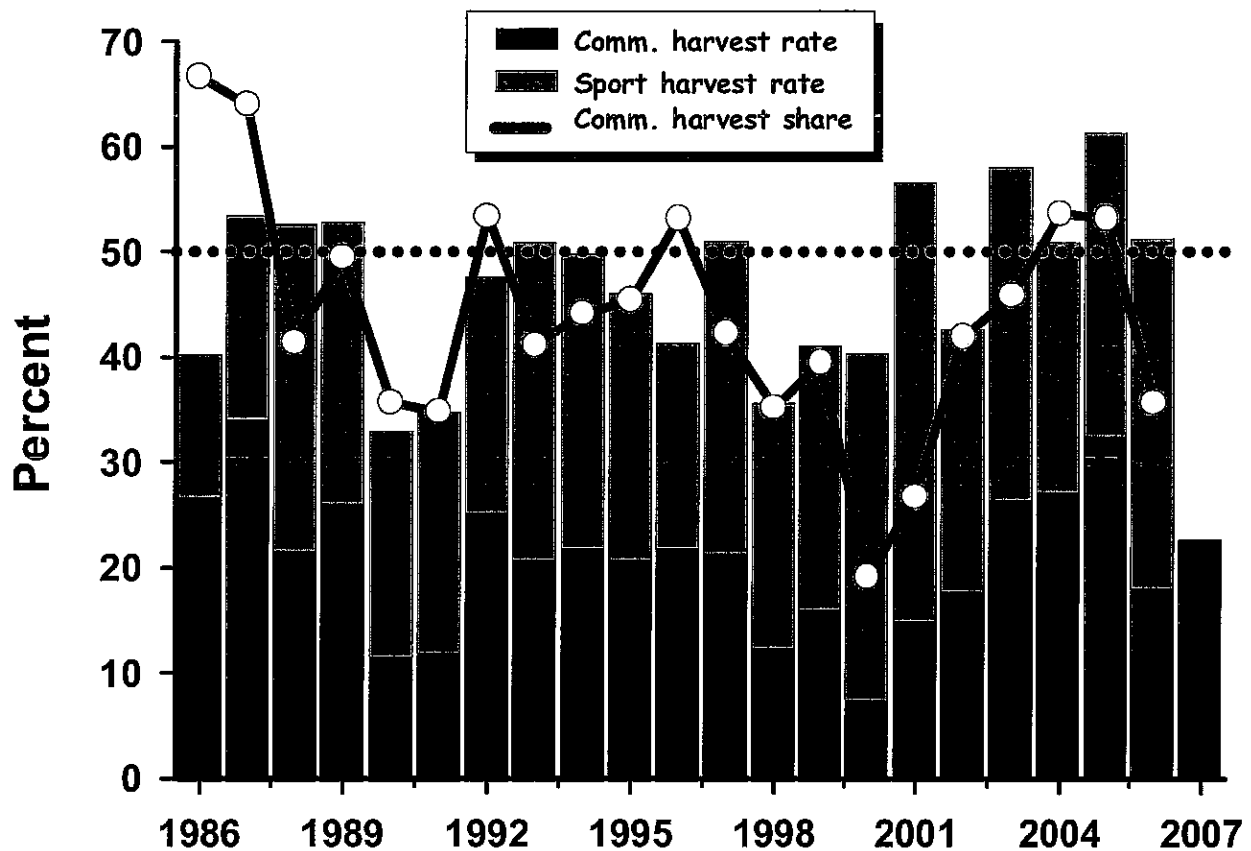


Figure 33. Annual harvest rates (bars) and commercial harvest share (line) of late-run Kenai River Chinook. Harvest share was based on all UCI commercial harvest plus marine and freshwater sport harvest including hook and release mortality. Numbers for 2007 are approximations based on in-season estimates of commercial harvest and sonar counts assuming recent five-year average sport harvest rates (29%).

High catches of Kenai king salmon in commercial fisheries run counter to a stipulation in the Kenai River Late-Run King Salmon Management Plan that these fish shall be managed primarily for sport and guided sport uses in order to provide a reasonable opportunity to harvest these salmon resources over the entire run, as measured by the frequency of in-river restrictions. A policy to minimize incidental take of late-run Kenai River king salmon in Cook Inlet commercial salmon fisheries was first adopted in 1977 and incorporated into regulation in 1981. However, commercial fisheries continue to be prosecuted to maximize harvest of sockeye with little attempt to limit bycatch of king salmon.

Sport and commercial fisheries for Kenai salmon each contribute tens of millions of dollars per year to the local economy, which clearly benefits by keeping both fisheries healthy. Late-run Kenai Chinook are very highly-valued in the sportfishery. Sport anglers typically spend \$30-\$300 per day to fish on the Kenai Peninsula depending on fishing method and residency (ISER 1996, Hamel et al. 2000, Herrmann et al. 2001). Anglers typically fish four or more days per Chinook harvested (Gamblin et al. 2002). In contrast, ex-vessel value of a Chinook in the commercial fishery has averaged \$22 per fish over the last five years at an average price of \$1.00/lb.

Recommendations

- 1. KRSA opposes efforts (Proposals 273 and 274) to change allocative direction and conservation controls in the Kenai Late-Run King Salmon Management Plan [5 AAC 21.359] and Kenai Late-Run Sockeye Salmon Management Plan [5 AAC 21.360].**

These proposals seek to remove important conservation and allocative measures needed to allow sufficient numbers of king salmon to enter the Kenai River. These proposals seek to increase commercial sockeye harvests by reverting back to single species (sockeye) management that was prevalent in Cook Inlet in the past. Affected portions of the plan provide for the non-commercial priority granted king salmon, sustainable spawning escapements, the linkage between in-river closures and commercial management actions, and the call for monitoring of important habitat concerns.

COHO SALMON

Background

- A Kenai River Coho Salmon Conservation Management Plan was initially developed in 1997 in response to declining UCI coho harvest and Kenai smolt production. The plan sought to reduce fishery harvest rates and to share the conservation burden among fisheries through a combination of restrictions in the Central District east-side set, personal use, and in-river recreational fisheries (Clark et al. 2000).
- Total harvests of Kenai River coho salmon were reduced by about 20% as a result (Begich and Pawluk 2007). Additional coho protection measures, including a reduction in the coho bag limit from three to two, were adopted by the Board of Fisheries during a special meeting on coho conservation in February 2000.
- In 2005, the Board repealed the Kenai River Coho Salmon Conservation Management Plan and adopted the Kenai River Coho Salmon Management Plan (5AAC 57.170). The plan was adopted to ensure an adequate escapement of coho salmon into the Kenai River drainage and to provide management guidelines to the Department. The plan designates Kenai River coho salmon stocks primarily for sport and guided sport use.

Upper Cook Inlet Coho Harvests

- Coho salmon support significant commercial and sport fisheries in the UCI with combined harvests between 500,000 and 900,000 coho per year from 1981 to 1995 (Figure 34). Coho harvests have been much reduced since that time with combined harvests between 250,000 and 500,000 from 1996 to 2006. These trends reflect changes in fisheries management and coho returns but are only broadly indicative of coho run status.
- Commercial fisheries historically accounted for 80-90% of the total coho harvest. Commercial and sport shares in Upper Cook Inlet have been roughly equal since 1998-2000 (Figure 34) but commercial shares increase with large sockeye fisheries (e.g. 2004 and 2005). Kenai coho harvest shares are more heavily weighted toward the sportfishery than the Cook Inlet totals.

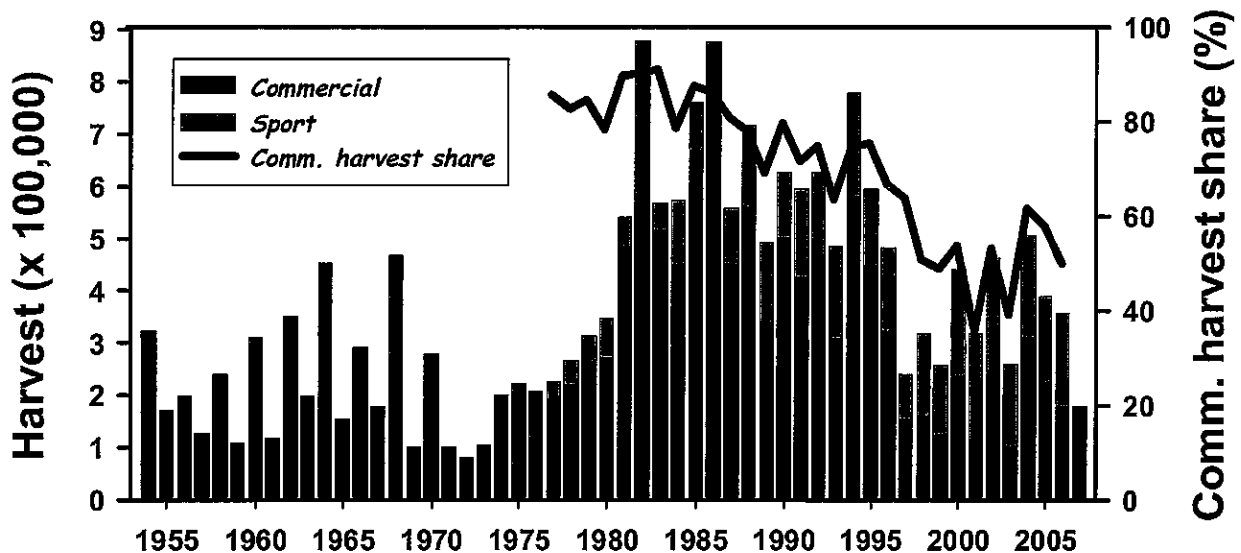


Figure 34. Commercial and sport harvest of coho salmon in the Upper Cook Inlet (2007 UCI coho sport numbers are not available).

Kenai River Coho Stock Status

- Annual estimates of Kenai River coho harvest are available based on the statewide sport angler survey and recoveries of coded wire tags in the commercial fishery.
- The Department does not currently estimate the Kenai in-river coho return inseason and an escapement goal has not been established for this stock.
- Information on Kenai coho stock status is available from smolt, harvest, and in-river adult indices (Figure 35). A smolt marking program for Kenai River coho was conducted between 1992 and 2007 to estimate smolt numbers and total harvest (Massengill and Carlon 2007). Smolt numbers provide an alternative measure of coho status in the absence of a reliable adult production index.
- Mark-recapture studies on adults were conducted between 1999 and 2004 to provide a more robust index of run size and escapement. Total run size (escapement and harvest) during this time averaged about 140,000 coho, ranging from 48,346 in 1999 to 208,520 in 2002. Since 2005, in-river adult abundance has been indexed using coho catch per unit of effort (CPUE) in fishwheels operating in the Kenai River.
- Kenai coho smolt numbers and adult harvests declined during return years 1993 to 1998 (Figure 35). Following the institution of coho conservation measures implemented in 1997, smolt numbers, harvest and in-river abundance generally increased from 1999 to 2004. Numbers have been trending downward again since 2005 (Figure 35).

