

UNALASKA/DUTCH HARBOR FISH AND GAME ADVISORY COMMITTEE

P.O. BOX 162 UNALASKA, AK 99685

Alaska Board of Fisheries Work Session Meeting

October 4-5, 2011 Anchorage, AK

Agenda Change Requests

Unalaska/Dutch Harbor AC Comments from their

September 17<sup>th</sup> 2011 meeting on ACR's1-10

The Unalaska/Dutch Harbor AC made only one comment on the current list of ACR's 1-10

ACR # 9 Increase total allowable catch in the Aleutian Island Golden King Crab Fishery due to the lack of a new stock assessment.

Motion was made by Don Goodfellow seconded by Zac Nehus to amend ACR#9 with the following statement. The Unalaska /Dutch Harbor AC encourages ADFG to complete the stock assessment model as soon as possible before further increases in the Aleutian Island Golden King Crab Fishery TAC,s are adopted. Motion passed 7-0



9-23-11

Frank Kelty, Unalaska /Dutch Harbor    Date

AC Chairman



# ALASKA DEPARTMENT OF FISH AND GAME

## *DIVISION OF SPORT FISH*

### MEMORANDUM

**TO:** Jack Erickson  
Fisheries Biologist  
Division of Sport Fish  
Anchorage

**DATE:** 9/27/2011

**FROM:** Tim McKinley  
Fisheries Biologist  
Division of Sport Fish  
Soldotna

**TELEPHONE:** 260-2913

**SUBJECT:** 2010 and 2011 late run Kenai  
River Chinook salmon run  
strength and escapement

Steve Fleischman  
Fisheries Scientist  
Division of Sport Fish  
Anchorage

This memo summarizes the department's current knowledge regarding the inriver run strength of late run Kenai River Chinook salmon in 2010 and 2011. It also provides 2010 and 2011 escapement estimates, properly converted to the currency of target strength based (TS-based) sonar estimates, for comparison with the sustainable escapement goal (SEG; 17,800 - 35,700).

#### ***Background***

The current escapement goal is based on TS-based sonar and mark-recapture estimates initiated in the late 1980s. The original goal, developed in 1989, set a minimum escapement of 15,500 and an optimum of 22,300 (McBride et al. 1989). The goal was revised to a range of 17,800 to 35,700 in 1999 (Fried 1999) by multiplying the optimum goal of 22,300 by 0.8 and 1.6 as recommended in Eggers (1993) for development of escapement goal ranges for Pacific salmon. The escapement goal range of 17,800 to 35,700 was recently corroborated with a stock-recruit analysis using data through 2006 (McKinley and Fleischman 2010).

With few exceptions, achievement of the goal has been evaluated using TS-based sonar to estimate inriver run size, then subtracting sport fishing mortality upstream of the sonar site to estimate escapement. In the 1990s, experiments indicated TS was a poor predictor of fish size and thus a poor discriminator of sockeye from Chinook salmon (Burwen and Fleischman 1998), resulting in estimates of

Chinook salmon abundance that were biased high (Hammarstrom and Hasbrouck 1998, 1999). Results of these studies led the department to begin developing alternative indices of abundance (discussed below) for assessing inriver run strength and making inseason management decisions (Eskelin and Miller 2010). During the 2010 field season, DIDSON imaging sonar was deployed on a limited basis, and the department committed to developing a new assessment system based on DIDSON estimates of inriver passage.

In 2011 the department revised the escapement goal from a biological escapement goal (BEG) to a sustainable escapement goal (SEG) because of the uncertainty in the estimates of escapement and lack of stock-specific information in the commercial harvest. In addition, the department informed the public it would discontinue use of TS-based estimates of inriver run in favor of five abundance indices (described below), and would also continue development of the new DIDSON-based assessment.

### ***Run strength***

The 2010 and 2011 late runs of Kenai River Chinook salmon were below average based on the following five inseason indices: echo length standard deviation based (ELSD-based) split beam sonar estimates, net-apportioned split-beam sonar estimates, catch per unit effort (CPUE) of gillnets drifted at the sonar site, CPUE of sport anglers interviewed in the lower river creel survey, and the harvest of Chinook salmon in the eastside set-net fishery (ESSN). See Eskelin and Miller (2010) for descriptions of these indices. All indices point to a general decline in run strength since 2003 or 2004 (Figure 1). Scatter plots of the indices (Figure 2) show positive linear relationships among all pairs of variables. This is consistent with the assumption that each is a consistent and corroborative measure of relative Chinook salmon abundance. All five indices were below average in 2010 and 2011, and in many cases they were at or near historical lows (Figures 1 and 2).

### ***Escapement***

As mentioned above, the escapement has historically been estimated from TS-based inriver abundance estimates. Until recently, TS-based estimates of inriver run had a positive relationship with the other indices of abundance (Figure 2; top row of matrix), although the relationships are not as strong as the relationships among the other five indices. In 2010, the TS-based sonar estimate was very high (50,400), whereas the other indices were near historic lows (Figures 1 and 2). Because the TS-based estimate was abnormally high in 2010, and it was not produced at all in 2011, the inriver run size and the escapement could not be estimated in the usual way in either of these two years.

At the February 2011 Board of Fisheries meeting, the department stated that ELSD-based estimates, along with other indicators of abundance, would be used to estimate escapement and evaluate whether the SEG had been met. ELSD is a better predictor of fish size and ELSD-based estimates are regarded as being more reliable than TS-based estimates (Eskelin and Miller 2010). However, new technical problems with the ELSD-based estimates surfaced in 2010 and the problems persisted in 2011. Direct use of ELSD-based estimates to evaluate achievement of the SEG is no longer recommended.

Instead, we have developed an estimator that combines information from all five indices, properly converted to the currency of the TS-based estimates, with which to evaluate achievement of the current escapement goal. We simultaneously considered the positive relationships between TS-based estimates

and the other five indices (top row of Figure 2) in a statistical model<sup>1</sup>, which provided sufficient information to predict what the TS-based abundance estimate would have been in 2010 and 2011. The expected<sup>2</sup> TS-based estimates of Chinook salmon passing the sonar site are 33,600 in 2010 (95% credible interval CI 20,200-56,100) and 36,000 in 2011 (CI: 22,400-58,200). After subtracting estimates of harvest and mortality above the sonar (7,026 in 2010; 6,240 in 2011), the corresponding estimates of escapement are 26,600 in 2010 (CI: 13,100 - 49,100) and 29,800 in 2011 (CI: 16,100 - 51,900). Although the point estimates are within the escapement goal in both cases, considering the uncertainty in the predicted TS-based estimates, there is a probability of 12% (2010) and 4% (2011) that the TS-based estimate would have led to an escapement estimate less than the goal (17,800) in those years.

### ***2012 and Beyond***

The indices of abundance described above are largely in agreement and provide valuable information for inseason monitoring of run strength. We recommend that they continue to be monitored and used as they were in 2011.

Analysis of historical data and comparison with new DIDSON-based estimates is ongoing. The approach used above to predict the missing 2010 and 2011 TS-based estimates may also be used to produce historical estimates of abundance in the currency of DIDSON-based estimates. This will be valuable in two ways:

1. It will provide a context for the DIDSON estimates and allow them to be considered along with other indices when monitoring run strength during the season, beginning in 2012.
2. Reconstructing historical abundance is the first step toward developing a new escapement goal based on DIDSON numbers.

Cc: Robert Begich, Tom Vania, Jim Hasbrouck, Bob Clark

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<sup>1</sup> A state-space model considering process and observation error was fitted to the data using Bayesian statistical methods. Such methods allow for consideration of multiple sources of information, and a more complete assessment of uncertainty than most other methods.

<sup>2</sup> Means of the posterior probability distribution are reported here as a point estimates.

