Public Comments for AK Peninsula/Aleutian Islands
February 2-6, 2010

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Unalaska Native Fisherman Association

P.O. Box 591, Unalaska, Alaska 99685 Phone: (907) 581-3474 (FISH) Fax: (907) 581-3644

11-16-09

Alaska Board of Fisheries
P.O. Box115526
Juneau, Alaska 99811-5526

Dear Board Members;

The Unalaska Native Fishermens Association (UNFA) is in full support of Proposal 111, which supports the closure of the Unalaska Bay to trawling year round. This closure will please and is important to many of the Unalaska Subsistence, Commercial and Sport fishermen. Unalaska Bay is a very small but productive area, with some of Unalaska Island's major salmon streams located in the bay. Other species are also harvested in Unalaska Bay include Crab, Herring and Halibut. These species are very important to the local residents.

UNFA has received numerous complaints from Subsistence, Commercial and Sport Fishermen, the main concern is being squeezed out of the customary fishing areas in Unalaska Bay by Pollack Pelagic Trawl vessels during the summer which is the most productive Halibut fishing time within the Unalaska Bay. A number of complaints have also been received on lost gear by subsistence fishermen who fish both Halibut and Crab in this very small area.

The most heartbreaking complaint I received was from an eighty year old Native resident who has fished here for the past seventy years. He is legally blind and his two sons take him fishing in an open skiff within Unalaska Bay. He was fishing with his customary fishing hand line when this big boat came right at him and he had to pull his line and move. He didn't catch any fish that day "I always caught my fish there, now no more. They almost run me over". The Unalaska Native Fishermens Association urges the Board of Fisheries to support proposal 111 which would close Unalaska Bay to trawling year round. Thank You for considering our recommendation.

Sincerely,

Emil W. Berikoff Sr.
President,

PUBLIC COMMENT # 1

Mark J. Wagner
P.O. Box 326
Sand Point, AK 99661

December 31, 2009

Board Support Section/ADF&G
P.O. Box 115526
Juneau, AK 99811

Dear Board Members,

My name is Mark Wagner and I'm a resident of Sand Point. I have commercially fished in Area M since 1979. In 1983, I purchased a Area M set net permit and currently set net salmon, jig cod and longline halibut out of Sand Point. The purpose of this letter is to outline minor changes to the South Eastern District Mainland (SEDM) fishery which would help Area M set netters and control escapement to Orzinski Lake.

The following comments are directed to proposals 132-138 and 142-143.

Proposals 132-138 all seek a change to the existing management plan in the South Eastern District Mainland (SEDM) fishery from June 1 through July 25. SEDM consists of five sections and is located from Beaver Bay to Kupreanof Point in the South Peninsula of Area M. The current management allocates Area M fishermen 7.6% of the Chignik harvest from June 1 to July 25 in the Beaver Bay, Balboa Bay, Southwest Stepovak, and East Stepovak sections of SEDM; and from June 1 to June 30, in the Northwest Stepovak Section of SEDM. Starting July 1, the Northwest Stepovak Section is managed on local sockeye returning to Orzinski Lake. Beginning July 26 to September 1 the entire SEDM is managed on local pink and chum salmon. In recent years, Area M fishermen have been severely restricted in June, with virtually no openings, due to a reduced fleet and harvest in Chignik and the management restraints in the current plan.

The SEDM plan could be slightly altered without changing the 7.6% interception rate to give some relief to Area M. I would model the change on the Chignik June management plan in their Western District. In 2008, the Board authorized two 48 hour openings in the Western District to give additional fishing opportunities to the Chignik fleet. I believe the Board could also establish two 48 hour openings in SEDM from June 10-20 if escapement requirements are met in Chignik. These two openings would have a 48 hour closure between them. I thought it best to add a safe guard after June 20 for the local sockeye returning to Orzinski Lake. When fishing occurs in SEDM after June 20, escapement suffers in Orzinski Lake. This greatly affects about 20 set netters and beach seiners who target the local sockeye run in the Northwest Stepovak Section of SEDM.