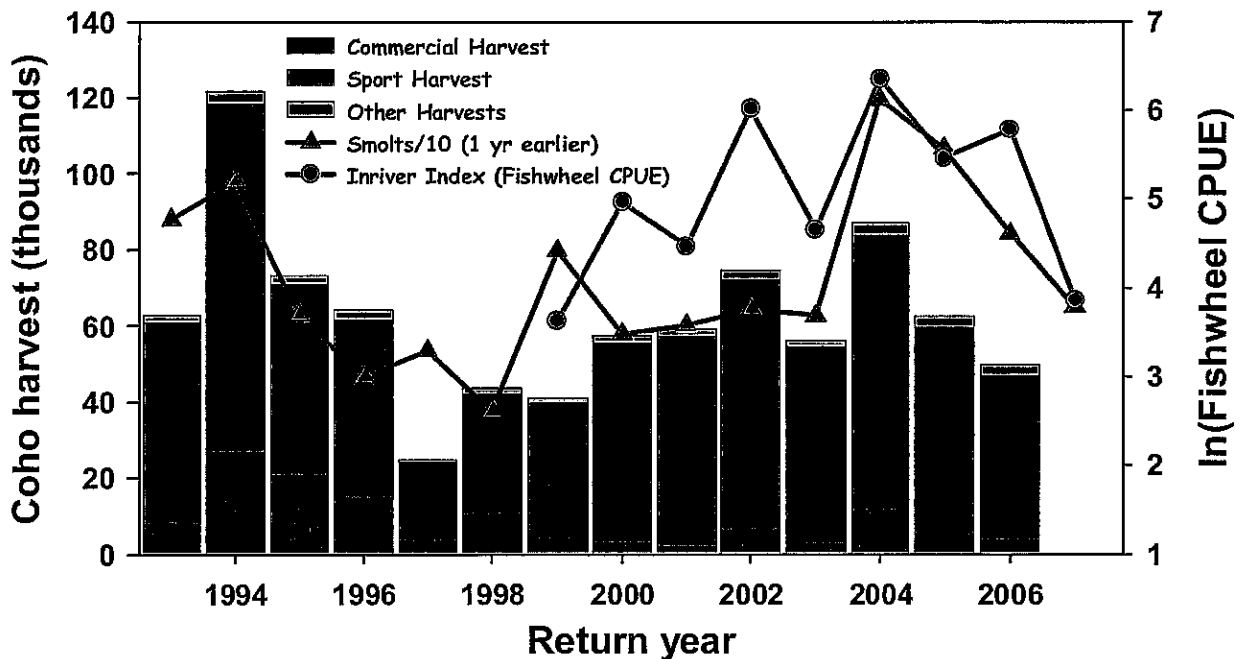


Figure 35. Kenai River coho smolt numbers, adult harvests, and adult in-river abundance index (based on fishwheel CPUE), 1993-2007. Note that adults were produced by the cohort of smolts from the preceding year. Harvest estimates are not yet available for 2007. Data provided by ADF&G, smolt estimates after return year 2005 and all in-river index data are preliminary.

Issues

#1. Coho bag and possession limits

Current regulations for the Kenai River allow anglers to keep two coho per day and in possession. The limit was reduced from three in 2000 in response to conservation concerns for this stock. The Kenai River Coho Salmon Management Plan (5AAC 57.170) gives the Department authority to reduce the bag and possession limits if additional conservation measures are necessary. However, the Department does not have the authority to increase coho bag and possession limits in the Kenai River.

Recommendations

1. **KRSA supports efforts to increase the bag and possession limit back to three fish in years where coho are abundant (Proposals 279, 280, and 281).**

The BOF removed the stock of concern status for Kenai River coho salmon in 2005, yet the bag and possession limits have remained at two fish. The Department estimates that the reduction in the bag limit from 3 to 2 decreased the harvest of coho salmon by an average of 8% (Lafferty et al. 2007). This modest increase in opportunity is consistent with the removal of stock of concern status. The Department has the authority to reduce the bag and possession limits if conservation measures are necessary.

#2. Coho sportfishing season

The Kenai River Coho Salmon Management Plan (5AAC 57.170) allows anglers to harvest coho salmon only between July 1 and October 31. However, small numbers of coho continue entering the Kenai River through late November (Begich and Pawluk 2007). Anglers are currently prohibited from harvesting fish returning in November.

Recommendations

1. **KRSA supports increasing the Kenai River coho salmon season through November (Proposal 282).**

The Kenai River Coho Salmon Management Plan directs the Department to provide the opportunity to harvest Kenai River coho salmon resources "over the entire run". However, anglers are currently denied the opportunity to harvest coho salmon after October 31 even though coho continue entering the Kenai River into November. Participation and catch is expected to be low in November. The current closure date unnecessarily restricts opportunity.

CHUM SALMON

Background

- Chum salmon spawn in many Upper Cook Inlet drainages but data on population status is poor. The best long term database for UCI chum salmon is commercial harvest data.
- Chum salmon historically supported large commercial harvests in Upper Cook Inlet. Commercial chum harvests in UCI were variable but trended upward until the harvest peaked at over 1.4 million in 1982 (Figure 36). Harvests have been trending downward ever since. Commercial chum harvests averaged about 750,000 fish in the 1980s, 240,000 fish in the 1990s, and just over 115,000 fish since 2000.
- The ADF&G offshore test fishery chum salmon catch closely followed the commercial catch trends through the 1990s, but has generally been higher since 2000. The test fishery was initiated in 1988 after the record chum harvests in the mid-1980s. Thus, this information can not be used to assess run strength relative to historic highs.
- There are no escapement goals established for UCI chum salmon stocks.

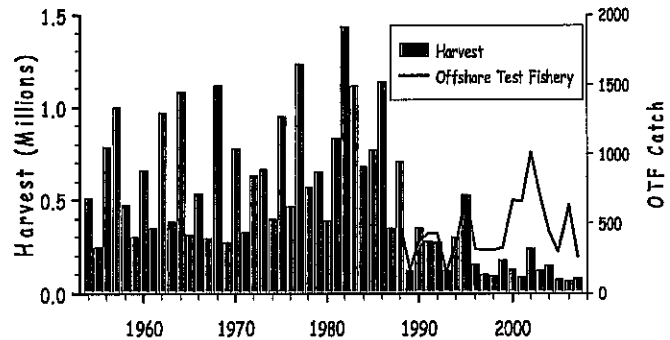


Figure 36. Annual commercial chum salmon harvests and offshore test fishery chum catches in Upper Cook Inlet, 1954 - 2007.

Issues

#1. Population status

There is great uncertainty about the status of chum salmon stocks in Upper Cook Inlet. Commercial chum harvests have continued to decline precipitously since the mid 1980s. Chum salmon escapement data in UCI is poor.

Recommendations

1. KRSA recommends designation of Stock of Concern status for UCI chum salmon (Proposal 120).

The Sustainable Salmon Policy (5 AAC 39.222) defines a stock of concern as a "stock of salmon for which there is a yield, management, or conservation concern." UCI chum salmon stocks clearly warrant a designation of a yield concern as defined by "a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock's escapement needs".

PROPOSAL 120

Consider designation of Cook Inlet chum salmon as a Stock of Concern which warrants development of an action plan to evaluate status, assess factors in decline, and identify appropriate remedies.

ISSUE: Chum salmon numbers in Upper Cook Inlet have plummeted over the last two decades and the reason is unclear. Chum historically supported very large commercial harvests but fisheries have evaporated over the years. Declines in chum numbers may have broader ecosystem implications, for instance, to the sensitive Cook Inlet beluga population. Significant investigation for action regarding chum salmon appears to have been precluded by failure to define meaningful conservation concern criteria and a lack of representative chum escapement data. Failure to act in the face of uncertainty is contrary the precautionary approach of the Sustainable Salmon Fisheries Policy.

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KRSA COMMENTS ON OTHER PROPOSALS

COMMITTEE A: Cook Inlet Commercial Fishing

Proposal 73—No Comment

This proposal addresses Central District herring fisheries.

Proposals 74 and 7—No Comment

These proposals address the use of aircraft for fish spotting.

Proposal 76—No Comment

This proposal seeks to reduce the Kasilof section to the specifications noted in the 2005 season.

Proposal 77—Support

Redefine the demarcation of the Kenai and Kasilof sections (the Blanchard Line) as a point one-half mile north of the north bank of the Kasilof River.

Comments: Current Kasilof set net management areas are not adequate. Excessive use of the Kasilof terminal fishing area in years of big Kasilof sockeye runs is ineffective for regulating escapement and has caused a variety of fishery problems and conflicts, making it extremely unpopular with commercial fishers. However, the current Kasilof set net area is not adequate to protect Kenai fish when those runs are weak. The northern boundary of the Kasilof set net area (Blanchard line) does not provide adequate protection of Kenai fish during Kasilof sockeye target fisheries. The set net fishery from the Kasilof River mouth to the Blanchard Line is a mixed stock fishery for Kasilof and Kenai River sockeye and Chinook. Intensive Kasilof fisheries in big run years intercept large numbers of Kenai fish. Kenai escapements and fisheries suffer as a result. For instance, big Kasilof fisheries in 2006 would have caused Kenai sockeye escapement to fall short of goals if the run had been on time rather than late. Large king harvests in set net fisheries north of the Kasilof also add to the excessive harvest of this sportfishery. Commercial fishery managers have consistently failed to implement effective management measures to limit king bycatch in sockeye target fisheries. Redefining the Kasilof area to exclude areas one-half mile north of the north bank of the Kasilof River would be much more effective strategy for selectively targeting Kasilof fish and avoiding Kenai fish, including kings.

Proposal 79—Opposed

This proposal seeks to increase commercial fishing opportunity for coho salmon by five days in the Kasilof section, Kenai and East Forelands section and remove the trigger for closure of the commercial fishery.

Comments: KRSA stands firmly opposed to the increased fishing opportunity for coho salmon by the commercial fishery. Significant numbers of coho are already being harvested as "incidental" to the commercial harvest for sockeye salmon. We believe that greater controls (as found in proposal 87) are warranted to protect the allocation of coho salmon found in 5 AAC 21.360 Kenai River Late-run Sockeye Salmon Management Plan (a) *The Department shall manage the 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 king and Kenai River coho salmon stocks to provide personal use, sport, and guided sport fishermen a reasonable opportunity to harvest salmon resources.*

Proposal 80, 81, 82, 83, 84, 85, and 86—Opposed

These proposals seek to extend commercial fishing time and/or remove windows.

Comments: A delicate balance exists in fish allocations among users. The simple solution of extending fishing time, ignoring the allocation of coho and king salmon to non-commercial users, is not an acceptable approach. Windows serve two equally important roles. First they are biologically sound as they allow segments of escapement from all components of the return, second, prescriptive windows allow for entry of fish into the river to fuel the in-river fisheries and afford meaningful and predictable fishing opportunity.

Proposal 87—Support

This proposal seeks to clarify the transition between commercial sockeye salmon management and coho management by use of a trigger. This approach was agreed to and passed by the previous Board, but through administrative oversight was made moot. This proposal addresses that administrative mistake.

Comments: During the January 2005 Upper Cook Inlet Finfish meeting Department staff and members of the various user groups arrived at an approach to define when the Department would transition from sockeye salmon management. Although numerous approaches were discussed, the one that was eventually agreed upon was to define the termination of the commercial sockeye season to be when the commercial catch was one percent or less of the cumulative season total for two consecutive commercial fishing periods. This agreement was part of a complex set of negotiations and collaborative efforts among users. The Board took action on this approach and adopted it into regulation. Following that action ADF&G staff took steps intended to "clarify" the regulation and the result is the language we presently have in 5 AAC 21.310(b)(2)(C)(iii). This provision now contains language that was inserted during the editing process that, if followed to the letter, subverts the intent of the Board when it passed this regulation in January 2005. The inserted language redefines a fishing period to include "a time period open to commercial fishing without closure". Under this inserted language this could include several days rather than the daily periods upon which the one percent trigger was selected. There is no record that the language in question was ever formally acted on by the Board (RC or Amendment to the proposal by a Board member during deliberations) and although intended to help clarify the regulation the added language has the opposite effect.

Proposal 88, 93, 94, 98, and 99—Opposed

These proposals all seek to remove controls on the seasons for commercial fishing time and extend commercial fishing time.

Comments: Fisheries management in Cook Inlet remains a unique challenge in Alaskan fisheries. Because of the number of non-commercial users involved in the Upper Cook Inlet fisheries, and their attendant harvesting power, the notion that we can simply manage commercial fisheries by EO time is a false presumption. Allocative decisions by the BOF need to be implemented through the use of specific direction to management staff. These proposals simply harken back to "the good ol' days" and that approach will no longer work.