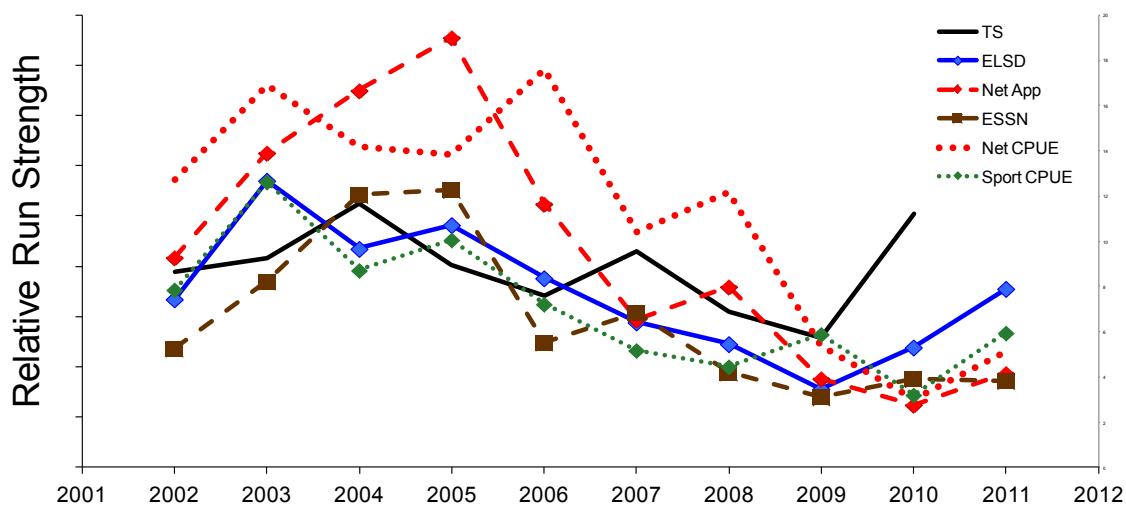


Figure 1.- Relative value of key Kenai River Chinook salmon abundance indices, late run 2002-2011. TS = TS-based split beam sonar estimates; ELSD = ELSD-based split beam sonar estimates; Net App = net apportioned split beam sonar estimates; Net CPUE = inriver netting catch rate index; Sport CPUE= lower river sport fishery catch rate index; ESSN = east side set net commercial fishery catch index. Absolute values not shown.

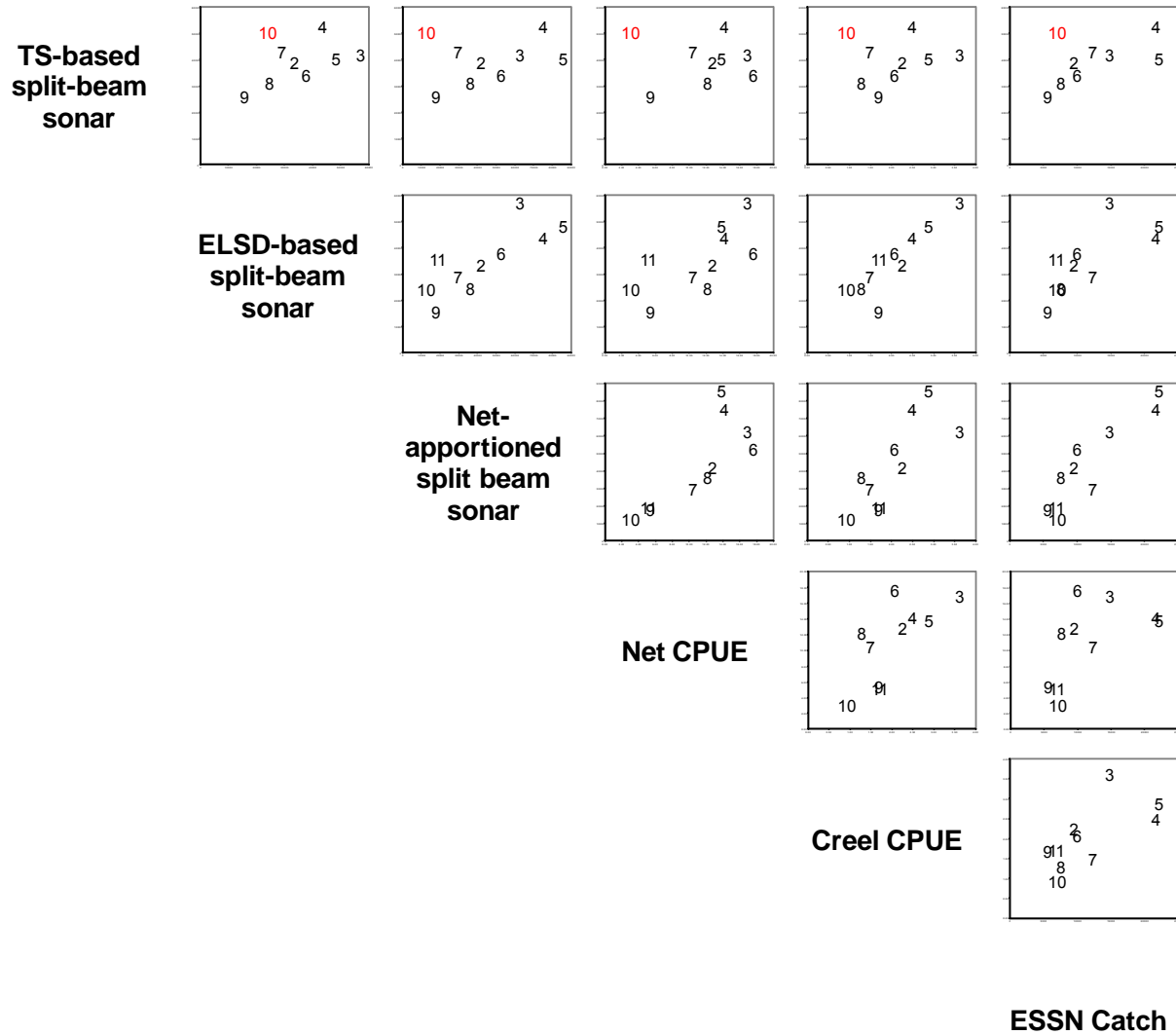


Figure 2.- XY scatter plots of late-run Kenai River Chinook salmon abundance indices 2002-2011. Data labels in plots refer to year.

## References

- Burwen, D. L. and S. J. Fleischman. 1998. Evaluation of side-aspect target strength and pulse width as hydroacoustic discriminators of fish species in rivers. *Can. J. Fish. Aquat. Sci.* 55: 2492-2502.
- Eggers, D. M. 1993. Robust harvest policies for Pacific salmon fisheries. Pages 85-106 in *Proceedings of the International Symposium on Management Strategies for Exploited Fish Populations*. Alaska Sea Grant Report No. 93-02, University of Alaska, Fairbanks, Alaska.
- Eskelin, T, and J. D. Miller. 2010. A qualitative evaluation of parameters used to assess Kenai River king salmon, 1986-2010. Alaska Department of Fish and Game, Special Publication No. 10-18, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/sp10-18.pdf>
- Fried, S.M. 1999. Upper Cook Inlet Pacific salmon biological escapement goal review – department findings and recommendations to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Regional Information Report No. 2A99-05, Anchorage.
- Hammarstrom, S. L., and J. J. Hasbrouck. 1998. Estimation of the abundance of late-run Chinook salmon in the Kenai River based on exploitation rate and harvest, 1996. Alaska Department of Fish and Game, Fishery Data Series No. 98-6, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds98-06.pdf>
- Hammarstrom, S. L., and J. J. Hasbrouck. 1999. Estimation of the abundance of late-run Chinook salmon in the Kenai River based on exploitation rate and harvest, 1997. Alaska Department of Fish and Game, Fishery Data Series No. 99-8, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds99-08.pdf>
- McBride, D. N., M. Alexandersdottir, S. Hammarstrom, and D. Vincent-Lang. 1989. Development and implementation of an escapement goal policy for the return of Chinook salmon to the Kenai River. Alaska Department of Fish and Game, Fishery Manuscript No. 8, Juneau. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fms-008.pdf>
- McKinley, T.R. and S. J. Fleischman. 2010. Stock assessment of late-run Chinook salmon in the Kenai River, 1999-2006. Alaska Department of Fish and Game, Fishery Data Series No. 10-96, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds10-96.pdf>

**[DRAFT] CALL FOR PROPOSALS**  
**Alaska Board of Fisheries**

**THE ALASKA BOARD OF FISHERIES CALLS FOR PROPOSED CHANGES  
IN THE SUBSISTENCE, COMMERCIAL, PERSONAL USE, SPORT, AND GUIDED  
SPORT FINFISH REGULATIONS FOR BRISTOL BAY; ARCTIC-YUKON-  
KUSKOKWIM, ALASKA PENINSULA/ALEUTIAN ISLANDS FINFISH AREAS;  
STATEWIDE FINFISH REGULATIONS; AND PACIFIC COD REGULATIONS FOR  
THE AREA OF: PRINCE WILLIAM SOUND, COOK INLET, KODIAK, CHIGNIK, AND  
SOUTH ALASKA PENINSULA.**

**PROPOSAL DEADLINE - 5:00 p.m., Tuesday, APRIL 10, 2012**

The Alaska Board of Fisheries is accepting proposed changes to the subsistence, commercial, personal use, sport, guided sport, and guided sport ecotourism finfish regulations for the Bristol Bay, Arctic-Yukon-Kuskokwim, and Alaska Peninsula/Aleutian Islands management areas. Finfish includes: salmon, herring, trout, groundfish, char, burbot, northern pike, whitefish, Pacific cod, sablefish, shark, pollock, etc., but does not include halibut.