I would be opposed to a major change in the current SEDM management plan without any new information regarding the makeup of the fish stocks.

Proposals 142 and 143 would allow fishing time in Dorenoi Bay prior to July 26.

Dorenoi Bay is located in the Northwest Stepovak Section of the South Eastern District Mainland (SEDM). Dorenoi Bay is closed to fishing until July 26, when it may open, based on chum and pink escapement. Starting July 1, the Northwest Stepovak Section is managed on local sockeye returning to Orzinski Lake. If escapement goals are met at Orzinski Lake by July 1, then the current management plan for the Northwest Stepovak Section allows continuous fishing in Orzinski Bay. Outside of Orzinski Bay in the remaining Northwest Stepovak Section, excluding Dorenoi Bay, fishing is restricted to two 48 hour openings in a seven day period unless escapement in Orzinski Lake exceeds 25,000 fish. Then the Northwest Stepovak Section, excluding Dorenoi Bay, is expanded from four out of seven days to continuous fishing. Opening Dorenoi Bay to fishing as early as July 1 would help to prevent over escapement to Orzinski Lake. The Orzinski Lake fishery dates back to 1888 when a cannery was first established in Orzinski Bay. This fishery is very important to the set netters and beach seiners who fish in the Northwest Stepovak Section. If the Board believes opening up Dorenoi Bay would be too extreme, then two other options should be considered.

Option A: Change the 25,000 fish threshold to 15,000 fish. The upper escapement goal for Orzinski Lake is 15,000 to 20,000 fish. In 2008, escapement reached 25,000 fish on July 14 when fishing was then increased to continuous fishing. When the weir was pulled on Aug. 12, 38,839 fish had passed. Waiting until the upper escapement goal is exceeded by 25% before allowing additional fishing jeopardizes the Orzinski Lake system.

Option B: Change the two 48 hour openings in a seven day period to two 60 hour openings in a seven day period. The 60 hour openings would be separated by 24 hour closures. This change would help control escapement to Orzinski Lake and keep the windows concept intact that allows migrating fish to travel through the area.

In conclusion, the existing management plan for the Northwest Stepovak Section is too restricted to control escapement to Orzinski Lake and needs to be amended.

Sincerely,

Mark Wagner

Mark Wagner
F/V Challenger
Sand Point, AK 99661

OUNALASHKA
CORPORATION

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JAN 12 2010
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January 11, 2010

ALASKA DEPARTMENT OF FISH AND GAME
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Subject: Fish and Game Advisory Committees Proposal 111 to the Board of Fisheries: Unalaska Bay Trawl Closure

Dear Board members,

The Ounalashka Corporation (OC) is the Alaska Native village corporation of Unalaska, formed under the Alaska Native Claims Settlement Act of 1971.

Our constituency is made up of many people who subsistence fish in the waters of Unalaska Bay, as well as small-boat commercial fishers. OC supports the Unalaska/Dutch Harbor Fish and Game Advisory Committee's proposal for the permanent year-round closure to trawl fishing in Unalaska Bay, from Cape Cheerful to Cape Kalekta.

This area is a part of the Bering Sea Pollock Restriction Area which is only open to pollock trawling by catcher vessels during the Pollock B season from June 10th to November 1st of each year, just as the returns of red, pink and silver salmon are coming into the Unalaska Bay area. We feel that the entry of large trawlers during the summer negatively affects local residents participating in commercial, subsistence, and personal-use fishing activities in the Unalaska Bay area.

The damage to habitat and loss of salmon, cod and halibut due to bycatch is an unacceptable exchange for the revenue that certain processors make by dragging their trawl gear through this small area. Further, most commercial fishing within Unalaska Bay is performed by a small boat fleet with vessels in the 58-foot-and-under class. As a result of the damage and disruption caused by the groundfish trawlers that still fish in

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PUBLIC COMMENT # 3

Unalaska Bay, these small commercial vessels have to travel outside the Bay and further from safety to make their living. Apparently, the trawling is also causing gear loss to the small vessels.