Proposals 90, 95, 96, and 97—Opposed

This group of proposals seeks to extend weekly commercial fishing schedules.

Comments: We remain opposed to the increased level of commercial fishing time as proposed within this group of recommended changes. There exists sufficient commercial fishing time available at differential run strengths to provide for a sustainable commercial fishery and provide for the needs of the in-river users. The authors of these proposals seek only to increase their opportunity to harvest at the expense of other Alaskans and non-Alaskans who enjoy the fishery resources as well.

Proposals 102, 103, 104, 105, 106, 107, 108, 109, and 111—Neutral

This group of proposals seeks to increase gill net efficiency by either allowing changes to the number of filaments required or by increasing the depth and length of gear.

Comments: To the extent that commercial fishing efficiency can be increased during the allowable opening periods we believe some of these proposed gear changes are reasonable. As long as the prescriptive windows remain we see no reason to not increase the efficiency of commercial gear with the exception we stand opposed to any increase in depth (proposal 106) of net or increase in mesh size. Increase in mesh depth and size will have a deleterious effect on the passage of king salmon into the river.

Proposals 112 and 113—Opposed

These proposals seek to amend or eliminate the 48 hour waiting period for district registration of commercial fishing vessels.

Comments: The registration and 48 hour waiting period are cornerstone to effective management.

Proposals 119 and 120—Support

These two proposals call to attention the depressed state of salmon stocks in the Northern District.

Comments: Proposal 119 requests the Board identify Susitna River and Fish Creek as stocks with a yield concern under the Sustainable Salmon Policy. Proposal 120 calls for Stock of Concern status for chum salmon which triggers development of an action plan to evaluate status, assess factors in decline, and identify appropriate remedies. In both cases, the Board is being requested to step in under the Sustainable Salmon Policy and take steps to curb the decline of salmon stocks destined for Upper Cook Inlet's Northern District. Chum salmon numbers in Upper Cook Inlet have plummeted over the last two decades and the reason is unclear. Chum historically supported very large commercial harvests but fisheries have evaporated over the years. Declines in chum numbers may have broader

ecosystem implications, for instance, to the sensitive Cook Inlet beluga population. Significant investigation for action regarding chum salmon appears to have been precluded by failure to define meaningful conservation concern criteria and a lack of representative chum escapement data. Failure to act in the face of uncertainty is contrary to the precautionary approach of the Sustainable Salmon Fisheries Policy. Sockeye stock status is less clear because of the difficulties in assessing the in-river returns due primarily to deficiencies in the sonar system used on the Yentna River. However, it is clear, given the best information available today, that in-river returns are depressed and actions need to be taken to conserve these stocks.

COMMITTEE B: Northern District Salmon Management Plans

BIG RIVER SOCKEYE SALMON MANAGEMENT PLAN

Proposal 152—Opposed

This proposal intends to increase commercial sockeye salmon fishing time by one month (earlier), double the amount of allowable gear to be fished, and increase the allowable bycatch of king salmon by 50% so that fishermen and processors have the opportunity to expand our markets and products.

Comments: This proposal is very narrowly focused in terms of benefits and very broad in its effect on other users. The request to increase the allowable king salmon bycatch by 500 fish (a 50% increase in the current level) is unacceptable in terms of king salmon conservation and the effect on upriver users. The Department has not established meaningful management targets for king salmon in these waters and the biological effect of this increased exploitation is unknown.

Proposals 100 and 101—Opposed

These two identical proposals seek to open a commercial fishery in Tuxedni Bay, statistical area 245–30.

Comments: KRSA is opposed to opening a targeted king salmon commercial fishery for king salmon. The Late-Run Kenai Sockeye Salmon Management Plan clearly indicates that king salmon are to be managed for the benefit of recreational/non-commercial uses. To open a directed commercial fishery for king salmon would be counter to that allocative decision.

NORTHERN DISTRICT KING SALMON MANAGEMENT PLAN

Proposals 146, 147, 148, 149, 150, and 151—Opposed

All of these proposals seek to extend commercial fishing opportunity for king salmon in the Northern District.

Comments: We remain opposed to such action as it is inconsistent with priorities placed by the Board of Fisheries with respect to a non-commercial allocation of king salmon. There exists a 12,000 king salmon allocation to the set gill net fishery and we believe that management is adequately tooled to provide that opportunity. Of particular concern is the request to INCREASE gill net mesh size (proposal 148) to favor the harvest of king salmon. This is an arcane approach that has resulted in significant management issues in every fishery in which it has been used. Selective harvest of large fecund females would be the product of such a change. This is a poor management strategy and should be avoided.

NORTHERN DISTRICT SALMON MANAGEMENT PLAN (CF)

Proposal 121 and 122—Support

These two proposals seek to establish an in-river goal (105,000 to 195,000) for sockeye in the Yentna River in an effort to account for in-river uses.

Comments: In-river sport fisheries for Yentna/Susitna River sockeye are typically closed while at the same time regular fishing periods and additional emergency order periods have permitted commercial harvest of Yentna/Susitna bound sockeye in the Central District of Upper Cook Inlet. In-river users feel that there is no equity in opportunity and are calling on the Board to provide direction to staff to allow for some measure of sockeye sharing. Recent genetics studies confirm that significant numbers of Yentna/Susitna fish are harvested in Central District commercial fisheries. Yentna/Susitna sockeye do not comprise a large fraction of the commercial sockeye harvest but the Central District fishery still harvests the majority of the Yentna/Susitna return in some years. Current commercial fisheries management practices sacrifice Yentna/Susitna sockeye escapement, yield, and fishing opportunity in order to maximize harvest of the more productive Kenai and Kasilof stocks.

Proposal 134, 135, 136, 137, and 138—Opposed

This group of proposals seeks to eliminate the wording that addresses the priority afforded to the sport fisheries with respect to coho salmon.

Comments: What the authors consider "meaningless wording" is actually direct instruction to the Department management staff regarding allocation of resources. The recurrent theme in many proposals this year is "let's go back to the good old days". To revert back and eliminate the priorities established by the Board will constitute a major reallocation of fishery resources. It is agreed that coho stocks within Cook Inlet have recovered from the depressed

state (if such a state had ever actually existed) and participation in recreational fisheries needs to be allowed to expand. The commercial fisheries are granted a priority for sockeye salmon and kings and coho are granted to the non-commercial users.

Proposal 139—Support

This proposal would clarify escapement goal priorities regarding the Yentna and Kenai rivers by stating that achievement of the lower end of the Yentna escapement goal shall take priority over any upper Kenai escapement goal, be it the Kenai OEG or the run-strength-based in-river goal.

Comments: The clarification of management targets will be an overarching aspect of the UCI meeting in 2008. This proposal addresses a gap in stated priority and recommends placing the priority squarely on conservation measures for Susitna stocks. The current management paradigm in Cook Inlet has been heavily focused on the harvest of Kenai and Kaslof surplus sockeye. The genetic information now available from commercial catch sampling and the persistent problems with attaining escapement goals in the Yentna and the lack of meaningful management targets for Susitna king salmon all highlight the need for a change. This can be accomplished by setting management priorities as called for in this proposal. As we pointed out in our comments on Proposal 143, management for the low end of the escapement goal does not afford enough abundance to provide for any level of in-river use in Northern District fisheries. In-river users are feeling increasingly disfranchised as they see commercial catches of northern bound salmon taken in Central District fisheries and they are unable to participate due to low abundance, albeit within the lower range of the goal.

Proposal 140—Support

Clarify escapement goal priorities regarding the Yentna and Kenai rivers as follows: clarify that achievement of the lower end of the Yentna escapement goal shall take priority over any upper Kenai escapement goal, be it the Kenai OEG or the run-strength-based in-river goal.

Comments: The Northern District Salmon Management Plan directs that achievement of the lower end of the Yentna River optimal escapement goal shall take priority over not exceeding the upper end of the Kenai River escapement goal. However it is unclear to which goal in the Kenai the plan is referencing.

Proposals 141 and 142—Opposed

Both of these proposals have the effect of increasing commercial fishing time for coho salmon in the Northern District. Proposal 141 couches it as an extension of “sockeye fishing time” and 142 is more direct.

Comments: We are opposed to this effort as it is counter to the long established priority granted the sportfishery for coho salmon. The Department has struggled with the transition between moving from sockeye management to coho management and there was a regulation passed to address that in 2005. In this cycle, proposal 99 is intended to further refine the direction to the Department. With the Department rolling back the assessment program for coho salmon it would seem inappropriate to add the significant harvest potential that this additional fishing opportunity will present.

Proposal 143—Opposed

This proposal calls on the Department to manage the Northern District set gill net fishery to fish on the east-side for Monday and Thursday regular periods and not be tied into the Yentna escapement, while managing the General Subdistrict of the Northern District commercial salmon fisheries based on the abundance of Yentna River sockeye salmon and the Yentna River escapement goal.

Comments: We support the notion that the General Subdistrict of the Northern District needs to be managed to meet the Yenta escapement goals. However, we believe that changes in the way commercial fishing time in the Central District is being administered needs to be part of this solution as well. According to results from recent genetic studies there are significant numbers of Susitna drainage sockeye being harvested in fisheries of the Central District. As a point of interest, management for the low end of the escapement goal does not afford enough abundance to provide for any level of in-river use in Northern District fisheries. In-river users are feeling increasingly disfranchised as they see commercial catches of northern bound salmon taken in Central District fisheries and they are unable to participate due to low abundance albeit within the lower range of the goal. In our view this proposal does not go far enough and the benefits are too narrowly focused.

Proposals 144 and 145—Neutral

The intent of this proposal is to allow the Department more flexibility in opening and closing Northern District statistical areas so areas that are targeting more abundant stocks are not closed under a district-wide “Northern District closure.”

Comments: There is a real disparity in the manner and amount of commercial fishing time granted to the Northern District as opposed to the Central District. We favor a management strategy that will allow for in-river escapement goals to be attained and allow harvest to occur in the form on terminal stock fisheries. We believe the management system that has been in place in UCI has contributed to this situation. Although there will be a great deal of new information coming as the results of projects which are currently being conducted, we believe the genetic sampling of the commercial harvest is well enough understood to allow for adjustments to the Northern District management model.

Proposals 123—Support

This proposal seeks to eliminate Fish Creek stocking program until escapement goals are met on a regular basis (a minimum of two life cycles).

Comments: This proposal addresses specifically Fish Creek while proposal 117 addresses the issue in a broader scope. Hatchery stocks are interfering with the natural reproduction of sockeye salmon on Fish Creek. Fish Creek has repeatedly missed its escapement goals. It has only been until the last five years that hatchery stocks were marked so that they could be properly identified. Alaska Department of Fish and Game continues to use both hatchery stocks to count towards escapement goals, when only wild stocks are supposed to be used. Counting hatchery fish masks the actual status of the wild stock and makes it appear that wild spawning goals are being met, when in fact they are not. Hatchery fish can also make it appear that escapement goals are being exceeded when they are not. We favor adoption of proposal 117 over this proposal due to the broader application.

UPPER COOK INLET SALMON MANAGEMENT PLAN

Proposal 114—Neutral

This proposal seeks to renumber Upper Cook Inlet Salmon Management Plan to put Umbrella Plan first in the regulations as follows: Renumber 5 AAC 21.363 to 5 AAC 21.351 or 352.

Comments: This reordering seems appropriate and would lend a logical flow to the following plans. This appears to essentially be a housekeeping proposal as no content is being changed.

Proposal 124—Neutral

This proposal is essentially a placeholder that seeks to reorganize the fishery management plans in UCI into an overall plan that provides information and regulation common to all fisheries, and additional plans that deal with the fisheries by species.