The board is accepting proposed changes to the subsistence, commercial, personal use, sport, guided sport, and guided sport ecotourism finfish provisions regulations. Examples of "statewide finfish" regulations can be found in Title 5 of the Alaska Administrative Code and include, but are not limited to, policy for the management of sustainable salmon fisheries, policy for the management of mixed stock fisheries, policy for statewide salmon escapement goals, possession of sport-caught fish, fishing by proxy, etc.

The board is also accepting proposed changes to the pacific cod regulations for the Prince William Sound Area (Registration Area E), Cook Inlet Area (Registration Area H), Kodiak Area (Registration Area K), Chignik Area (Registration Area L), and South Alaska Peninsula Area (Registration Area M) for parallel and state-waters Pacific cod seasons to address coordination of the state-waters Pacific cod fisheries with Gulf of Alaska federal sector splits scheduled for implementation in January 2013. Fishing seasons including season opening, season closure, late season harvest opportunities and coordinating state-waters seasons with federal A and B seasons may be addressed, as well other issues necessary for coordination of the fisheries.

**PROPOSAL DEADLINE: 5:00 p.m. Tuesday, APRIL 10, 2012**

To insure that the proposed booklets are distributed well in advance of the board meetings and the fishing season, the board has set 5:00 p.m. Tuesday, April 10, 2012 as the proposal deadline.



**Proposals may be submitted by mail, fax, or online:**

**Mail:** ADF&G, Boards Support Section  
P.O. Box 115526  
Juneau, AK 99811-5526

**Fax:** (907) 465-6094

**Online:** <http://boardoffisheries.adfg.alaska.gov/>

**Proposals must be received by the 5:00 p.m. Tuesday, April 10, 2012 deadline at the Board Support Section office in Juneau. A postmark is NOT sufficient for timely receipt.** You are encouraged to submit proposals at the earliest possible date.

Please use the Board of Fisheries proposal form, available from any office of the Boards Support Section or on our website at <http://www.boards.adfg.state.ak.us/fishinfo/index.php>. Proposals must contain a contact telephone number and address. Please print or type the individual's name or organization's name as appropriate. A fax is acceptable and considered an original.

All proposals are reviewed by the board's proposal review committee prior to publication. Language that is emotionally charged detracts from the substance of the proposal. It may draw opposition that may not be germane to the element(s) of the proposal and may elicit nonresponsive charges from the public/board members. The proposal review committee reserves the right to edit proposals containing offensive language. Proposals published in the proposal book will be referenced with the appropriate Alaska Administrative Code citation and include a brief description of the action requested. Following publication, proposal booklets will be available to advisory committees and the public for review and comment.

Proposals received per the above "Call for Proposals" deadline will be considered by the Board of Fisheries during the October 2012 through March 2013 meeting schedule.

Proposals that are likely to have a substantial economic, social, or biological impact or require significant changes to the management of a salmon fishery may be determined by the board to be a "restructuring proposal". Restructuring proposals may strive to improve the value of a fishery by providing new and increased opportunities to: (1) raise the revenue generated from harvested fish (e.g. through improved quality); or (2) lower the cost of fishing operations; or (3) improve conservation. Such proposals may include (but are not limited to): consolidation of fishing effort or a shift in who harvests the fish, changes in harvest methods used, or allocations of quotas. Because the board will seek additional information on restructuring proposals, authors of proposals that are likely to be determined restructuring proposals are asked to submit a completed Restructuring Proposal Form along with the standard proposal form. The Restructuring Proposal Form is also available from any office of the Boards Support Section or on the website as listed above.

For more information, please contact the Alaska Board of Fisheries Executive Director at (907) 465-4110.

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RC 9

October 3, 2011

**VIA FACSIMILE 465-6094 and e mail monica.wellard@alaska.gov & vince.webster@alaska.gov & via fax to Coast International Inn (907) 248-3796**

Mr. Vince Webster, Chairman  
Alaska Board of Fisheries  
Alaska Department of Fish and Game  
P.O. Box 115526  
1255 W. 8th Street  
Juneau, AK 99811-5526

**RE: Agenda Change Request 3. Alaska Board of Fisheries, Work Session, October 4-5, 2011. Anchorage, Alaska  
Our File: 470.617**

Dear Chairman Webster:

We represent several Alaska commercial fishermen who own purse seine fishing vessels, and operate in Southeast Alaska.

These fishermen were recently very surprised to learn that the Alaska Board of Fisheries ("Board") is being asked to consider Agenda Change Request ("ACR") #3 (attached), drafted by and submitted to the Board by the Alaska by the Alaska Department of Public Safety ("DPS"). ACR #3 requests that the Board adopt a statewide definition of anchor rollers.

We respectfully write to ask the Board to reject ACR #3. ACR #3 violates the law establishing Board policies related to ACRs. Moreover, we ask that the

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Board condemn the form and substance of ACR #3. If not rejected outright, ACR #3 should be tabled to allow public review and comment. Finally, if the Board is remotely inclined to waste time to even consider ARC #3, we ask that the Board appoint a committee, or working group, on this matter to report back to the full Board at a time decided by the Board.

ACR #3 contains very misleading information, and significant factual misstatements. In submitting ACR #3, DPS gives rise to extreme concern by commercial fishermen who rely on DPS to fairly deal with the public and fishermen, and fairly interpret and enforce Alaska laws related to the management of our fisheries. Below we detail the misstatements, misleading information, and errors contained in ACR #3, and provide information forming the basis of our requests.

**I. ACR #3 DOES NOT COMPLY WITH 5 AAC 39.999.**

5 AAC 39.999(a)(1) sets forth the Board's policy for changing the Board's agenda. That regulation is specific on the guidelines that the Board must employ before it accepts an ACR, and provides that the Board will accept an agenda change request only for specific reasons including:

- (A) for a fishery conservation purpose or reason;
- (B) to correct an error in a regulation ... .

There is nothing to remotely suggest that ACR #3 has any fishery conservation purpose or reason. The Board violates 5 AAC 39.999(a)(1)(A) if it considers ACR #3 on that basis. There is no error in any regulation that would allow the Board to accept ACR #3 at this October Work Session. The Board violates 5 AAC 39.999(a)(1)(B) if it considers ACR #3 on that basis.

DPS seems to be attempting to mislead the Board and the public to believe there is an error that needs correcting. However, as discussed in more detail below, there is absolutely no error in any regulation that the Board needs to address through the ACR process.

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**II. IN SUBMITTING ACR #3, DPS HAS MISLED THE BOARD AND THE PUBLIC AND MAKES SERIOUS MISSTATEMENTS.**

Under the heading "State in Detail the Nature of the Problem", the DPS wrote in ACR #3 at page 4 (emphasis added):

During summer months of 2011, reports were received by the Alaska Department of Public Safety that commercial purse seine fishing vessels longer than the allowable overall length were being used to take salmon. The Alaska Legislature has limited the allowable length of purse seine vessels in Alaska to 58 feet in overall length (AS 16.05.835). ...

During the summer months of 2011, it was found that vessels of more than 58 feet in overall length had been modified by removing a section of the bow (in one case, several feet of vessel hull length), and then bolting the bow section back on.

DPS misleads the Board. If a seine vessel was "longer than the allowable overall length" operating in Alaska in 2011, then DPS should have cited the owner and taken them to court. Instead, DPS seems to be reacting to complaints by small number of fishermen about boats competing with them in seine fisheries. In response, DPS appears to be engaging in a political process with the Board and the public by asking the Board to deal with something that DPS mischaracterizes, which is not an issue properly before the Board.

DPS approaches the "anchor roller" matter as if it came at them out of the blue, as if DPS never knew there were purse seine vessels that had anchor rollers that were long, and as if vessels that DPS would like to get rid of, snuck into Alaska to break the law. Nothing could be further from the truth.