Thank you for your consideration of this proposal, and for noting our support. If you have any questions, please contact me.

Best regards,
OUNALASHKA CORPORATION

Wendy Svarny-Hawthorne
Chief Executive Officer

Cc: Denby Lloyd, Commissioner, Alaska Department of Fish and Game
Ounalashka Corporation Board of Directors
file

United States Department of the Interior

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

IN REPLY REFER TO:

FWS/OSM/10001/BOF AKPEN

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JAN 7 2010

Mr. Vince Webster, Chair
Alaska Board of Fisheries
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

Dear Chair Webster:

The Alaska Board of Fisheries will deliberate 2009/2010 regulatory proposals that address Alaska Peninsula and Aleutians Islands commercial, sport, and subsistence finfish fisheries beginning February 2, 2010. We understand that the Board will be considering approximately 63 proposals at this meeting.

The U.S. Fish and Wildlife Service, Office of Subsistence Management, working with other Federal agencies, has reviewed these proposals and does not believe that adoption of any of these proposals will have an impact on Federal subsistence users and fisheries in this area. We may wish to comment on these proposals if issues arise during the meeting which may have an impact on Federal subsistence users and fisheries.

We appreciate the opportunity to comment on these important regulatory matters and look forward to working with your Board and the Alaska Department of Fish and Game on these issues.

Sincerely,

Peter J. Probasco
Assistant Regional Director

cc:
Denby S. Lloyd, ADF&G
Michael Fleagle, Chair FSB
John Hilsinger, ADF&G, Anchorage
Craig Fleener, ADF&G, Juneau
Charles Swanton, ADF&G, Juneau
Rob Bentz, ADF&G, Juneau
Marianne See, ADF&G, Anchorage
Steve Honnold, ADF&G, Kodiak
James Hasbrouck ADF&G, Anchorage
Jeff Wadle, ADF&G, Kodiak
Tina Cunning, ADF&G, Anchorage
George Pappas, ADF&G, Anchorage
Jim Marcotte, ADF&G, Juneau
Interagency Staff Committee

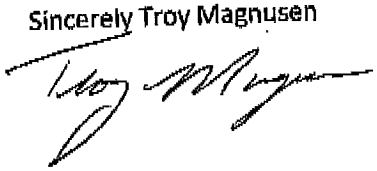
TAKE PRIDE IN AMERICA

PUBLIC COMMENT # 4

To the Board of Fish for proposal 111

My name is Troy Magnusen I work for the State of Alaska out here in Dutch Harbor AK. I was transferred out to Dutch Harbor from Kodiak 11.5yrs ago, I am an avid sport fisherman and my family and I rely upon freshly frozen seafood throughout the winter months. When my family and I arrived here in Dutch Harbor in 1998 the sport fishing here was beyond my wildest dreams, there were plenty of halibut and salmon to go around for everyone. As the years have gone by I have noticed instead of fishing the local bays like I used to, I have slowly had to start moving out of the bays and further to the outside waters. In the past I have not had any problems with catching my limits whether it was halibut, Sockeye, Chinook or King Salmon. The halibut that I now catch are much smaller and there are fewer, the Chinooks are getting fewer every year, I didn't even catch 1 this year, the Kings have been declining the most as far as I can see, in the past it was never a problem to catch enough Kings to limit out, the truth of the matter is I haven't caught a King in 1.5 yrs now. For Halibut I now have to run as far 30 to 40 miles to try and catch some. I guess what I don't understand is why do these 100+ ft Bering sea going vessels have to fish inside the local bays and collect their catch, while they are forcing the little skiffs 25ft and under vessels to go on the outside to catch their fish. I have been a Bering Sea fisherman for 10yrs prior to working for the state of Alaska and I do understand why they are fishing so close to town, I mean why not they're saving fuel, but on the other hand why should they force the small guys out to risk their lives to try and catch their winter catches for their families.