Comments: We support efforts to improve the utility of the management plans. It remains to be seen what elements of the current plans remain and what are dropped out. A revision with transparent reorganization will be favored over a deceptive effort to cloak substantive changes under the guise of simplification and reorganization. Any allocative restructuring should come from individual proposal changes rather than this reformatting effort.

Proposal 126, 127, 128, 129, 130, 131, and 132—Support Clarification of Priorities

These seven proposals all seek to clarify priorities for management. In most cases they speak to escapement goals as the single priority. Other proposals in this group address the priorities in a more global manner.

Comments: Upper Cook Inlet salmon management is governed by five different management plans in regulation. Many of these plans overlap in time and area and may have objectives that compete with one another. Lack of explicit direction has led to confusion and subjective interpretations as to which objectives may have priority under different circumstances. Priority language considered by the BOF at the 2007 statewide meeting identifies escapement goals as the primary management objective within a specific plan but does not provide adequate direction to resolve questions of potentially competing objectives among plans.

We support the approach provided in proposal 132 as per the following:

1. Achieving established escapement goals is the primary management objective unless otherwise specified.
2. Achieving the lower end of every optimal, biological, or sustainable escapement goal shall take priority over not exceeding the upper end of any optimal, biological, or sustainable escapement.

3. Fisheries shall be provided no less than a 51% harvest share of species and stocks designated for management priority of that fishery (e.g. 5AAC 21.358 Northern District chum, pink, and sockeye salmon stocks primarily for commercial uses, 5 AAC 21.360 Kenai River late-run primarily for sport and guided sport uses, 5 AAC 21.360 Northern District coho, late-run Kenai king, and Kenai River coho for personal use, sport and guided sport fisheries.).
4. Limitations on emergency order authority and fishery closure windows designated to distribute escapement throughout the run and to the balance allocation and opportunity among fisheries shall take priority over not exceeding the upper end of any optimum, biological, sustainable, or in-river escapement goal.

Proposals 115—Opposed

This proposal seeks to return to 1995 by repealing substantive changes made by the Board of Fisheries in 1999 and minor changes made in 2005 in the way the fisheries of Upper Cook Inlet would be managed and the allocation of fishery resources among users.

Comments: In its current form, the Upper Cook Inlet Salmon Management Plan recognizes the statutory priority of subsistence, provides direction for the specific and comprehensive management plans, and provides direction on the adoption of management plans. Furthermore, this plan provides the allocative direction necessary for the Board. Finally, it clearly states the Commissioners emergency order authority can trump management plan direction should, in the Commissioners judgment, new information become available that warrants departure from existing plans. This is a fail safe that is to be used thoughtfully and infrequently. In sum, this plan provides the overarching direction for all other plans.

Proposal 116—Support

This proposal seeks to revise current allocation priorities to match current needs and values.

Comments: This proposal recognizes the fundamental problem in Cook Inlet today which is that a relative few take the greatest share of fishery resources while the relative many feel short changed. Upper Cook Inlet fisheries are unique in Alaska because of their accessibility by road to Anchorage. For more than a decade the urban population of Anchorage has been enjoying the fishery resources of Cook Inlet. There is a very sincere feeling that fueling the commercial harvest for the benefit of a relatively few number of Alaskans has come at the expense of the majority of users. This proposal simply seeks to make allocation of Upper Cook Inlet salmon fishery resources commensurate with the demand of the majority.

Proposals 117—Support

This proposal seeks to amend the Upper Cook Inlet Salmon Management Plan (umbrella salmon management plan) to clarify that escapement goals are based on wild fish.

Comments: Counting hatchery fish toward wild fish escapement goals is inaccurate, biologically inappropriate, and contrary to the Sustainable Fisheries Policy (5 AAC 39.222 (c) (1) (D)). Hatchery fish are currently counted toward achieving escapement goals for wild fish in a number of Upper Cook Inlet systems (Fish Creek sockeye, Kenai River sockeye, and Kasilof River sockeye). However, escapement goals are based on wild spawner numbers and hatchery fish often do not make effective contributions toward natural production. Counting hatchery fish masks the actual status of the wild stock and makes it appear that wild spawning goals are being met, when in fact they are not. Hatchery fish can also make it appear that escapement goals are being exceeded when they are not.

Proposal 125— Opposed

This is an expansive rewrite of a number of management plans; however, at its root is simply the reallocation of salmon stocks away from the in-river users to the benefit of the commercial fishery.

Comments: This proposal epitomizes the singular focus of the commercial fishery mind set. Language within the first paragraph (i) indicated that no other management target shall be considered except that of managing for a predetermined escapement. Never mind that escapement could come all in one or two tides and the permitted continuous commercial fishing that would follow (under this approach) would severely curtail any meaningful opportunity for in-river users. This mind set worked for years, but now, in Cook Inlet, commercial fishermen are outnumbered by non-commercial users by over 100 to 1. The Board has attempted to afford meaningful and predictable opportunity for in-river users through the use of prescriptive windows of closure. Commercial users see this as a penalty but in reality it is what keeps their opportunity viable. Reverting back to the days where the in-river fisheries are sustained by what ever leaks through an aggressively fishing commercial fleet are over. All users should share in the sustainable salmon surplus of Upper Cook Inlet.

Proposal 133—Opposed

This proposal seeks to extend a commercial fishing priority to UCI salmon stocks.

Comments: There is little substance to this proposal. It simply would offer a reallocation (priority) over other users to the commercial fishery from June 20 to August 20.

CENTRAL DISTRICT DRIFT GILLNET MANAGEMENT PLAN

Proposal 160—Opposed

Seeks to address deficiencies in commercial fish management due to poor forecast error.

Comments: The author of this proposal makes a valid point in that forecast error is relatively large in UCI salmon fisheries. Offering additional “flexibility” at the expense of the interests of the in-river users is not a satisfactory alternative however.

Proposals 161 and 162—Opposed

These proposals both seek to repeal or amend the Central District Drift Gill Net Management Plan.

Comments: The business of fisheries management is far more complex than it was even a few years ago. The Kenai Late-run Sockeye Salmon Management Plan (5 AAC 21.360) in its current form affords conservation for sockeye and clear allocative direction to fisheries managers. Those who propose to “roll back” the plan refuse to recognize that there must be specific language within the plan that addresses the allocative direction to the manager. Otherwise we set the managers up for an impossible situation of making allocative decisions on the fly and in season. Contrary to the claims; the window provisions within the plans are working in exactly the manner in which they were intended to. Windows afford a predictable level of in-river fishing opportunity for in-river users, providing windows for king salmon to pass, spreading commercial harvests throughout the run, and putting sockeye salmon escapements in-river in a manner that sustains future yield. It is true that there is the possibility for a short term loss in yield in the commercial fishery; however, the science is clear that the short term loss in yield does not constitute a biological threat nor does it affect long term production. In fact the opposite may be true. Larger escapements continue to produce larger returns within the Kenai River drainage. Proposals 18–192 are particularly troubling because they seek to reduce the in-river abundance of salmon, reduce escapement goals, and do not address in any way the need to move fish into the river in any predictable manner for the benefit of in-river users. If passed in their present form, they negatively affect thousands of in-river users, reduce long term system productivity, result in greater commercial interception of king salmon, and benefit a single user group at the expense of the resource and all the other users. A common theme among this group of proposals is the abandonment of abundance based management under the guise of simplified plan language. In the final analysis, this approach only serves to benefit a single user group (CF) during times of high abundance. The current plan allows all to share in the conservation of the resource and the surplus.

Proposal 89—Opposed

Close the Central District by executive order.

Comments: The proposal makes no sense based on the wording.

Proposal 163—Opposed

This proposal seeks to afford additional set net fishing opportunity by restricting the Central District drift fleet.

Comments: With the soon to be released genetic sampling data from the commercial harvest of the set and drift fleets in the Central District and other locations, it will become far more clear where management action may be taken to conserve Northern bound salmon stocks. Unfortunately those data are not yet ready for use at this upcoming Board meeting. We favor direction to the Department, from the Board, that the new genetic sampling information be brought on line as soon as is practicably possible. Until then, there is no practical way to assess the benefits of actions such as those called for in this proposal.

Proposal 164—Support

This proposal seeks to clarify August fishing periods in the Central District by amending the regulation to correct an omission in direction for drift gill net fisheries during August.

Comments: The Central District Drift Gillnet Fishery Management Plan currently provides no direction for fishing periods from August 1 through August 10. The current text in (B) provides direction “from July 16 through July 31.”

Part (C) provides direction "from August 11 until closed by emergency order." This is an apparent oversight in language adopted in the previous UCI Board meeting. As such this is a housekeeping proposal.

Proposal 165—Support

This proposal would reinstate restrictions for directed Cook Inlet west side drift gill net fishery.

Comments: In a last minute amendment at the 2005 UCI BOF meeting, the Board revised the Central District Drift Gillnet Fishery Management Plan to remove coho fishing time restrictions on the drift fleet during August in areas of the western inlet. This change was enacted through the 2007 season. This fishery does not make a significant contribution to UCI fishery values but can have significantly effect on local escapements and sport fisheries.

Proposal 91—Opposed

This proposal seeks to repeal the mandatory July 17 and 26 restrictions for the Kenai and Kaslof Rivers in an effort to "go back to the good ol' days".

Comments: The business of fisheries management is far more complex than it was even a few years ago. The Kenai Late-run Sockeye Salmon Management Plan (5 AAC 21.360) in it current form affords conservation for sockeye and clear allocative direction to fisheries managers. Those who propose to "roll back" the plan refuse to recognize that there must be specific language within the plan that addresses the allocative direction to the manager. Otherwise we set the managers up for an impossible situation of making allocative decisions on the fly and inseason. Contrary to the claims; the window provisions within the plans are working in exactly the manner in which they were intended to. They are affording a predictable level of in-river fishing opportunity for in-river users, providing windows for king salmon to pass, spreading commercial harvests throughout the run, and putting sockeye salmon escapements in-river in a manner that sustains future yield. It is true that there is the possibility for a short term loss in yield in the commercial fishery; however, the science is clear that the short term loss in yield does not constitute a biological threat nor does it affect long term production. In fact the opposite may be true. Larger escapements continue to produce larger returns within the Kenai River drainage. Proposals 187– 192 are particularly troubling because they seek to reduce the in-river abundance of salmon, reduce escapement goals, and do not address in any way the need to move fish into the river in any predictable manner for the benefit of in-river users. If passed in their present form, they negatively affect thousands of in-river users, reduce long term system productivity, result in greater commercial interception of king salmon, and benefit a single user group at the expense of the resource and all the other users. A common theme among this group of proposals is the abandonment of abundance based management under the guise of simplified plan language. In the final analysis, this approach only serves to benefit a single user group (CF) during times of high abundance. The current plan allows all to share in the conservation of the resource and the surplus.

COMMITTEE C: Pink, Kenai, and Kasilof Management Plans

COOK INLET PINK SALMON MANAGEMENT PLAN

Proposal 153—Neutral

This is a housekeeping proposal to replace wording that was inadvertently omitted from the last printing of the regulation booklet.

Comments: Between 2002 regulations and 2005 regulations, the area for the pink salmon fishery was inadvertently deleted. Proposal 153 (ADFG proposal) adds the fishing area description that was inadvertently omitted at the previous Board meeting. This proposed language is the same as in the original plan.

Proposals 154, 155, 156, 157, 158, 159—Opposed

This group of proposals seeks to increase commercial fishing opportunity for pink salmon in Cook Inlet. Comments: Pink salmon have been historically a low value commercial enterprise. The market has not changed. The expansions recommended in this group of proposals will result in increased bycatch of coho salmon which are highly valued in the sport fisheries in-river. Contrary to the justification, pink salmon play a valuable role in the ecosystem and are responsible for significant nutrient loading that is ultimately a value to the systems productivity. The reason commercial fishing opportunity for pink salmon has historically been low was the poor economic return. Now the value of the recreational fisheries (coho) that would be impacted by this expansion combined with the very limited economic value of the commercial pink salmon product make this proposed change ill-advised.