The owner of one of the vessels that DPS boarded this summer in Southeast Alaska was advised by two DPS Troopers that it could not fish because it was too long. If the vessel had done what the troopers directed, then those state employees

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and the state would have been sued for damages based on the negligent acts of those employee. The seine vessel DPS boarded had an American Bureau of Shipping Tonnage Certificate that specifically stated it was 57.5 feet in overall length. The vessel was inspected by the Coast Guard and documented as less than 58 feet.

DPS personnel apparently did not like the look of the seine boat because the seine boat's anchor roller extended off from the bow, and looked different from other seine vessels. However, it was in no way "longer than the allowable overall length" as stated by DPS to the Board in ACR #3.

If that seine vessel, and other seine vessels alluded to by DPS in ACR #3, were "longer than the allowable overall length", DPS should have done its job and cited the vessels owner/operator. The courts could then have sanctioned the owner if the owner was guilty of some wrongdoing.

Instead, DPS comes to the Board claiming illegal acts that do not exist, and seeks an administrative determination that seine vessels operating legally were "longer than the allowable overall length." Saying something does not make it so, and ACR #3 should be rejected on that basis too.

DPS goes on to write in ACR #3 at pages 4-5 (emphasis added):

The owner then considered this hull section to be an "anchor roller." This is clearly unlawful . . . .

This statement by DPS presents not only very misleading information, it is a significant misstatement. This causes extreme concern to commercial fishermen who rely on DPS to fairly apply and enforce Alaska laws related to the management of our fisheries.

If any action by a commercial seine vessel operator was "clearly unlawful", why is DPS going to the Board with ACR #3? If a commercial seine vessel operator was operating in a "clearly unlawful" manner, why didn't DPS take immediate steps to halt that "clearly unlawful" activity? If the purse seine vessel was configured in a "clearly unlawful" way, why isn't the state district attorney

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prosecuting the vessel's owner? If the anchor rollers on the purse seine vessels that DPS is concerned about are "clearly unlawful", why isn't DPS taking the issue before a judge to have the fisherman fined?

The Board should reject ACR #3. DPS is misleading the Board and public by even bringing ACR #3 before the Board, out of the Board's regular cycle. Moreover, the Board should rebuke DPS for asserting things in ACR #3 that are both misleading and that significantly misstate the law or the facts.

DPS goes on to write in ACR #3 at page 4-5 (emphasis added):

This ACR is primarily to correct an error (omission) in regulation by providing a definition for the term "anchor roller;"

There is no "error" in regulation. That is a misleading statement by DPS, made apparently to shoehorn its way into consideration by the Board under 5 AAC 39.999(a)(1)(B). Alaska law establishes the maximum length of salmon seine vessels. AS 16.05.835 (emphasis added) provides in relevant part as follows:

(a) Unless the Board of Fisheries has provided by regulation for the use of a longer vessel in a salmon seine fishery, a salmon seine vessel may not be longer than 58 feet overall length except vessels that have fished for salmon with seines in waters of the state before January 1, 1962, as 50-foot, official Coast Guard register length vessels.

....

(c) In this section, "overall length" means the straight line length between the extremities of the vessel excluding anchor rollers.

The Board has not adopted a regulation otherwise dealing with salmon purse seine vessel length. Again, however, DPS presents a disservice to the

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public and the Board by writing that ACR #3 is submitted to correct a non-existent "error."

DPS compounds and repeats its mischaracterization when it writes in ACR #3 at page 5 (emphasis added, boldface in original), in response to the Board asking DPS to "State in Detail how its Agenda Change Request Meets the Criteria Stated Below:"

**Correct an error in regulation: Adoption of this ACR corrects an error in regulation by supplying a statewide definition essential to efficient enforcement of the statute limiting the length of purse seine vessels fishing in Alaska.**

Again, DPS misstates the current situation by stating to the Board and the public that ACR #3 "corrects an error in regulation."

There is no fishery conservation purpose or reason for ACR #3. (ACR #3, page 5.) DPS has not provided any information that any of the purse seine vessels that it is targeting with ACR #3 harmed the resource in any way. Nor is there any information to support the notion that the vessels that DPS is targeting are thwarting the fishery conservation purposes considered by the Alaska Legislature when it limited purse seine vessels length to 58 feet. Moreover, there is no information at all that any of the vessels that DPS is going after by submitting ACR #3 are longer than 58 feet at all. The legal documentation that the vessels have, which DPS is targeting, indicate that they meet the legal requirements set forth by the Alaska legislature to operate in Alaska's fisheries.

DPS writes in ACR #3 at page 4-5 (boldface in original, emphasis added):

**STATE WHY YOUR AGENDA CHANGE REQUEST IS NOT PREDOMINANTLY ALLOCATIVE:** This ACR introduces no new allocative aspects to the legislative limitation of the maximum length of purse seine vessels. It simply supports efficient

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enforcement of this limitation in light of a new and unlawful interpretation, and clearly notifies the public what an "anchor roller" is.

The Board should demand that DPS produce a copy of the "new and unlawful interpretation" that DPS refers to in ACR #3. If DPS cannot produce it to the Board and the public, DPS must be strongly rebuked by the Board.

In the interests of time, and because ACR #3 has just been brought to our attention, we are limiting our comments to those above, without offering additional reasons why ACR #3 should not be taken out of the Board's regular cycle.

There is no problem to address as far as purse seine vessels are concerned. There are concerns about the methods that DPS has used, and the information that DPS has submitting to the Board and the public in ACR #3.

The misstatements and actions of DPS in submitting ACR #3 to the Board should be subject to review by the Board or the Board should refer ACR #3 to the Ombudsman's Office for investigation.

The Board should roundly reject ACR #3.

Very Truly Yours,

  
Bruce B. Weyhrauch

Enclosure (ACR #3)

C: Monica Wellard  
Kerri Tonkin via fax 465-2604

87077





# UCIDA Newsletter

Founded September 29, 1980

October 2011

## This Summers Salmon Catch

	Chinook	Pink	Chum	Coho	Sockeye	Total
Northern District	2,197	408	7,310	19,109	29,240	58,264
East Side Set Net	6,893	14,617	2,753	14,996	1,792,609	1,831,868
West Side Set Net	102	723	2,050	1,795	43,844	48,514
Kustatan	71	5	0	59	2,885	3,020
Kalgin	486	1,213	5,862	13,175	89,608	110,344
Drift Fleet	512	15,161	107,919	37,286	3,135,097	3,295,975
<b>Totals</b>	<b>10,261</b>	<b>32,127</b>	<b>125,894</b>	<b>86,420</b>	<b>5,093,283</b>	<b>5,347,985</b>
Corridor *	208	4,917	25,525	6,817	943,278	980,745
* Included in Drift Fleet Total						
Drift Fleet						
% of Harvest	5%	47%	86%	43%	61%	62%
Average per "D" Boat	1	36	254	86	7,377	7,520
Total Return to UCI	100,000	1 mil	1.4 mil	1.3 mil	8 mil	11.6 mil
Drift Fleet Total Harvest	0.5%	1.5%	7.7%	3.0%	39.0%	28.0%

This year certainly was a good year as compared to the last 10 years! However, as noted above, our total harvests are about 28% of the total salmon returns to Upper Cook Inlet. Even when escapements are accounted for, our overall harvests are about 50% of the harvestable surpluses.

### Expanded Corridor vs. Old Corridor, Board of Fish (BOF) Meeting, New Regulations, Emergency Petition, UCIDA Lawsuit, BOF/Commissioner ADF&G, Settlement and BOF Agenda Change Request

As you are probably aware, at the February/March BOF meeting, there were some questionable/ambiguous BOF actions concerning the old, narrow corridor and the new, expanded corridor. The scenarios went like this:

#### BOF Feb/Mar Meeting

1. July 9-15 - Two (2) regular fishing periods - In 2011: July 11 and 14
  - a. First regular period, July 11 - Remove drift fleet from Area 1 and Old Corridor to Expanded Corridor only

- b. Second regular period, July 14 – Area 1 and the Expanded Corridor. Change was Old, Narrow Corridor to New, Expanded Corridor
- c. Additional fishing time is allowed only in the Expanded Kenai and Kasilof Corridors.