Sincerely Troy Magnusen



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To whom it may concern,

My family has lived in Unalaska for one year. I own a boat and subsistence & sport fish as much as my wife will let me get away with. Before, I moved to Unalaska I was a Ketchikan resident for 10 years. I really enjoyed Ketchikan's abundance of fish & big game. Unfortunately for me I only qualified for a sport fishing liscense, and as a result even when we were "in the fish" our bag limits sometimes prevented us from filling the freezer. I never complained though because we had a Wal-mart & there were a lot more people fishing besides myself.

One thing that I really looked forward to when I found my job was moving me too Dutch Harbor was finially qualifiny for a subsistence fishing permit. I knew this would be important to my family, because we eat alot of salmon & the Dutch Harbor Wal-Mart, for some crazy reason, has not yet been built. One of my favroite things about fishing here is that even on the best days of the year I never see more than a dozen other anglers out on the water. There is something to be said about getting away from it all.

This is my reason for writing this letter. I can not say if the fishing was better here 20, 10 or even five years ago. I don't know for sure if the draggers are taking all the fish. What I do know is this. I did not catch a king this year. I caught many kings for many years in Ketchikan. I caught three silvers this year using a 32 fathom net, & I had to go out six diffrent times to get them three. I did get 13 reds, but we travelled over thirty-five miles in horrible weather to get them & in my small boat I don't think I will be going back there ever again.

In closing. Reguardless of higher bag limits, better fishing gear (like gillnets apposed to rod & reel), or even less anglers on the fishing grounds I had, at best a slightly less than average year of fishing. I believe limiting entry into the bay will only help the small subsistence fisherman get there catch.

Sincerely,

Ray R. Streitmatter

December 12, 2009

Boards Support Section
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

Dear Mr. Chair and members of the board,

I would like to recommend to the Board that it amend proposal 123 by adding Language that says setnetters fishing between Dark Cliffs and Popof Head must have All gear including anchors, buoys, anchor lines and running lines out of the water at the end of each 48 hour fishing period.

Sincerely,

Dale Pedersen

Dale Pedersen
Author, proposal 123

PUBLIC COMMENT # 7

Alaska Crab Coalition
3901 Leary Way N.W. Suite #6
Seattle, Washington 98107
206.547.7560
Fax 206.547.0130
acccrabak@earthlink.net

January 15, 2010

Vince Webster, Chair
Alaska Board of Fisheries
PO Box 115526
Juneau, Alaska 99811-5526
Fax #: 907 465 6094

Re: Comments on Proposal #114, Aleutian Islands District Pacific Cod Fishery

The ACC participated in the Board of Fisheries meeting in Cordova on December 5 and 6, 2008, and testified on proposals 371 and 372. The ACC represents Bering Sea pot vessels that have historically fished for Pacific cod in the Bering Sea since the early 1990s and a few of the vessels fish for cod in the Aleutian Islands District West of 170 West longitude. The ACC opposed adoption of proposals 371 and 372, as we viewed the proposals as primarily allocative in nature and aimed at creating an exclusive market for one shorebased processing company on Adak Island.

The final outcome of the Board decision was to impose a 60 foot limitation on vessels fishing in the B season for cod in State waters West of 170 West longitude (teleconference December 31, 2009).

The ACC notes that a petition to the Board of Fisheries to reinstate the 125 foot limit was filed by Dan Gunn on June 5, 2009, in anticipation of a large foregone harvest that would occur in the 2009 B season for cod in the Aleutians District, as a result of the imposition of the 60 foot vessel limit. The petition was denied. However, as Gunn predicted there was a foregone harvest in excess of 6 million pounds by the season's end, although ADFG records show that seven vessels under 60 foot registered for the B season. The total catch for the B season was approximately 500,000 pounds.

ACC recommends the Board of Fisheries reinstate the 125 foot limit on longline and pot vessels for the Aleutian Islands District Pacific cod B season.