KENAI LATE-RUN SOCKEYE SALMON MANAGEMENT PLAN

Proposals 187, 188, 204, 118, 189, 190, 191, 192, 193, 195, 200, 194, 196, 197, 198, 199, 201, 203, 205, 209 —Opposed

These groups of proposals address changes to the Kenai Late-run Sockeye Salmon Management Plan (5 AAC 21.360). In aggregate, these proposals simply seek to "go back to the good ol' days".

Comments: The business of fisheries management is far more complex than it was even a few years ago. This sockeye plan (5 AAC 21.360) in its current form affords conservation for sockeye and clear allocative direction to fisheries managers. Those who propose to "roll back" the plan refuse to recognize that there must be specific language within the plan that addresses the allocative direction to the manager. Otherwise we set the managers up for an impossible situation of making allocative decisions on the fly and in season. Contrary to the claims; the window provisions within the plans are working in exactly the manner in which they were intended to. They are affording a predictable level of in-river fishing opportunity for in-river users, providing windows for king salmon to pass, spreading commercial harvests throughout the run, and putting sockeye salmon escapements in-river in a manner that sustains future yield. It is true that there is the possibility for a short term loss in yield in the commercial fishery; however, the science is clear that the short term loss in yield does not constitute a biological threat nor does it affect long term production. In fact the opposite may be true. Larger escapements continue to produce larger returns within the Kenai River drainage. Proposals 187 - 192 are particularly troubling because they seek to reduce the in-river abundance of salmon, reduce escapement goals, and do not address in any way the need to move fish into the river in any predictable manner for the benefit of in-river users. If passed in their present form, they negatively affect thousands of in-river users, reduce long term system productivity, result in greater commercial interception of king salmon, and benefit a single user group at the expense of the resource and all the other users. A common theme among this group of proposals is the abandonment of abundance based management under the guise of simplified plan language. In the final analysis, this approach only serves to benefit a single user group (CF) during times of high abundance. The current plan allows all to share in the conservation of the resource and the surplus.

Proposal 202—Support

This proposal seeks to amend windows provisions for Kenai River Late-Run Sockeye Plan to provide missing direction for the weekly timing of fishery escapement/allocation windows at sockeye run strengths of less than two million and address the inadequacy of 24-hour window at run strengths of two to four million sockeye to provide the intended benefits.

Comments: The Kenai River Late-Run Sockeye Management Plan does not provide direction for the weekly timing of fishery escapement/allocation windows at sockeye run strengths of less than two million. Nor is the additional 24-hour window at run strengths of two to four million sockeye adequate to provide the intended benefits. Emergency

order opens timed for Friday or Saturday disrupts in-river fishing opportunity on the weekend. A 24-hour window merely reloads the beaches for the set net fishery and does not provide for adequate in-river escapement to meet the management intent of windows.

Proposal 210—Opposed

This proposal calls on the Board to “Manage so 50% of early Russian River reds revert back to commercial fishery”.

Comment: This proposal asks the Department to manage with a level of precision it does not have. Catch allocation in Cook Inlet is currently imprecise and, until the new genetics technology available through the SNIPS work becomes the norm for management, this proposal asks for the impossible.

Proposals 206, 207, and 208—Support

This group of proposals addresses the Department’s authority to increase/decrease sport bag limits for sockeye salmon in response to in-river abundance. The Department proposal 206 provides the Department the ability to ratchet the SF down by reducing bag limits in response to low abundance. This maintains some measure of sportfishing opportunity albeit at a reduced level, consistent with conservation mandate. Proposals 207 and 208 address increased harvest opportunity for sport users at high levels of abundance. This too makes sense.

Comments: We support the increased authority for the Commissioner to exercise EO authority in response to abundance of sockeye in-river. Presently the Department has direction within the plan as to what they should do during periods of moderate in-river abundance. Absent however, is specific language necessary to allow the Department to increase harvest opportunity in response to large (greater than four million) and lower (less than two million) levels of abundance. We favor this form of resource sharing over that proposed in proposal 205 where the author wants equity between CF and SF users with respect to sockeye salmon. KRSA stands in support of the current allocation language that designates sockeye to be managed primarily for the benefit of the commercial fishery, while king salmon and coho salmon are managed primarily for the benefit of non-commercial (sport and Personal use) users.

KASILOF RIVER SALMON MANAGEMENT PLAN

Proposals 166, 167, and 168—Opposed

These three proposals seek to amend the Kasilof Sockeye Salmon Management Plan to a form that has no provisions that take into account in-river users.

Comments: These three proposals represent another effort on the part of a single user group to focus management on essentially one species for the benefit of a single user group. The windows provisions contained within the Kasilof plan serve two purposes. First they are helpful for conservation in that windows allow for the passage of fish into the river system and ensure commercial harvests are taken across the duration of the run and proportional to abundance. They also serve a vital allocative role. By having mandatory or prescriptive windows in place, in-river users are afforded some consideration with respect to the movement of fish into the river system. Following the management plan removes management staff from the allocative decision making process. The perception that the windows provisions within the plan caused the Department to miss the escapement goal is not correct. Management has sufficient fishing time available within the plan to harvest surplus sockeye. Again, this single user group single species approach needs to be left behind.

Proposal 169—Support

This proposal seeks to accomplish four important revisions to the current Kasilof Sockeye Salmon Management Plan:

- *Maintain recent large Kasilof sockeye salmon runs by increasing the OEG range based on updated data showing large returns from high escapements.*
- *Increase the size of the Kasilof River Special Harvest area to provide an orderly commercial fishery and regulate Kasilof sockeye escapement where necessary in poor Kenai run years.*
- *Protect escapement of Kasilof king salmon and provide in-river sport and personal use opportunity in the face of intensive fisheries on large sockeye runs by use of commercial fishery windows.*
- *Provide for an orderly end-of-season closure of the Kasilof area set net fishery after the Kasilof sockeye run has passed in order to provide appropriate opportunity to Kenai area set net and in-river fisheries.*

Comments: The Kasilof River Salmon Management Plan needs to be revised to accommodate issues arising from an increasing trend in Kasilof sockeye in recent years. The current BEG for Kasilof sockeye is too low based upon

the most recent analysis. Consequently the OEG range is artificially low as well. We propose a more appropriate range is 200,000 to 350,000 sockeye. The terminal fishing area does not provide for a traditional and orderly commercial fishery in years of big Kasilof run years when the Kasilof section is restricted to protect a weak Kenai run. Intensive commercial sockeye fisheries on recent large runs have also eliminated significant in-river sportfishing opportunities for kings and are likely to overfish Kasilof kings to below sustainable levels. King salmon escapement data are inadequate to develop escapement goals necessary for direct regulations of fisheries and so indirect protection measures such as fishery windows are necessary. Further, intensive commercial fisheries in the terminal area have eliminated significant personal use fishery opportunity in the Kasilof. Finally, the current sockeye OEG also does not provide adequate protection for large escapements needed to ensure continuing large runs and requires adjustments.

Proposal 177—Opposed

This proposal would direct Department to manage the Kasilof River sockeye salmon primarily for commercial uses.

Comments: This proposal oversimplifies fisheries management in Cook Inlet today. It ignores any responsibility the Board and Department have with regard to other in-river users. This is old school commercial fisheries management that has not kept pace with the changing demand for resource use and the increasingly productive Kasilof stocks.

Proposals 180 and 186—Opposed

These proposals seek to repeal or amend the Kasilof River Salmon Management Plan. Proposal 180 goes so far as to suggest that it would be appropriate to fall below the lower end of the Kenai sockeye escapement goal in order to harvest Kasilof sockeye.

Comments: Both of these seek to remove the portions of these plans that afford any consideration for in-river users. The authors fail to acknowledge that fisheries management in Cook Inlet today, must take into account the upriver users and that allocative provisions contained in these plans are there to protect management staff from having to make these decisions in season. It is simply not feasible to manage Kenai and Kasilof sockeye independently, as this proposal assumes, due to the overlapping migratory pattern of salmon through the district. Recent genetic sample data from the commercial set net catch confirm that large numbers of Kenai sockeye are harvested in Kasilof set net fisheries throughout July. Kasilof sockeye cannot be harvested without significant impacts on Kenai escapements and fisheries. Managing to avoid exceeding the upper Kasilof sockeye escapement goal in large return years will over-harvest Kenai sockeye relative to escapement and in-river needs. Excessive harvest of Kenai sockeye which results in failure to make the low end of the escapement goal clearly sacrifices future yields. In contrast, exceeding the Kasilof sockeye BEG has increased rather than decreased Kasilof sockeye yields. The risks are not equivalent. In years when the Kenai return is low and the Kasilof return is high, it is not possible to meet escapement goal ranges in both systems. Current management linkages seek to optimize the balance among multiple escapement and allocation objectives.

Proposals 178 and 179—Support

These proposals all seek to increase the OEG for Kasilof River sockeye salmon.

Comments: Kasilof River optimal escapement goal (OEG) is too low. Increasing escapements of Kasilof sockeye have resulted in increasing rather than decreasing returns. The common logic is that the best and most current analysis suggest an increase in the BEG is warranted and therefore an increase in the OEG. Additionally, an increase in the OEG (consistent with the best estimates of BEG) will afford some protection for king salmon which are a by-product of the intensive commercial fishing being employed to harvest "surplus" sockeye salmon.

Proposals 181, 182, 184, 185, 186—No action (Recommend #169 as alternative)

All of these proposals seek to adjust the Kasilof Special Management area, generally expanding the area for the set net fishery at the expense of the drift net fishery.

Comments: We are neutral on the allocative aspects of these proposals between the drift and set net fisheries. We are opposed to continuous intensive commercial fisheries in the terminal area and have offered a suite of remedies for this situation in proposal 169.

Proposals 172, 173, 174, and 175—No action (Recommend # 169 as alternative)

All of these proposals call for a reevaluation and limitation to the use of the Kasilof River Special Harvest Area (KRSHA).

Comments: This collection of proposals point to the Board's intent at the time (1986) KRSHA was created and was described "to be rarely, if ever used". Continuous use was neither considered, nor intended by the Board of Fisheries. Major historical harvest reallocation occurred in 2006 emergency opening in the KRSHA, with 33% of the entire Upper Cook Inlet harvest occurring in the terminal area. The terminal fishing area does not provide for a traditional and orderly commercial fishery in years of big Kasilof run years when the Kasilof section is restricted to protect a weak Kenai run. Intensive commercial sockeye fisheries on recent large runs have also eliminated significant in-river sportfishing opportunities for kings and are likely to overfish Kasilof kings to below sustainable levels. King salmon escapement data are inadequate to develop escapement goals necessary for direct regulations of fisheries and so indirect protection measures such as fishery windows are necessary. Further, intensive commercial fisheries in the terminal area have eliminated significant personal use fishery opportunity in the Kasilof. Finally, the current sockeye OEG also does not provide adequate protection for large escapements needed to ensure continuing large runs and requires adjustments. The overuse of the KRSHA is caused by a combination of issues in the Kasilof River Salmon Management Plan. This plan needs to be revised to accommodate issues arising from an increasing trend in Kasilof sockeye in recent years (see Proposal 169). The current BEG for Kasilof sockeye is too low, based upon the most recent analysis. Consequently the OEG range is artificially low as well. We propose a more appropriate range is 200,000 to 350,000 sockeye. If additional set net opportunities are required to target Kasilof sockeye in years of large abundance relative to the Kenai run, then this fishery should be focused within one half mile of shore in portions of the Kasilof section south of a point one-half mile north of the north Bank of the Kasilof River. This area will provide the best opportunity to catch Kasilof sockeye while protecting Kenai sockeye.