2. July 16-31 – Four (4) regular fishing periods

- a. Runs below 2.3 million – One (1) period to be restricted to Expanded Corridor and Three (3) full, district wide openings
- b. Runs from 2.3 to 4.6 million – One (1) regular period per week (2 in total) will be restricted to Area 1 and either/both of the Kasilof and/or Kenai Expanded Corridor(s), two full, district wide openings
- c. Runs above 4.6 million – Four (4) regular fishing periods with no mandatory restrictions

**Emergency Petition by Kenai River Sportfishing Association (KRSA) and the Mat-Su Blue Ribbon Sportsman’s Committee**

In June, KRSA and the Mat-su submitted an Emergency Petition claiming that there was an error in the published regulations outlined above. This emergency petition asked the BOF to meet and change the published regulations. KRSA asked for the following to be changed by the BOF:

- 1 b. Change Expanded Corridor(s) to Old, Narrow Corridor
- 1 c. Change Expanded Corridor(s) to Old, Narrow Corridor
- 2 b. Change Expanded Corridor(s) to Old, Narrow Corridor

The BOF met on June 30, 2011 and adopted the above three (3) changes to the just published ADF&G regulations for Upper Cook Inlet. Emergency regulations were passed and signed by the Commissioner, Cora Campbell, and signed into law by the Lt. Governor on that same day.

UCIDA filed a lawsuit on July 8, 2011 against these emergency regulations claiming economic harm and that there was **NO EMERGENCY**. All of the “emergency regulations” were fully discussed at the BOF Feb/Mar meeting.

July 12<sup>th</sup> was the court date for the hearing on economic harm and whether or not an emergency existed.

**Temporary Restraining Order (TRO) and Preliminary Injunction Issues Concerning the Emergency Regulations**

July 14<sup>th</sup> Judge Andrew Guidi decided there was a real possibility of economic harm and that **NO EMERGENCY** existed. Practical effects of this decision were:

- Returned us to the newly published ADF&G regulations
- Set aside the BOF emergency regulatory changes in 1b, 1c and 2b
- Established that an emergency does not exist just because the BOF declares an emergency

On August 8, 2011, the BOF met again concerning the 1b, 1c and 2b regulations. This time the BOF instructed the Commissioner of ADF&G to adopt the KRSA proposed regulation changes.

On September 9, 2011, ADF&G Commissioner Campbell met with senior staff and the Directors of Sport and Commercial Fisheries and told them to adopt the KRSA proposed regulatory changes to 1b, 1c and 2b. She decided to adopt these three (3) regulatory changes, even though the public comment period **DID NOT** close until September 12 – so much for public comments and the public process.

We are now awaiting the Commissioner's decision about the three proposed regulatory changes to 1b, 1c and 2b described/referenced above. We expect the Commissioner to forward the Lt. Governor these three proposed regulatory regulations exactly as the BOF instructed.

Kenai River Sportfishing Association (KRSA) also submitted an Agenda Change Request (ACR) to the BOF concerning these exact three regulatory changes.

**UCIDA Comments included an Introduction Letter, an Executive Summary and Sections I and IV which included, in part, the following:**

**Introduction Letter:**

Addressee: Kerri Tonkin  
Regulations Program Coordinator, Fisheries  
Department of Fish and Game  
PO Box 15526  
Juneau, AK 99811

Dear Kerri,

Thank you for the opportunity to comment on the proposed regulations. We do not think that an error occurred regarding the regulations adopted following the February/March Board of Fish (BOF) meeting. The Emergency Regulations adopted on June 30, 2011 made no sense at all, were biologically inappropriate and had they been put into practice, would have been an economic disaster. These three proposed BOF regulatory changes are just plain wrong and have huge, negative economic consequences. We ask you not to adopt these proposed BOF regulations as there are no biological benefits. Had these regulations been in effect for the entire 2011 fishing season, the drift fleet would have experienced a \$6,500,000 economic loss. This \$6,500,000 million projected loss is in addition to the \$15,000,000 million in direct loss due to removing the Drift Fleet from Area 1. We ask that you take this opportunity to adopt the UCIDA proposed regulations that will provide economic and biological benefits. We feel the regulations adopted by the BOF at the February/March meeting can be improved. UCIDA's proposed changes in Section 1 (see attachment) will increase the biological and economic performance of the Central District Drift Gillnet Management Plan. The stock of yield concern and the action plan need major revisions. Revisions are appropriate now that six years of research have shown that escapement goals are within the anticipated ranges.

Sincerely,

Roland Maw, PhD  
UCIDA Executive Director

## **Executive Summary**

UCIDA believes that there were few errors in the regulations adopted following the UCI Board of Fish (BOF) meeting. We further think that these regulations need to be changed. The UCIDA proposed changes will improve the biological and economic performance of several management plans. Had the BOF emergency regulations been put into effect in 2011, UCIDA members would have lost \$6,500,000 in income. This equates to \$15-20 million in lost economic activity for Alaska businesses. The Central District should remain open to the Drift Fleet on all regularly scheduled openings.

The BOF and Department have a 30-year history of drawing numerous open/closure lines that all have failed to meet stated biological objectives. This year is no exception. For over 30 years, everyone relied on the Yentna Salmon Sonar Project to accurately count the returning spawners. In 2006 it was realized that the Yentna River Sonar was not accurate. Generally, the Yentna Sonar undercounted sockeyes. The Yentna Sonar (Bendix technology) was discontinued in favor of operating weirs at three representative indicator lakes: Chelatna, Judd and Larsen Lakes. Thirty years of sockeye salmon escapement data became useless. With 30 years of biased escapement data and 20 different corridor lines, it was impossible to determine whether or not a particular corridor line had met any escapement goal(s). Thirty years of guessing about corridors and escapement(s) should have come to an end. In the future, with the three sockeye weirs at Chelatna, Judd and Larsen Lakes, we might be able to draw an association between a particular open/closure corridor line(s) and Mat-Su salmon escapements.

When the BOF voted (2008) to designate the Northern bound sockeyes a Stock of Yield Concern, we were only 2 years into the weir project. Now, in 2011, we all have just finished the sixth year of operating the weirs and collecting data. In retrospect, had the Emergency Regulations or these BOF proposed regulations been in effect for 2011, all sockeye escapement goals would have been exceeded in UCI. Even with the current regulations, Chelanta Lake and the Kenai River exceeded the upper escapement limits. Since these BOF proposed regulations further limit the time and areas where we can fish, even more sockeyes would already be on the crowded spawning grounds. We see no biological or economic benefits from adopting the proposed BOF regulations as they are not supported by the biological data. We feel that at the UCI 2011 meeting, the BOF acted in haste to remove the drift fleet from Area 1 before the relationship between corridors and escapements could be understood.

### **Law Enforcement and Compliance Issues**

Every time the BOF or Department changes an open/closure line, some law enforcement and compliance issues develop. It just takes time to develop fishing techniques, to fish in a legal manner and to avoid a legal summons. This year is no exception. Many summonses were issued as fishermen tried to fish the Expanded Corridor.

## **Section I – Status of Northern Bound Sockeye Salmon Stocks**

### **A. Historical Prospective**

During the 1960's, 70's and 80's ADF&G staff completed a decade long research project and published "An Estimate of Adult Sockeye Salmon (*Oncorhynchus nerka*) Production, Based on Euphotic Volume, for the Susitna River Drainage, Alaska."

This 1989 study had the following results:

- There are 24 major/minor sockeye-producing lakes in the Susitna River System, including the Yentna Drainage
- Twelve of the 24 sockeye producing lake flow into the Yentna River Drainage
- The 12 Yentna River System Lakes account for 68% of the total Susitna River sockeye production (800,000)
- Chelatna, Judd and Larsen Lakes collectively require a maximum of 123,500 spawners in order to produce a maximum 493,000 return. These three lakes historically required about half of the escapement and produced about half of the total sockeye return to the Susitna River System

## B. Current Status

These stocks were designated by the Board of Fish (BOF) in 2008 to be a stock of yield concern. UCIDA was asked by the BOF and the Department to support the stock of yield concern designation for the Mat-Su sockeye salmon. We reluctantly went along with the stock of yield concern designation for the following reasons:

- Research funds were needed to be secured for salmon enumeration, weirs and sonar assessment/replacement
- Research funds were needed to access the effects of Northern Pike on salmon populations
- Salmon enumeration issues needed resolution
- Genetic analysis was needed to identify stocks temporarily and spatially in the harvest of all users
- Reluctantly understood that our fishing time was going to be restricted to Area 1 during the July 9<sup>th</sup> - 15<sup>th</sup> timeframe
- That **no further restrictions** were to occur until such a time as we could determine the relationship to the above restriction and sockeye escapements in the Mat-Su

We held up our end of the understandings, spent our own funds and worked (politically) hard to secure the necessary \$10,000,000 needed for weirs, stock assessments and other research funds.