Restricting the vessel length size to 60 feet OAL in the B season fishery only, seriously impacted the pot vessels which primarily fish during this season. No trawl vessels fish in the B season. The fish are spread out and not aggregated enough for optimum trawl vessel CPUE, thus there is no competition from the trawl fleet. The average size of the

PUBLIC COMMENT # 8

pot vessels that fished in the B season in 2008 was 66 feet OAL. (ADFG Staff Comments, page 199, December 2008) Restricting the length of the pot vessels disenfranchised most of these vessels in 2009.

Additonal comments:
There are numerous opportunities for vessels 60 feet OAL and under in both the State waters fisheries and the parallel fisheries in the Gulf of Alaska and the Bering Sea.

- Vessels 60 feet and under OAL without federal LLPs can fish in State waters anytime the federal fisheries are open, (parallel fishery period) and they can fish in State waters during the State waters only fishery.
- Pot and longline vessels 60 feet and under OAL have a set aside allocation of 2 percent of the BSAI cod TAC, which is currently about 6 million pounds.

Given the opportunities currently available for vessels 60 feet and under OAL in the current State and Federal management programs for Pacific cod and given the remote nature and notoriously hazardous sea conditions of the Adak area, it is recommended that the Board of Fisheries restore the 125 foot limit for pot and longline vessels fishing in the Aleutian Islands District in the B season.

Sincerely,

Arni Thomson
Executive Director

PROWLER FISHERIES
LONGLINE CAUGHT ▪ FROZEN AT SEA

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January 18, 2010

Mr. Vince Webster, Chairman
Alaska Board of Fisheries
P.O. Box 115526
Juneau, AK 99811-5526

RE: Alaska Peninsula/Aleutian Island Finfish: Groundfish Proposals

Chairman and members of the Board of Fisheries,

Please consider these comments from the Alaska Longline Company (formerly Prowler Fisheries) on the groundfish proposals for the South Alaska Peninsula. Alaska Longline Company is based in Petersburg and has been annually fishing p-cod in the WGOA (federal waters only) since 1985. Our company's vessels have a long history of participation and dependency in the WGOA. In some years for these vessels, harvest in the WGOA represents up to 50% of total p-cod landed for the entire year in all areas. We ask that you oppose (or take no action) Proposals 108 and 109.

Proposals 108 and 109: Increase GHL in the South Alaska Peninsula Area state-waters p-cod management plan. Oppose.

Summary: The current GHL for the state-water state managed p-cod fishery in the South Alaska Peninsula Area is 25% of the federal ABC for the WGOA (NMFS reporting area). These proposals seek to double the percentage for the state-water GHL to 50% – which would in turn reduce the available federal TAC to some historical participants by another 25%.

These proposals are a fish grab with numerous negative side-effects that will: a.) re-allocate away from federal fishery participants who have long term historic dependence on the resource; b.) undermine recent NPFMC actions to provide stability in the GOA p-cod fishery (cod sector splits based on sector history and license limitation cod endorsements based on participation history), and c.) further concentrate harvest inside of three miles, which will have Steller sea lion (SSL) management implications.

The current fisheries management regime is being evaluated by NMFS in the "status quo" Biological Opinion for SSL. Any significant changes in management at this juncture would unnecessarily complicate that evaluation. If the status quo evaluation of existing fisheries management results in any latitude that would allow a change in GOA p-cod management, it is almost unanimously agreed that the preferred change would be adjustments to the 60/40 seasonal apportionment. Increases to the A season harvest proportion would allow additional catch to be landed during a time period (A season) with higher CPUE and lower bycatch – benefits for all sectors. Further concentration of harvest inside of three miles would work against changing the seasonal apportionment percentage.