Proposals 176—Support

This proposal calls for prescriptive windows to be included within the Kasilof River Sockeye Salmon Management Plan for the purpose of conserving king salmon.

Comments: We support this approach for the following reasons:

- Current analyses suggest that the sockeye goals for the Kasilof are too low and the additional sockeye allowed into the system through this approach will not harm long term productivity.
- The impact of the Kasilof River Special Harvest Area (KRSHA) and extensive fishing opportunity is likely affecting the currently unmanaged late-run Kasilof kings in negative manner.
- The terminal fishing area does not provide for a traditional and orderly commercial fishery in years of big Kasilof run years when the Kasilof section is restricted to protect a weak Kenai run.
- Intensive commercial sockeye fisheries on recent large runs have also eliminated significant in-river sportfishing opportunities for Chinook and are likely to overfish Kasilof Chinook to below sustainable levels.
- Commercial fishery windows are critical to the protection of Kasilof king escapements in the absence of established escapement goals and inseason monitoring. Recent Kasilof Chinook studies by ADFG have confirmed the existence of a significant late-run that returns in July and August. Nearly continuous commercial fisheries at the mouth of the Kasilof have clearly impacted escapements and have a strong potential to reduce future yields.

Proposal 170—Opposed

This proposal seeks to open South K Beach when the Kasilof terminal area is open.

Comments: This proposal increases the chances of failing to meet the Kenai sockeye escapement goals in years when fisheries for Kenai sockeye are limited due to low returns. It also reduces the Kenai River PU and sportfishery opportunity for sockeye and king salmon in years of a high Kasilof return. This change will result in significant bycatch of Kenai River sockeye and king salmon which is contrary to the intent of commercial fishing periods in the Kasilof terminal area. The terminal area is opened in years of low Kenai river returns and high Kasilof returns to target commercial fishing effort on Kasilof sockeye and avoid Kenai River sockeye stocks. In years when harvestable numbers of both Kenai and Kasilof sockeye are available, both Kenai and Kasilof set net areas are opened simultaneously. Recent genetic sample data from the commercial set net catch confirms that sockeye catch in the current terminal area exceeds 90% Kasilof fish but that catch on South K Beach typically includes a large fraction (currently a majority) of Kenai sockeye. A more appropriate alternative for expanding the terminal area to target Kasilof fish would be to open the beaches within ½ mile of shore in an area south of a point ½ mile north of the Kasilof River as per proposal 169.

Proposal 171—Support

This proposal seeks to move guided sport regulations out of the commercial fisheries section.

Comments: This seems to make sense and leads one to wonder why it was placed in this section in the first place.

COMMITTEE D: Kenai Peninsula PU/Kenai River Resident Species

PERSONAL USE FISHING

Proposals 211, 212, 213, 217, 218, 219, 220—Opposed

This group of proposals seeks to reduce Personal Use fishing opportunity in several ways. Two (211 and 212) would tie PU fishing to meeting or exceeding in-river goals. One (213) would link management actions in the PU fishery to commercial fishing restrictions. Three (217, 218, 219) seek to reduce allowable limits in the PU fishery. Proposal 220 seeks to make PU gear less efficient.

Comments: KRSA is opposed to this set of proposals which seek to reduce the harvest potential of the Personal Use fishery in favor of the commercial users. Any type of fishing opportunity is dependant on management system that seeks to deliver a predetermined number of fish to spawning grounds. Tying the PU fishery to specific action in the commercial fishery is not the same thing. Actions taken in the commercial fishery are intended to affect a fishery that is both temporally and spatially separate from the in-river PU fishery. This is a similar argument of tying management actions in the sport and commercial fishery. In both cases there is no discernable benefit to trying to manage them in a linked manner.

Reductions in the harvest potential through bag limit adjustments are unnecessary. Currently the seasonal limit is 25 fish per head of household and 10 additional salmon for each dependant. One must remember that only Alaskan residents qualify for Personal Use fishing privileges. This annual limit appears to be entirely reasonable. An overlooked attribute of the PU fishery is its utility in helping to manage spawning escapement numbers when an over abundance of salmon are in-river. Limiting the harvest potential in the manner suggested diminishes the utility of the PU fishery as a management tool.

Proposal 220 seeks to reduce mesh size allowed in the Personal Use dip net fishery. There appears to be no conservation issues related to this recommendation as PU fishermen must cease fishing once the bag limit is filled.

Proposals 214, 215, 216—Support

These proposals seek to add Personal Using fishing opportunity when salmon abundance warrants.

Comments: KRSA fully supports this approach to using the Personal Use Fishery as a tool to harvest surplus sockeye salmon. Both of these proposals provide for more liberal use of the harvesting power of the PU fishery. We favor proposal 215 as it is specific as to what level of PU harvest is appropriate.

Proposals 221, and 222—Support

These two proposals seek to implement motor type restrictions for dip netting from a vessel.

Comments: Kenai River Sportfishing Association has been an active participant in the call for more environmentally sound regulations concerning the phase out of two-cycle outboard motors and replacing them with either four-stroke or DFI two-stroke motors.

DNR has proposed regulation changes in Title 11 of the Alaska Administrative Code that would require that, starting in 2008, all power boats operating in the KRSMA during July would be limited to either four-stroke or DFI two-stroke motors. Starting January 1, 2010 all power boats operating in the KRSMA must have either four-stroke or DFI two-stroke motors year round.

We fully support the application of this technology to the Personal Use Fishery in an effort to address environmental issues. We believe the regulations in the lower river Personal Use Fishery need to be consistent with those within the KRSMA and the remainder of the river.

Proposal 223—Opposed

This proposal would eliminate Personal Use fishing from all but anchored boats.

Comments: This proposal is ill-conceived and unworkable. The issues addressing pollution from two-cycle engines are better addressed by proposal 221. The other concerns addressed in this proposal are simply intended to thwart the opportunity to participate in this fishery.

Proposal 224—Neutral

This proposal seeks to allow rod and reel as a legal personal use methods and means.

Comments: While the proposal seeks to align rod and reel as a gear type associated with some “consumptive” users, we find that rod and reel fishing applies to a broad spectrum of users. The sportfishing regulations generally afford ample opportunity for persons who wish to harvest fish for the table. The addition of Personal Use regulations allows residents a more efficient opportunity to accomplish the same task. We believe the needs are being served under current regulations.

KENAI RIVER RESIDENT SPECIES

Proposals 236 and 237—Support

These two proposals seek to increase rainbow trout bag limits for Kenai River drainage lakes and ponds.

Comments: The proposed increase in rainbow trout harvest from two to five in lakes and ponds identified within this proposal appears to be sustainable. Standard regulations are helpful but not essential in the management of fisheries. It is a balance between lost opportunity and bureaucratic consistency.

Proposals 238 and 240—Support

These two proposals seek to add some additional protection for rainbow trout during the spawning season closure.

Comments: Proposal 238 addresses the area from the outlet of Skilak Lake to the Upper Killey River and would include Dolly Varden in an effort to close a loophole that allows fishing for Dolly Varden between outlet of Skilak Lake down to the Upper Killey River section of the Kenai River from May 1 - June 11 when actually targeting rainbow trout.

Proposal 239—Support

Move the beginning date of the spawning season closure from May 1 back to May 15. The ending date can remain the same (June 11).

Comments: Rainbow trout spawning closures are overly restrictive and result in unnecessary loss of sportfishing opportunity. Above and below Skilak Lake, 75% to 80% of rainbow trout spawn from 15 May and June 11. Current regulations prohibit fishing for all species in the closed waters of Upper Kenai River from May 1 to June 11. This results in a net loss of two weeks of sustainable fishing opportunity.

Proposals 241 and 242—Opposed

These proposals would prohibit the handling of rainbow trout (and Dolly Varden) in the spring fisheries.

Comments: This is a well intentioned proposal, however, the biological benefit from this restriction will be of no measurable value. There have been extensive studies where professional staff has handled thousands of rainbow trout in spawning and pre-spawning condition. There has been little evidence that handling had a detectable affect on the population. There is a measure of “feel good” associated with this action, but the harsh reality will be that citations will be written, fines paid, and no measurable benefit for the resource will accrue.

Proposals 243, 244, 245—Opposed

This group of proposals seeks to limit terminal gear in a portion of the Kenai River to barbless hooks and suggest limits to hook size.

Comments: Anglers have long recognized the benefits of releasing fish when using barbless hooks. Intuitively it makes sense that a barbless hook will be “easier” on the fish and therefore increase survival of the hooking event. Extensive scientific studies focused on this question have been repeated for numerous fisheries and have all concluded there is little, if any, measurable benefit to release survival by requiring the use of barbless hooks. This is likely an area where education, rather than regulation is the appropriate path. To require the use of barbless hooks with result in a messy enforcement problem and ultimately citations will be written, and fines paid, all for a regulation that has no discernable biological value.

Proposal 246—Opposed

This proposal would disallow fishing from an anchored vessel in the swan sanctuary area from June 15 to December 31.

Comments: This proposal is overly restrictive and unnecessary.

Proposals 247 and 248—Support

These proposals seek to liberalize harvest opportunity for Dolly Varden.

Comments: We favor the regulations changes offered in proposal 248. This proposal would add Cooper Lake with a bag and possession limit of five, and one over 20". The recent studies by ADFG and ADNR indicate a significant harvestable surplus exists and that opportunity as allowed by this regulatory change would be sustainable.

Proposal 249—Support

This proposal would reduce bag and possession limits for lake trout in Hidden Lake from two to one.

Comments: This is a conservative measure put forward by the Department. Although the logic that harvests have exceeded sustained yield estimates for 25 of the last 29 years appears contradictory, we support a conservative approach to lake trout management. A bag limit of one still allows a measure of opportunity.

Proposals 250 and 251—Support

These two proposals will increase harvest opportunity for northern pike by increasing the number of lines allowed to be fished.

Comments: We support the Department efforts to take management action regarding this invasive species.

COMMITTEE E: Kenai/Kasilof Salmon Sport Fisheries

KASILOF RIVER SALMON SPORT FISHERIES

Proposal 225—Support

Increase days allowed to retain naturally-produced king salmon in the Kasilof River by allowing retention of naturally-produced king salmon on Tuesdays, Thursdays, and Saturdays only.

Comments: Thursdays have been added to the days allowed for retention of king salmon by EO for the last several years. This proposal will simply move to codified regulations the changes being made each year by the Department.

Proposal 226—Neutral

This proposal seeks to increase harvest opportunity for hatchery produced king salmon.

Comments: Additional harvest opportunity for hatchery king salmon is biologically sustainable. Sport fishermen's dollars have paid for these fish and additional harvest opportunity is consistent with similar circumstances (Ninilchik River) where this situation occurs. The possible down side to this is the potential for increased crowding as the bag limit in the Kasilof would be higher, and therefore more attractive to king salmon fishermen. There would be less cycling of anglers and therefore more crowding.

Proposal 227—Opposed

This proposal seeks to require that once a king salmon is retained, the angler is done fishing and must put their gear down.

Comments: The Department's management strategy is to maximize the harvest of hatchery fish. Challenges to that strategy are that sportfishing effort is on the decline. There is no biological reason to eliminate catch and release opportunity once a fish has been retained. This regulation approach is usually prescribed when efforts are being made to eliminate high grading of the catch/harvest and when it is necessary to spread the opportunity to catch a king salmon among a large number of people (Kenai River).

Proposal 228—Support

Specifically designate the Kasilof River mainstem between the Sterling Highway Bridge and Tustumena Lake as a king salmon spawning sanctuary from July 1 through August 31.