With the stock of yield concern designation and the accompanying action plan, regulatory changes occurred; stock assessments and enumeration practices were also changed. The drift fleet was restricted to Area 1 with corridor openings for two fishing periods during the week of July 9<sup>th</sup> thru 15<sup>th</sup>. There were no restrictions placed on the recreational fishery. The three indicator sockeye lakes had escapement goals established: Chelatna Lake, Judd Lake and Larson Lake. Chelatna and Judd lakes on the Yentna had escapement goals established at 20,000 to 65,000 and 25,000 to 55,000 respectively. Larson Lake is on the main Susitna River and had an escapement goal of 15,000 to 50,000 established. These three sockeye indicator lakes were then to be used to access the health of Susitna/Yentna sockeye salmon stocks and to gauge the need for future actions. Attached is the current escapement data for Chelatna, Judd and Larson Lakes (CIAA sourced data).

The 2011 escapements to date, August 26, 2011, are as follows:

- Chelatna - Weir escapement count - 70,353, Escapement Goal 20,000 to 65,000 <sup>1</sup>
- Judd - Weir escapement count - 39,656, Escapement Goal 25,000 to 55,000

- Larson – Weir escapement count – 12,161, Escapement Goal 15,000 to 50,000 <sup>2</sup>

**Note 1:** This weir experienced high water over the top of the weir for August 5, 6, 7, 8 and 9<sup>th</sup>. The count of 70,353 is an actual observed count. However, the weir crew indicated an estimated escapement well in excess of 95,000.

**Note 2:** Sport fishing guides in the Mat-Su have developed a four-wheeler trail/road to the confluence of Larsen Creek and the Talkeetna River where the guide’s clients specifically target sockeye salmon headed for the Larson Lake weir.

The escapements by lake beginning in 2006 thru 2011 to date, August 26, 2011, are as follows:

Year	Chelatna 20-65,000	Judd 25-55,000	Larson 15-50,000	Yearly Total
2006	18,433	40,633	57,411	116,477
2007	41,290	58,134	47,736	147,160
2008	73,469	54,304	35,040	162,813
2009	17,865	43,153	41,929	102,947
2010	37,784	18,361	20,324	76,469
2011	95,000	39,656	15,000	149,656
<b>6 Yr Average</b>	<b>47,306</b>	<b>42,373</b>	<b>36,240</b>	<b>125,919</b>

**Discussion:**

The six year averages for all individual lakes fall near the midpoint of the escapement goal ranges. Prior to 2008, the Yentna River had an escapement goal of 90,000 to 160,000. By adding the Chelatna and Judd Lake values (Yentna River system), the six year average for the sockeye escapement is 89,679. While the six year average combined escapement goal of 89,679 is slightly below the old Yentna escapement goal of 90,000 to 160,000, you must realize these escapement numbers are for only **two** of the **twelve** sockeye producing lakes in the Yentna River System.

The six year average for Larson Lake is midway in the escapement goal range. Larson Lake was selected by the department as representing the sockeye escapements in the main stem of the Susitna River System.

During the 2008 BOF meeting, UCIDA supported the stock of yield concern and the data (escapement) collection program. Now, four years later, UCIDA believes the stock of yield concern for Northern Bound Sockeyes and the Action Plan need to be adjusted.

**C. Removal of Stock of Yield Concern, Adjustment to Action Plan**

**The stock of yield concern for Mat-Su Sockeye Salmon stocks and the Action Plan are no longer appropriate and must be adjusted.**

UCIDA believes that there is sufficient scientific data to support changing and adjusting the action plan. It was assumed by the BOF, and others, that sockeye production and returns to the Susitna/Yentna System had changed. In the ADF&G 1989 study, the three indicator lakes, during the 1960’s, 70’s and 80’s, 123,500 spawning sockeyes were needed for maximum sustained yield

management. During 2006-2011, six years, the sockeye spawning escapement average was 125,919. From 1968 thru 2011, for the years we have reliable escapement data, these three lakes have been managed at maximum sustainability. During all these 43 years, there has been an active commercial fishery. If there are sockeye salmon production problems in the Mat-Su Area, they are localized and may be occurring on a lake-by-lake basis. If there are individual lake production issues, then the action plan needs to be modified to address specific issues.

UCIDA and its members have borne the effects of the stock of yield concern designation and the regulatory measures. During this entire time, we have historically fished Area 1 during the first regularly scheduled fishing periods during the July 9<sup>th</sup> thru 15<sup>th</sup> time period (July 11, 2011). The concerns over our harvests are unfounded.

The stock of yield concern and the Action Plan are no longer appropriate and must be changed. The drift gillnet fleet must be returned to its historical harvest location, Area 1, during the July 9<sup>th</sup> thru 15<sup>th</sup> timeframe.

**Discussion:**

For 30 years, the Department said that the Susitna River, which includes the Yentna, needed 200,000 sockeye spawners.

The Department also said that a 4:1 return per spawner was normal, producing a projected total return of 800,000 sockeyes. No adequate sonar location could be found on the Susitna, so the Department selected a sonar site on the Yentna River. Escapement goals were then adjusted so that the Yentna sonar escapement goal would achieve a minimum of 200,000 sockeyes into the Susitna River system.

During the last six years, these three indicator lakes, Chelatna, Judd and Larsen have had an average of 126,000 sockeye spawners. There are over 24 lakes that produce sockeye salmon in the Susitna River drainage.

**Discussion:**

The July 9-15 is thought to be the most important dates necessary to ensure adequate sockeye salmon escapement into the Northern Cook Inlet. Run timing data presented by the Department for these stocks indicated that Northern Sockeye Salmon stocks passed by Anchor Point and Offshore Test Fishery (OTF) on June 30, one year, July 10-15, two year and August 1, one year. It appears that the Northern District sockeye stocks were early in 2011. This is supported by the early, rather large weir counts, indicating another early, prior to July 9-15, run entry pattern. We will not know for sure until the genetic samples are processed from the OTF and commercial catches. For three out of the last five years, these July 9-15 restrictions were ineffective and inappropriate and have cost our industry tens of millions of dollars for NO particular benefit(s). The BOF just got run timings and these closures wrong. We find the BOF ignored the biological run timing facts and acted arbitrarily, without a basis for these July 9-15 restrictions.

There is a significant policy difference between a yield concern and a conservation concern as defined by the Sustainable Salmon Fisheries Policy. The BOF, public and some departmental staff failed to clearly differentiate between these two policy definitions.

## **Section IV – Summary of Upper Cook Inlet Drift Gillnet Salmon Fishery**

The 2011 preseason forecast for the UCI salmon fishery was slightly above the 20 year average. We had a new set of BOF regulations that had yet to be tested in the real world of day-to-day management. This season will be discussed in four time periods: (1) June 20<sup>th</sup> thru July 9<sup>th</sup>; (2) July 11<sup>th</sup>; (3) July 14<sup>th</sup> thru August 1<sup>st</sup> and (4) August 2<sup>nd</sup> thru August 11<sup>th</sup> (present). For your references, see the attached day-by-day 2011 Drift Gillnet Preliminary Catch Data and 2011 Set Net Preliminary Catch Data (ADF&G sourced).

### **A. June 20<sup>th</sup> thru July 9<sup>th</sup>:**

This time period was normal. The drift fishery started June 20<sup>th</sup> with 90 vessels that gradually increased to 332 vessels making deliveries on July 4<sup>th</sup>. The number of salmon harvested also gradually increased from 3,845 harvested on June 20<sup>th</sup> to 88,891 harvested on July 7<sup>th</sup>.

### **B. July 11<sup>th</sup>:**

The first 2011 regular fishing period in the July 9<sup>th</sup> thru July 15<sup>th</sup> time frame.

**July 11<sup>th</sup> was the most critical day of the entire season. The new BOF regulations removed the Drift Fleet from Area 1 and restricted our harvest efforts to the Expanded Kasilof and Expanded Kenai Corridors. On July 11<sup>th</sup>, 366 vessels harvested 104,183 sockeyes for a catch per unit (vessel) effort (CPUE) of 284 sockeyes.**

On July 11<sup>th</sup> there was a large school of sockeyes located in the very southwest corner of the Expanded Kasilof Corridor. Most of these 104,183 sockeyes were harvested by less than 100 drift vessels, CPUE of 1,000, all crammed into a tiny corner of the Expanded Corridor. The other 260 vessels harvested very few salmon, CPUE of less than 50 per vessel. Had the Drift Fleet not been restricted and had been allowed to harvest salmon in our traditional Area 1, there would have been a CPUE of at least 1,000 for the entire drift fleet.