F/L PROWLER ▪ F/L OCEAN PROWLER ▪ F/L BERING PROWLER
PO Box 1989 Petersburg, Alaska 99833 ▪ 907-772-4835 ▪ Fax: 907-772-9385 ▪ www.prowlerfish.com

Concentration of harvest in state waters: The proportion of harvest that actually occurs in state waters is the sum of the state-water state managed fisheries harvest plus the harvest in the parallel fishery. Of all areas in the GOA, the WGOA already has by far the highest proportion of p-cod harvest inside of 3 miles in recent years. **For example, in 2006, 71% of the entire p-cod harvest in the WGOA (NMFS reporting area) occurred inside of 3 miles** (p. 18, Table 3 from ADF&G staff report 09-55, *Annual Management Report for Groundfish Fisheries in Kodiak, Chignik, SAP Management Areas, 2008*). These proposals could potentially result in 96% of the WGOA ABC being harvested inside 3 miles. For comparison, the highest proportion of harvest inside of 3 miles in the CGOA is 38% in 2005.

The reasons for p-cod harvest becoming more concentrated inside of three miles is not due to any shift in p-cod biomass but more of a reflection of regulatory gamesmanship – particularly in the parallel fishery. There were a number of federally licensed vessels that would routinely surrender their FFP (federal fishing permit) in order to participate during the federal season but only in the parallel fishery – where these vessels could dodge the requirements for observer coverage, VMS, and license requirements. The NPFMC has taken action to discourage this activity in the p-cod fisheries in CGOA and WGOA, but that action will likely not be implemented until 2012. A few other vessels chose not to acquire the necessary federal licenses at all – and participated only in the parallel fishery and state-water fishery. These proposals would cause further concentration of harvest of p-cod inside of three miles in the WGOA where the distribution of harvest is disproportional to the actual biomass distribution of p-cod, which makes it a SSL concern, as p-cod is a prey species for Steller sea lions.

Steller sea lion issues: The intent of the Steller sea lion (SSL) management measures implemented in 2002 was to disperse harvest temporally and spatially particularly in the near shore area. However, contrary to that intent, the concentration of p-cod harvest inside of 3 miles in the WGOA has sharply increased since 2002. Prior to 2002, in the WGOA, the average percentage of harvest inside of three miles was **27% (1990-2001 average)**. After 2002, and the implementation of SSL mitigation measures, the proportion **increased to an average of 58% (2002-2008 average)**. Further increasing that concentration of p-cod harvest in the near shore area –as is suggested by these proposals - may trigger additional concerns and federal action regarding SSL management.

NMFS considers the near shore areas of high concern for SSLs and have implemented management measures in 2002 that were "*...intended to reduce fishing pressure in near shore critical habitat; reduce seasonal competition for prey during critical winter months; and disperse fisheries spatially (area) and temporally (time/season) to avoid local depletions of prey.*" (p. 11-6, NMFS 2008 Recovery Plan for SSL). These management measures will be re-evaluated this spring in the status quo Biological Opinion – which will examine the current fisheries management in light of the new Recovery Plan, population trends, and new relevant studies. Additional changes to harvest distribution – such as these proposals – will further complicate evaluation of spatial harvest distribution. Due to the already high proportion of harvest currently inside of 3 miles in the WGOA, these proposals may be the tipping point for additional ESA actions.

Reallocation not justified. These proposals will harm participants in the federal fishery with long term historical dependency on WGOA p-cod as well as undermining the intent of recent NPFMC actions to stabilize the GOA p-cod federal fisheries (fixed gear recency and GOA p-cod sector allocations). The Council action on GOA p-cod sector splits was largely based on catch history of each sector. This proposal would undermine those historical proportions and the intended stability of the Council action by doing a subsequent re-allocation that is without merit (as well as further confounding SSL issues).

The reallocation in this proposal would not be based on catch history – but would reallocate primarily to participants in the state-water pot fisheries – who are in fact the same participants in the federal pot fisheries. Since the state-water state-managed fishery only allows pot and jig gear, this proposal will reallocate from all other gear types to pot gear. In 2008, 97% of the catch in state waters in the South Alaska Peninsula area, came from participants who also fished the federal/parallel water fishery. In 2008, 42 of the 50 vessels that participated in the state water fishery also participated in the federal fishery. (Table 2-8, p. 27, *NPFMC Initial Review Draft, Nov 2009).* This proposal would also further move cod from observed fisheries to unobserved fisheries – a backwards step in fisheries management.