Comments: New data on Kasilof late-run king salmon has identified a significant population which spawns in the mainstem below Tustumena Lake. Current regulations do not allow sportfishing for king salmon in current mainstem spawning areas upstream from the Sterling Highway Bridge after June 30, but do not specifically identify the significance of these areas to escapement and may not provide adequate protection in the face of any potential future fisheries. Adequate protection of spawners is particularly important in the Kasilof in the absence of designated escapement goals or effective annual in-season monitoring.

Proposals 229, 230, 231, 232—Opposed

This group of proposals would restrict or eliminate or expand (232) the use of powerboats on the Kasilof River.

Comments: There exists no biological reason to eliminate the use of powerboats on the Kasilof River. Concerns over illegal fishing in sanctuary areas or on spawning king salmon can be addressed with spawning season closures. The current situation seems to be a reasonable balance between user group preferences and in alignment with fishery management concerns. We do not support any change in these regulations.

Proposal 233—No Action

This proposal seeks to change the provision that makes this area a drift only for the purpose of landing fish.

Comments: The current regulation reads: from January 1 – June 30, a person may not sport fish from an anchored vessel from an ADF&G regulatory marker located near the confluence of Crooked Creek, downstream approximately 2,700 feet to an ADF&G regulatory marker located near the cutbank. The problem seems to be that FWP has written tickets to anglers who are only seeking to land a fish once it has been legally hooked and have made shore and dropped an anchor to allow them to play and land the fish. Some clarification for the benefit of the FWP personnel would go a long way toward addressing this issue. This is only a ¼ mile section of river where this is an issue. If the Board chooses to address this issue, we recommend they amend this proposal to allow anchoring while landing a fish, limited to the north shore opposite the People's Hole and that actively fishing (not fighting a fish) is prohibited.

Proposal 234—Support in Concept

This proposal seeks to increase the bag and possession limit for sockeye salmon in the Kaslof River.

Comments: KRSA favors increasing opportunity to harvest sockeye salmon when run strengths warrant. We would prefer the Department exercise EO authority to increase bag and possession limits for sockeye salmon at such times when the in-river abundance exceeds the BEG in numbers large enough that the increase in sport harvest does not affect attaining the appropriate number (BEG) of spawners.

Proposals 270 and 271—Opposed

These proposals seek to extend the sport season for king salmon on the Kenai River.

Comments: Under the current regulations, king salmon in the Kenai River may be taken only from January 1 – July 31, from the mouth of the Kenai River upstream to the outlet of Skilak Lake and in the Moose River from its confluence with the Kenai River upstream to the northernmost edge of the Sterling Highway Bridge. Both of these proposals seek to extend the sportfishery for another 7 to 10 days. While we favor the maximizing of sportfishing opportunity in most cases, the current closure period has been in place for a number of years and seems to be working. If king salmon abundance warrants the expansion of sport harvest capability, the Department can do so with adjustment to bag limits and methods, and with an EO extension to season.

Proposal 272—Opposed

This proposal seeks to increase the escapement goal for Kenai River king salmon to 35,000 minimum.

Comments: Kenai River king salmon are currently managed for a biological escapement (spawners) goal range of 17,800 to 35,000. Department staff is charged under the direction of the Sustainable Salmon Policy with the responsibility of developing BEGs. We believe the Department has done a credible job of estimating a sustainable BEG for king salmon in the Kenai River and see no compelling reason to change it.

Proposals 273 and 274—Opposed

Both of these proposals seek to amend the Late-run Kenai River King Salmon Plan by removing sections of the plan that address important allocative direction and significant conservation controls.

Comments: We oppose both of these suggested actions as they are intended to remove the expressed sport fish priority granted to Kenai River king salmon and would remove protective measures important for conservation. Proposal 273 would amend the plan and remove the SF priority and thereby open the door to increased CF harvest of Kenai River king salmon. Furthermore, the additional deleted sections proposed here remove the direction to the Department for the conduct of riparian habitat assessments. Proposal 274 focuses on language that provides special protection for Kenai River king salmon stocks when king salmon abundance is low. The section referenced is the Kenai River Sanctuary area that is intended to provide a zone of safe travel for king salmon destined for the Kenai River. Removal of this provision, particularly when king stocks are in low abundance is counter to sound conservation. This thinking smacks of the age-old notion of single species (sockeye) management that was prevalent in Cook Inlet for so many years.

CHICKALOON RIVER SALMON SPORT FISHERIES

Proposal 235—Neutral

This proposal seeks to open the Chickaloon River to king salmon fishing from May 1 thru July. No more than one king 20 inches or longer may be retained per year.

Comments: There is not a lot of information available concerning Chickaloon king salmon. What exists would indicate that only a fishery of the most conservative nature should be considered. Spawning stock size is not known. Access is problematic which limits the number of potential anglers. If this fishery were configured in a conservative manner for the limited number of participants, it is likely workable.

RUSSIAN RIVER SPORT FISHERIES

Proposal 253—Opposed

This proposal seeks to close a portion of the Russian River in proximity to the ferry crossing cable (100 yards above and 25 yards below).

Comments: There is no statement of purpose.

Proposal 254—Support

This proposal seeks to expand the area designated for fishing by youth.

Comments: The youth designated fishing area on the Kenai River near Cooper Landing (near the ferry) is “reserved for children 12 and under when present” i.e. if no kids are present—anyone can fish in this area. We support the expansion of this area to accommodate more youth fishing opportunity.

KENAI RIVER KING SALMON SPORT FISHERIES

There are 23 proposals addressing Kenai River king salmon sport fisheries. Four seek to increase the jack king limit, four more call for amending the slot limit, three place additional limits on non-resident anglers.

Proposals 255, 256, 257, and 25—Support

These groups of proposals all seek to increase the allowable harvest of jack king salmon. We favor adoption of proposal 255 which would amend the regulation such that the allowable limits for king salmon in the Kenai River are 10 fish less than 20 inches in length, one fish per day between 20 and 28 inches in length, one per day greater than 28 inches in length. If a fish greater than 28 inches in length are included in the annual limit.

Comments: The smaller age-4 king salmon in the return are frequently released by anglers and are not harvest in proportion to their abundance. As a result, numbers of these small fish are increasing over time. However, these smaller kings are almost entirely males which do not significantly contribute to the reproduction potential of the population. Fishery selection which shifts the age composition toward these small fish will not reduce production, yield, and numbers of large kings over the long term.

Proposal 259 and 26—Opposed

These proposals seek to increase the harvest opportunity on straying hatchery produced king salmon.

Comments: Non-event since there are so few of them to begin with.

Proposals 261, 262—Support

These proposals seek to repeal the slot limit for early-run king salmon on the Kenai River.

Comments: We favor removal of this regulation due to the unintended and detrimental biological and fishery consequences observed since adoption. The biological problems outweigh the intended biological benefits and sportfishery opportunity has been unnecessarily limited by this regulation. The slot limit has actually exacerbated the problem it was intended to fix. The regulation was intended to address angler selectivity for big fish. A growing body of scientific evidence has highlighted the risks of fishery selectivity to the long term diversity and productivity of salmon. That is why fishery managers strive to evenly distribute harvest evenly among all age and size groups. The unanticipated problem is that the harvest is now concentrated on fish just under the slot size which includes large numbers of females. At the same time, the smaller kings, which anglers are typically much less likely to keep, continue to be significantly underharvested in proportion to their numbers. The slot limit has thus replaced a small level of fishery selectivity on large fish with a much bigger selectivity problem on average size fish. This regulation has also unnecessarily reduced harvest opportunity due to regular escapements in excess of the biological escapement goals. Even with the earlier openings of the fishery to bait, escapement goals have frequently been exceeded in recent years. The escapement is increasingly made up of the smaller age-4 fish (typically males) that, while biologically important, are not critical to future production. Finally, reduced harvest opportunity (due to the slot limit) in the May and June early-run fishery has resulted in the transference of effort into the July fishery for the late-run with all the related crowding, use, and hydrocarbon issues.

Proposal 263 and 264—Opposed

These proposals seek to extend the slot limit on early-run kings.

Comments: The proposal unnecessarily eliminates fishing opportunity and would provide little or no benefit to the early run. Historical telemetry data collected by the Department indicates that virtually all of the early-run kings have either entered the spawning tributaries or are concentrated near tributaries by the time significant numbers of late-run kings arrive above the bridge. Extending the tributary mouth sanctuaries closures would be a better mechanism to afford protection (proposal 269). The unanticipated and undesirable biological and fishery effects of the slot limit are discussed under the proposals to eliminate the regulation. This proposed action is flawed in its conception and ill advised. The sampling data simply do not support the suppositions presented in the justifications found in the proposals. There is only one action necessary regarding the early-run slot limit, and that is to repeal them.

Proposal 265—Opposed

This proposal would put restrictions on how king salmon may be processed on the Kenai River.

Comments: House keeping proposal EO. We are opposed to this regulation as it is excessively burdensome to anglers. The notion that this effort must be made to evaluate the effect of the slot limit begs the question as to how, in the absence of this requirement in the past, the Department determined a problem existed in the first place. The slot limit is an ill-conceived approach to a poorly defined problem. Rather than entrench more regulations around this management approach, we should simply repeal it.

Proposal 266—Support

This proposal would restrict the use of bait in the early-run king salmon fishery on the Kenai River.

Comments: We support this conservation-based proposal as it is consistent with current regulations that afford protection for spawning rainbow trout found at Killey and Willies Creek.

Proposal 267—Support

These two proposals address the use of bait in the Kenai River. Proposal 266 would restrict the use of bait for early-run kings while 267 would provide added opportunity to use bait.

Comments: We support the expansion of the use of bait in the early-run fishery. The number of harvestable king salmon in the early run has continued to climb as the Department has reevaluated escapement goals. The use of bait results in a greater opportunity to harvest fish and is consistent with a greater availability of harvestable surplus.

Proposals 268 and 269—Support

These two proposals would extend spawning season protection for king salmon in the sanctuary through July 31. In the case of proposal 269, the sanctuary associated with the Killey River would be expanded as well.

Comments: We support the passage of proposal 269 as it is more expansive in its protection afforded to spawning king salmon. We believe current seasonal closures to king salmon fishing in the lower Kenai River at the mouths of Slikok Creek, Funny River, and lower Killey River are not adequate to protect early-run spawners staging at the mouths of these creeks. King telemetry data indicates that significant numbers of early-run fish are staging near tributary mouths outside current seasonal closure areas and closure periods. Some anglers are concentrating on staging ripe and spawning fish in these areas, catching and releasing significant numbers, and sorting for large fish. Areas of particular concern include the upper Killey River mouth where channel changes have altered fish entry patterns and the College Hole downstream from Slikok Creek. Benefits of sanctuary closures prior to July 14 are eroded by harvest of fish in staging areas outside of existing sanctuaries and in tributary mouth areas after they open in July.

Proposals 270 and 271—Opposed

These proposals seek to extend sportfishing season for late-run king salmon on the Kenai River.

Comments: We favor the extension of sportfishing opportunity when biologically warranted; however, we do not support the extension of the sport season as proposed here. We believe that the use of more liberal inseason regulations by EO allows the Department to respond to surplus on a year-by-year basis. Such liberalization may include increased bag limits and more liberal use of bait.

Proposals 272—Opposed

This proposal seeks to increase the escapement goal for late-run Kenai River king salmon.

Comments: The current BEG is expressed as a range of 17,800 – 35,700. This proposal would set the minimum number at 35,000. While this may be attractive to in-river users it is not supported by the best science and escapement goal evaluations. Additionally, establishment of BEGs are the preview of the Department.

Proposal 273—Opposed

This proposal seeks to delete important allocative language from the Kenai River Late-run King Salmon Management Plan.