1. Specific problems arising out of being restricted out of Area 1 and into the Corridors on July 11<sup>th</sup>:
  - This is a critical time of the season regarding ADF&G's ability to access both sockeye salmon run timing and run strength (numbers). The CPUE's per fishing period are compared to the past 30 years' CPUE's per fishing period to assess both run timing and run strength. Nowhere in the history of this fishery was there a comparable CPUE on this date. Due to an unreliable CPUE, the Department was unable to assess the run timing and strength on July 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup>. The Department was managing with unreliable data, otherwise, "flying blind"
  - By being restricted out of Area 1, we, as a Drift Fleet, were prevented from harvesting salmon in our traditional areas. The salmon we traditionally would have harvested on July 11<sup>th</sup> were then added to the salmon available for harvest on July 14<sup>th</sup>
  - The 60-70 Homer-based drift boats were forced away from their home port and traditional fishing areas about 5 days earlier than in prior years. This negatively affected the economy of the Homer area, reduced raw fish taxes, reduced harbor fees and reduced sales taxes



- Fish buyers and processors were caught “a bit off-guard” and had staff, ice and salmon processing capacity in the wrong locations. Some vessels now staged in the Kasilof River were not loaded until the afternoon of July 12<sup>th</sup>. Some loss of salmon quality occurred
- The fishery was not orderly, as directed by State Statute

### C. July 14<sup>th</sup> thru July 31<sup>st</sup>:

1. On July 14<sup>th</sup>, the Drift Fleet harvested 685,435 sockeyes for a CPUE of 1,631 per vessel. This was both the largest harvest and largest CPUE for Upper Cook Inlet Drift Vessels. While we are grateful for this harvest, this harvest of salmon totally overwhelmed the fish buyers and processors and also had catastrophic consequences, such as follows:

- Fish quality suffered from lack of ice, crushing and bruising of salmon on vessels, heavily loaded totes and brailers and a lengthy period before processing
- Ice capacity was insufficient and was totally depleted just trying to keep these 685,435 (4,660,000 lbs) salmon cool
- These 685,435 sockeyes were in addition to the 26,586 harvested by the Set Nets. With the additional 666,137 sockeyes harvested on July 16<sup>th</sup>, the canneries were plugged
- Many drift vessels not unloaded until the evening of July 15<sup>th</sup>
- Price drop occurred ranging from \$.20 to \$1.20 per lb
- Price drop remained in place for the remainder of the season for both Drift and Set Net salmon harvested.
- All fish buyers and processors put delivery limits on Drift vessels and Set Net fishermen
- **This price drop for both the Drift and Set Nets amounted to lost income of over \$15,000,000, an additional \$30,000,000 to \$40,000,000 to the Kenai as well as the Alaskan economy**

### Discussion:

We outlined these future events and consequences to the BOF and Department. Now, history proves us right. Had the Drift Fleet been in Area 1 on July 11<sup>th</sup>, 2011, we would have harvested, at a minimum, an additional 300,000 sockeyes. These 300,000 sockeyes would have produced a usable CPUE for run timing, run strength and analysis by the Department. Also, these 300,000 sockeyes would have directly reduced the 685,000 sockeye harvest on July 14<sup>th</sup>, 2011. Fishing Area 1 would have provided 3 additional days of processing and “preparation time” for fish buyers and processors. An orderly fishery could have occurred, quality of the salmon pack could have been maintained and the **\$15,000,000 to \$40,000,000** error avoided. The BOF just plain screwed up and made a **\$15,000,000 to \$40,000,000** regulatory error by removing the Drift Fleet from Area 1 on July 11<sup>th</sup>. Both the Commissioner and the BOF have a statutory obligation to develop orderly fisheries. While we appreciate the efforts of the Department to try to maintain an orderly fishery, this season was a mess and the **\$15,000,000 to \$40,000,000** error lies directly upon four board members of the BOF. This entire July 14<sup>th</sup> thru August 1<sup>st</sup> period is characterized by lack of ice, quotas and limits on both gear types, price drops and a scramble by all involved to harvest the return. It was all caused by the new BOF regulations that took the Drift Fleet out of Area 1 on July 11<sup>th</sup>. The \$15,000,000 price drop/quality error is in addition to the \$6,500,000 dollar error that will occur if the drift fleet is removed from the Expanded Corridor into the old narrow corridor.

**C. August 1<sup>st</sup> thru August 18<sup>th</sup>:**

The sockeye catches were dropping as escapement goals were again exceeded. There is a lack of regulatory clarity concerning sockeye escapements, king escapements and the 1% rule for the Drift Fleet and the East Side Set Netters.

**ACR submitted by Kenai River Sportfishing Association**

ACR #5 is yet another attempt to set aside the Feb/Mar BOF regulations by modifying 1b, 1c and 2b, see previous discussion. ACR #5 will be discussed by the BOF at its workshop on October 4 and 5 in Anchorage.

Our legal costs involved due to the KRSA "Emergency" and the BOF illegalities are in excess of \$80,000.

September 21, 2011, UCIDA, the State of Alaska, the BOF and Commissioner Campbell agreed to a stipulated settlement of this lawsuit. This agreement reads in part:

1. Plaintiffs will suffer irreparable harm to their livelihoods due to the emergency regulations passed by the Board on June 30, 2011 if the Temporary Restraining Order and Preliminary Injunction are not granted;
2. Plaintiffs have shown that, at trial, they will likely prevail on the merits on some or all of their claims against the Defendant; and
3. The balance of hardships favors granting the Temporary Restraining Order and Preliminary Injunction.

Based on the above findings, IT IS HEREBY ORDERED:

1. Plaintiff's Motion for Temporary Restraining Order and Preliminary Injunction are GRANTED;
2. Defendants State of Alaska, Alaska Department of Fish and Game, and Alaska Board of Fisheries are immediately enjoined from enforcing the emergency regulations passed on June 30, 2011;

**September 11, 2011, one day before the close of public comments, UCIDA submitted these 32 pages of comments concerning the three (3) proposed regulatory changes.**

**United Cook Inlet Drift Association**

43961 K-Beach Road, Suite E • Soldotna, Alaska 99669  
(907) 260-9436 • Fax (907) 260-9438 • info@ucida.org

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_ M.I.: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Email: \_\_\_\_\_

Permit # SO3H \_\_\_\_\_ ADF&G License # \_\_\_\_\_

Fishing Vessel Name: \_\_\_\_\_

**UCIDA Membership Dues (for 12 months):  
\$200/Permit Holder • \$25/Associate**

## Comments about the 2011 Sockeye Return

KC 11

The number of six year olds in this year's Kenai return was three times the historic "average." These six year olds as fry spent two summers in Skilak Lake. The ocean survival was in excess of 30% for these same salmon. A "normal" ocean survival rate is in the 10% to 15% range.

A little bit of Kenai River Salmon biology: you may have thought that salmon spawn and their offspring return in 4 or 5 years. Actually, the Kenai River Sockeyes have one of the largest adaptive survival capabilities.

Age composition of sockeye salmon escapement in the Kenai River,  
Upper Cook Inlet, Alaska, 1979 to present