Comments: This is yet another proposal to push fishery management back to a period that emphasized management of commercial sockeye salmon over any other species and any other users. This is an over simplification of the issues regarding fisheries allocation and management of a public resource where the non-commercial fishing public outnumber the commercial interests over 100 to 1. The elements suggested for removal by this proposal speak directly to the non-commercial priority granted king salmon, the sustainable spawning

escapements, the linkage between in-river closures and commercial management actions, and the call for monitoring of important habitat concerns. This is old-time logic being applied to modern fisheries management. There are no changes required within this plan.

Proposal 274—Opposed

This proposal seeks to amend the Late-run Kenai River King Salmon Plan by removing sections of the plan that address important allocative direction and significant conservation controls.

Comments: Proposal 274 focuses on language that provides special protection for Kenai River king salmon stocks when king salmon abundance is low. The section referenced is the Kenai River Sanctuary area that is intended to provide a zone of safe travel for king salmon destined for the Kenai River. Removal of this provision, particularly when king stocks are in low abundance, is counter to sound conservation as it will result in increased king salmon harvest and in not achieving the BEG for Kenai River king salmon. This thinking smacks of the age-old notion of single species (sockeye) management that was prevalent in Cook Inlet for so many years.

Proposals 275, 276, and 277—Opposed

These proposals all seek to place limitations on non-resident participation by limiting permits, establishing annual limits, or restricting export poundage.

Comments: Modern fisheries management allows for adjustments to the time and area, methods and means and seasons and bag limits. In the current system resident and non-resident anglers have a predictable measure of opportunity and no changes are necessary. The notion of poundage limitations as proposed in 277 have been rejected as unworkable by the Board numerous times. Establishing a permit system is an unwieldy mechanism that is very expensive and confusing to manage and operate with little measurable benefit. Differential annual limits are unnecessary as there are other effective ways to distribute harvest among users.

KENAI RIVER SOCKEYE AND COHO SALMON SPORT FISHERIES

Proposals 278—Opposed

This proposal would allow the retention of sockeye salmon hooked other than in the mouth (snagged).

Comments: This proposal is consistent with increasing the harvest potential in the Kenai River by sport anglers. As a matter of maintaining an orderly fishery we have opposed the use of snagging regulations as a means to increase harvest. We favor increased bag and possession limits as a response to additional surplus salmon.

Proposals 279, 280, 281—Support

These groups of proposals seek to increase the bag limit for coho salmon from two to three.

Comments: We support this very modest change in bag limit and find it consistent with removal of the stock of concern status at the 2005 Board meeting. This action affords sport anglers a modest increase in opportunity consistent with the stated priority for sportfishing. The coho fishery is somewhat self-regulating since the probability of catching a third coho increases when there is an abundance of fish available. Likewise, at weaker returns, the three fish limit is not a factor in controlling harvest as most anglers are not landing sufficient numbers to attain a full bag limit. Should the return appear weak, bag limits can be reduced by EO. We believe this increase is overdue as it is consistent with the sport priority for this species and should not be used as justification for extended commercial fishing time resulting in increased commercial exploitation of coho salmon.

Proposals 282—Support

This proposal would extend the sportfishing season for coho salmon on the lower Kenai River and Skilak Lake through Nov 30.

Comments: Currently the season for coho salmon fishing closes October 31. Given the changing climate and the extended seasonal opportunity that it presents, it seems appropriate to allow additional fishing time during the month of November. This extension would benefit local anglers who are positioned to take advantage of the occasional favorable day to enjoy some late season angling for coho salmon. Increased harvest from this extension is considered to be minimal.

Proposals 92—Opposed

This proposal seeks to repeal the Kenai River Coho Salmon Management Plan.

Comments: The premise that the only aspect of the Kenai River Coho Salmon Management Plan is depressed stock status is false. There is a great deal of valuable management direction contained within the plan that addresses both conservation and allocation. To delete the plan entirely is irresponsible and harkens back to the day where we managed single species for one primary user group. Those days are long gone.

COMMITTEE F: Kenai Sport Vessel Restrictions/Kenai-Kasilof Guides

KENAI RIVER VESSEL RESTRICTIONS

Proposals 283, 284, 285, 286 287, 288, 289, 290—Opposed

These proposals seek to increase the number of drift-only days on the Kenai River.

Comments: There are a number of issues at play with the proposed increase in drift-only days for the Kenai River. The pollution of the river by the use of two-stroke engines during July, erosion, crowding and noise are all generally mentioned. Unfortunately there is not a simple solution. There is a lack of sufficient infrastructure to handle the drift-only opportunity expansion. Boat ramps and pull outs are used at max capacity now and the requirement for drift-only days will substantially increase that demand. Drift-only days can exacerbate the pollution levels by jamming folks together.

Proposals 291, 292, 293, 294, 295, and 296—Support in Concept

These proposals all seek to address the pollution that is resulting from hydrocarbon discharge from gasoline engines being operated on the Kenai River.

Comments: KRSA has been an active participant in the call for more environmentally sound regulations concerning the phase out of two-cycle outboard motors and replacing them with either four-stroke or DFI two-stroke motors. DNR has proposed regulation changes in Title 11 of the Alaska Administrative Code that would require that starting in 2008; all power boats operating in the KRSMA during July would be limited to either four-stroke or DFI two-stroke motors. Starting January 1, 2010 all power boats operating in the KRSMA must have either four-stroke or DFI two-stroke motors year round. We support the proposed DNR regulations and believe regulations in the lower river Personal Use Fishery need to be consistent with those within the KRSMA and the remainder of the river.

Proposal 297—Opposed

This proposal seeks to close the lower Kenai River to fishing from boats for a 48-hour period in an effort to deliver king salmon further up river.

Comments: The proposed action called for in this proposal is counter to sound management. It is a preferred strategy to allow harvest proportional to abundance on stocks of king salmon in "pass through" fisheries as they exist in the lower portions of the river. It is understandable that folks who fish upriver would prefer this action; however, they need only drop down river and participate.

Proposal 298—Opposed

This proposal places restrictions on non-resident fishing opportunity and ties it to degree of kindred.

Comments: This proposal is unworkable and will cause a massive enforcement problem to effectively regulate.

Proposal 299—Opposed

This proposal extends the area open to king salmon fishing from boats below the Soldotna Bridge.

Comments: This proposal is to diminish the spawning season closure in the College Hole, and is unnecessary and counter to sound conservation.

Proposal 300—Neutral

This proposal would require a safety course be completed before you can operate a boat on the Kenai River.

Comments: The extension of this requirement to the general fishing public is unprecedented and will only result in increased over-regulation. Beyond the scope of the Board of Fisheries authority and requires legislative action.

Proposal 301—Opposed

Create a drift only fishery in the Upper Kenai River.

Comments: This proposal unnecessarily limits sportfishing opportunity. We support changes proposed by DNR to address pollution by outboard motors in the Kenai River, however, we do not support the elimination of one user over another as is proposed here.

GUIDES—KENAI AND KASILOF RIVERS

Proposal 302—No Action

Limited entry for guides.

Comments: There is a limited entry task force working on this issue and a report will be given to the Board. This request is beyond the Board's authority.

Proposal 303,304, 305, 306, 307, 308, 309, 310, 311—Opposed

Change and/or reduce hours that guides may offer services.

Comments: This group of proposals all unfairly target guided anglers by placing additional limitations on their activities simply because they have chosen to employ the services of a guide. Every issue raised in this group of proposals is not isolated simply to guide fishermen and can be applied to non-guided as well. If the issues are sufficiently grounded then all sport users should share in the burden of additional restrictions. The fishery is managed on the biological well being of the resource and ample opportunity is being afforded to participate. These types of regulations have been tried unsuccessfully in other states and have eventually been abandoned. There is no need for the types of changes proposed here.

Proposal 312—Opposed

Restrict guides from fishing during non-guide hours on the Kenai River.

Comments: This proposal seeks to address the perception that there are increasing violations of the non-guide hours. We do not support regulations that deal in perception. There are laws already on the books to address this issue. They must simply be enforced. Continually enacting new regulations to address the unsubstantiated claims that fuel the perception is poor public policy and results in greater inroads into sportfishing opportunity.

Proposal 313, 314, 315, 316—Opposed

This group of proposals would limit the number of parties a guide may take out each day.

Comments: This set of proposals unfairly targets anglers who choose to use the services of a guide. Passage of this type of proposal would be short-sighted, as the logical response to limiting the number of trips a guide can make is an increase in the number of guides operating to service the demand left when the trip slate has been filled. These types of restrictions favor those who have the gear and knowledge over those who don't, yet they all equally share in access to public resources.

Proposal 317, 318, 319—Opposed

Limit guides to either Kenai or Kasilof Rivers.

Comments: There exit very significant enforcement issues associated with this group of proposals. There is no conservation rational for this action and therefore they would unnecessarily reduce sportfishing opportunity. It is questionable if this action is legal and within the Boards authority.

Proposal 320—Opposed

Restrict Kasilof River guides from fishing on Mondays.

Comments: There is no biological rational for restricting sportfishing opportunity on the Kasilof River. This approach unfairly targets guided anglers who have chosen to use the service of a guide. If crowding is an issue then a way to restrict all users is the only fair means to address the issue. Otherwise the common property fishery resources should be made available to all.

Proposal 321, 322, 323, 326, 327—Neutral

Relax regulations limiting guided fishing opportunity.

Comments: We do not support the targeting of guided fishermen for overly restrictive regulation. We do recognize that some of these regulations have been in effect for a number of years and seem to be working. We would suggest a cautious approach that leads to a linearization of guided fishing opportunity if it is biologically sustainable. We recommend wholesale changes in the balance between guided and non-guided. Status quo applies.

Proposal 324—Opposed

This proposal would increase the number of clients allowed in guide boats from five to six.

Comments: KRSA supported the change to 50 hp motors on the Kenai on the basis of habitat and environmental considerations. We are pleased with the changes and believe them to be a positive application of the best science available. We do not however support the increase in capacity within a guide boat because of the impacts that additional weight in the boat can have on boat wakes/erosion. It would be counter to the environmental gains resulting from the increase in horsepower.

Proposal 325—Opposed

Comments: No need to limit opportunity for unguided anglers.

Proposal 328—Support with amendment

This proposal clarifies current regulations prohibiting fishing by guides when clients are present on the Kenai River.

Comments: Currently restrictions that prohibit guides from fishing while attending to clients are found in DNR rule and ADFG codified. This is an effort to bring all the **current** restrictions under ADFG codified and extend their applicability to below the Warren Ames Bridge. Staff indicates that no functional changes are intended with this change. However, the way the proposal is worded it would affect bank anglers as well as anglers fishing from a vessel. This error can be corrected by adding the wording that specifies "While fishing from a vessel"... In that case we support the Department's efforts to clean these regulations up.

Proposal 329—Support

Align vessel registration regulations with DNR requirements that allow for un-registered guide vessels.

Comments: The intent of this proposal is to allow guides use their deregistered vessels to fish with their family, friends, and relatives after the peak of the guiding season concludes and the guides are no longer commercially operating.

COMMITTEE G: Northern Cook Inlet Sport Salmon Fisheries

SUSITNA RIVER SALMON:

Proposals 330, 331, 332, 333, 33—Support Dept. Proposal

This group of proposals seeks to reduce sportfishing opportunity for king salmon on Alexander Creek.

Comments: The Department reports that king salmon sport harvest in Alexander Creek is not sustainable. Aerial surveys of spawning king salmon have been conducted in Alexander Creek since 1978. During 2006, the escapement of king salmon into Alexander Creek was the lowest on record with only 885 spawning fish being observed, well outside the desired range of 2,100 and 6,000 spawning fish. Due to low escapements of king salmon to NCI waters the BOF took action to reduce the sport harvest of king salmon for all NCI streams in the early 1990s. Given the poor escapements to this system in recent years, it is warranted to implement further restrictive regulations that will reduce the sport harvest on this system.