Year	0 <sup>1,2</sup>	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Total
1979		0.2		19.6		63.0	10.6		6.6				100
1980		6.1		35.4	0.9	36.7	14.4		6.5				100
1981				19.7	0.5	66.4	7.9		5.3				100
1982		0.1		5.8		87.5	2.9		3.7				100
1983		0.3	0.3	8.4	0.5	79.0	2.2	0.3	8.9		0.1		100
1984	0.1		1.1	23.1	0.5	37.8	13.2	3.6	19.5	1.0		0.1	100
1985	0.5	0.1	0.2	15.9	0.1	56.4	14.7	0.3	11.4	0.3			100
1986	0.1		1.3	31.8	0.3	39.5	8.2	0.7	18.0		0.1		100
1987			0.1	12.8		78.4	3.2	0.1	5.2				100
1988		0.3	0.1	11.6	0.2	74.2	3.1	0.4	10.2				100
1989	0.1	0.2	0.1	5.6	0.8	26.7	7.6	0.9	57.4		0.3		100
1990		0.6	0.3	21.6	0.3	41.4	13.7	0.6	21.1	0.2	0.3		100
1991	0.0	0.1	2.2	48.2	0.4	31.6	5.7	0.2	11.4	0.1	0.0		100
1992	0.1			2.7	0.3	79.9	5.9	0.2	11.0				100
1993	0.1	0.3	0.3	12.2	6.3	30.5	6.4	2.6	41.2	0.1	0.1		100
1994	0.1	0.3	0.1	6.6	0.8	61.1	17.8	0.8	12.1	0.2	0.3		100
1995		0.3	0.4	31.9	2.4	26.4	6.6	0.4	31.3		0.3		100
1996			0.3	10.8	0.7	75.4	6.1	0.3	5.4	0.2	0.6		100
1997		0.1	0.3	7.6	0.4	75.2	2.8	0.4	13.0	0.1	0.1		100
1998		0.3		27.1	6.6	40.7	9.6	1.3	13.9	0.1	0.1	0.1	100
1999			0.3	15.1	1.2	55.4	16.8	0.4	9.6	1.0	0.1		100
2000		0.2	0.9	15.3	2.6	55.1	9.4	1.0	14.5	0.7	0.5		100
2001		0.3		10.8	1.5	68.9	8.3	0.8	9.2			0.2	100
2002	0.1		0.0	23.0	0.7	58.4	10.6	0.7	6.1	0.1	0.1	0.0	100
2003	0.1	0.0	0.2	14.4	0.1	57.9	8.0	0.4	18.7		0.1		100
2004			0.4	10.1	0.2	69.1	8.2	0.2	11.1	0.2	0.2	0.2	100
2005	0.1		0.2	2.8	0.2	81.3	2.8	0.3	11.8	0.5	0.1		100
2006			0.5	9.9	0.4	38.7	3.7	2.4	44.0	0.1	0.4	0.1	100
2007			0.1	5.9	0.7	78.8	4.4	1.5	7.8	0.1	0.7	0.1	100
2008			0.4	15.2	0.7	60.8	7.4	4.6	10.8		0.2		100
2009		0.3	0.1	6.1	0.1	72.6	9.8	0.9	9.7	0.1	0.1		100
2010	0.1	0.2	0.1	23.4	2.8	44.4	4.7	0.2	23.9	0.1			100
2011		0.1		8.0	1.1	38.9	5.4	0.4	45.6		0.1	0.1	100
Mean	0.1	0.5	0.4	15.7	1.1	57.2	7.9	0.9	16.2	0.3	0.2	0.1	

Notes to Table:

1. First number = years in fresh water
2. Second number = years at sea

Example:

- 0.2    0 = hatch and go to sea    .2 = 2 years at sea
- 1.2    1 = 1 year in fresh water    .2 = 2 years at sea
- 2.2    2 = 2 years in fresh water    .2 = 2 years at sea
- 2.3    2 = 2 years in fresh water    .3 = 3 years at sea

Spawn year – In all cases, except 0.2 and 0.3, add one year in order to back calculate the spawn year

Example:

- 1.2 = 3 years + 1 egg year = 4 years old  
2011 = 4 years = 2007 spawn year
- 1.3 = 4 years + 1 egg year = 5 years old  
2011 = 5 years = 2006 spawn year
- 2.3 = 5 years + 1 egg year = 6 years old  
2011 = 6 years = 2005 spawn year

The dominate return, as measured by the highest mean, are the 1.3 or 5 year old fish (57.2% - See Table above). Next are the 2.3 or 6 year old fish (16.2%). The next dominate age class are the 1.2 or 4 year old fish (15.7%). Please note that salmon, when managed at or near the Biological Escapement Goal (BEG), spend one year in fresh water. That is the rule throughout their range, Oregon to Japan/Russia. When BEG management is practiced, the 1.2, or 4 year olds, are the majority of returning adults. That is true for Kasilof, much of Bristol Bay and sockeye returns in Japan and Russia. However, as Kenai sockeye have adapted into a 1.3, or 5 year old, dominate year class. (See Table) This is in part why Kenai sockeyes are some of the largest in the North Pacific. Additionally, our Kenai Sockeyes often have a unique 2.3, or 6 year old, adaption. (See 2.3 data in Table) These 6 year olds spend two years in fresh water after hatching. These two years in fresh water is an adaption that is expressed when high escapements (overescapement) occur. This is a life survival strategy that develops in order to ensure that the fry/smolt are physically large enough to survive at sea. This year we had 2.1 (1.1%), 2.2 (5.4%), 2.3 (45.6%) and 2.4 (0.1%), for a combined percentage of 52.2% of this year's return that spent 2 years in fresh water. Again, this is due to large escapements, or big fry populations competing for a limited food supply.

Hopefully, you are feeling a bit more comfortable with this data. Some of our larger returns, not always, occur when, in a single year, we have above average 2.3 (6 year old) salmon return in addition to the 1.2 (4 year olds) and 1.3 (5 year olds). This year, see Table above, we had 45.6% of the return in the 2.3 (6 year old) age class.

Most of the preseason prediction models are based on either a 1.2 (4 year old) or 1.3 (5 year old) return data sets, Kenai included. We are in uncharted territory, as these Kenai River return models are based on 1.2 and 1.3 historic data. Now the norm is for 2.3 (6 year old) returns and there is just not an historic data set upon which to build a good predictive model for preseason forecasting. Only four times, 1989, 1993, 2006 and 2011, have the 2.3 (6 year old) been over or near 50% of the return. From a practical management standpoint, ADF&G has a very difficult time in

determining in-season age composition of the returns. It takes a few days/week(s) to collect scale samples and run the age composition analysis. At the same time, trying to determine the tier the current return most likely fits into: less than 2.3 million, 2.3 – 4.6 million or greater than 4.6 million. Look at 1989, 1993, 2003, 2008 and 2011, all are markedly different in age compositions and run size.

Please give some thought and provide suggestions to UCIDA as to how we might speed up the in-season age analysis and run size determination. Our management plans are so complex and assumes that ADF&G and our industry know the age composition and run size. Just now, the last week of September, is the age composition actually known. There is limited age composition occurring in the first 2 to 3 weeks of July.

### Run size and Maximum Sustained Yield

In order to use any model or procedure to determine maximum sustained yields, the age composition and return sizes must be completed.

**To determine the total adult return from any spawning escapement, we must know the age composition, number and percentage from all the possible freshwater and saltwater combinations.**

For example, we must determine the percentage and number of adult returners for all the 0.2 thru 3.3 age combinations. Finding the return per spawner may take up to 6 to 8 years after the spawning occurred. We will have to wait until 2017 or 2018 to see all the returning adults from the 2011 spawn.

ADF&G has compiled this type of data since the early 1970's. This spawning/return data is included in the table below. This table was constructed using the Markov type of analysis.

Escapement Interval	n	Mean Spawners	Mean Returns	Return per Spawner	Mean	Yield Range
0-200	3	120	679	5.7	559	358-871
100-300	3	165	798	5.0	633	449-871
200-400	2	292	1,055	3.6	763	578-948
300-500	4	414	2,180	5.1	1,766	580-3419
400-600	9	495	2,450	5.0	1,955	580-3419
500-700	8	555	3,048	5.3	2,493	999-6393
600-800	8	724	4,798	6.6	4,075	788-8697
700-900	7	771	4,731	6.1	3,960	788-8697
800-1000	5	931	3,458	3.8	2,527	698-4840
900-1100	5	971	3,289	3.4	2,318	698-4840
1000-1200	3	1,148	3,483	3.0	2,335	1377-3084
1200-1400	3	1,343	2,863	2.1	1,520	513-2301
>1300	7	1,623	4,486	2.7	2,863	513-8396

Notes to Table:

1. Escapement intervals are increased by 100,000 utilizing 200,000 ranges.
2. For each range/interval, information is displayed from the historic data set.

The highest mean return(s), 4,798 and 4,731, occur at escapements of 600 – 800 and 700 – 900 (thousands). At these 600 – 800, 700 – 900 or 600-900 spawners, the highest returns per spawner of 6.6 and 6.1 occur, the largest mean returns of 4,075 and 3,960 occur and the largest yields (harvests) of 788,000 – 8,697,000 also occur.

This year's 5,700,000 Kenai return came from 2005, '06 and '07 spawners. It is important to understand this. The 2011 return had a large 2005 and a normal 2006 and 2007 adult returns all occurring in the same year. Will this pattern of 3 years of concurring returns continue into 2012? Well, we will know next August. Frankly, there is just no way of knowing that now. If these three years of concurring returns happens next year, we could have a very good, better than this year, return next year. However, if we fall back into one dominate year class return, our return next year could be average for the Kenai. The ADF&G staff is struggling to understand the inner play between escapement (overescapements) and this effect on the age and number of returning adults. We are in uncharted biological territory, all due to large overescapements. Instability and lack of predictability will be our companions until we get BEG/MSY management back!