Proposer's rationale: For Proposal 108, the sole rationale that the proposers provide is that they would like more p-cod quota. No other rationale is provided other that they want more (i.e. a fish grab). The proposers do not address any allocation criteria or SSL issues.

The rationale in Proposal 109 focuses on the increasing harvest of large pot vessels with BSAI crab quota that are fishing in the federal fishery in the WGOA. However, this proposal is incorrect that it fails to acknowledge that these vessels (pot boats with BSAI crab quota) have already been restricted by the BSAI crab program as to the aggregate amount of allowable catch of groundfish (including p-cod) in the WGOA and CGOA – including in state-waters. These vessels are subject to a "crab sideboard" in the GOA and that sideboard limit has been in place since 2007. The aggregate harvest of these sideboarded vessels cannot increase and is capped at 9% of the federal TAC in WGOA – wherever caught.

Given that these proposals were written and submitted prior to the Council taking action on GOA p-cod sector splits, these proposals are speculative in nature as to how the NPFMC action would proceed. The Council action was largely based on catch history and these proposals would undermine the Council action as they are not based on catch history.

Thank you for your consideration, and we ask that the BOF take no action or oppose Proposals 108 and 109.

Gerry Merrigan

Alaska Longline Company
(formerly Prowler Fisheries)
Box 1989
Petersburg, Alaska 99833
(907) 772-4835

Table 3.–Pacific cod harvest, in millions of pounds, from Central and Western Gulf of Alaska Management areas, 1990-2008.

NMFS Area	Year	Federal Waters		State Waters				Discards at Sea
		Pounds	% of total	Pounds	% of total	Total	ABC	(pounds)
Central GOA	1990	79.8	87%	11.8	13%	91.6	131.0	0.6
	1991	81.2	81%	19.5	19%	100.8	106.5	0.5
	1992	73.1	82%	16.5	18%	89.6	85.4	0.5
	1993	60.3	84%	11.6	16%	71.9	77.5	0.7
	1994	50.3	80%	12.9	20%	63.2	68.9	0.8
	1995	72.8	77%	21.8	23%	94.6	100.7	0.8
	1996	71.9	81%	16.8	19%	88.7	94.6	3.2
	1997	76.6	76%	24.6	24%	101.2	113.2	1.8
	1998	72.6	74%	24.9	26%	97.5	108.2	0.4
	1999	71.0	68%	34.1	32%	105.1	117.2	0.2
	2000	56.3	72%	21.7	28%	78.0	96.0	0.5
	2001	50.0	78%	14.1	22%	64.1	85.2	0.8
	2002	42.4	70%	18.2	30%	60.6	69.8	1.1
	2003	42.0	68%	20.1	32%	62.1	64.0	1.0
	2004	47.3	66%	24.2	34%	71.4	78.9	0.5
	2005	38.9	62%	24.0	38%	62.9	73.0	0.2
	2006	37.2	63%	22.3	37%	59.5	83.5	0.1
	2007	43.5	65%	23.0	35%	66.6	83.5	0.4
	2008	45.2	64%	25.8	36%	71.0	83.6	1.2

SSL RPA MEASURES IMPLEMENTED

AVG. 22%

AVG. 35%

NMFS Area	Year	Federal Waters		State Waters				Discards at Sea
		Pounds	% of total	Pounds	% of total	Total	ABC	(pounds)
Western GOA	1990	72.2	85%	13.1	15%	85.3	65.5	0.7
	1991	71.9	94%	4.3	6%	76.2	56.7	0.3
	1992	59.7	82%	13.1	18%	72.9	51.8	0.7
	1993	37.9	95%	1.9	5%	39.8	41.3	0.2
	1994	24.9	77%	7.3	23%	32.2	36.7	0.1
	1995	35.7	80%	9.0	20%	44.7	44.2	0.2
	1996	35.3	73%	12.9	27%	48.2	41.6	0.3
	1997	47.3	71%	19.5	29%	66.9	62.9	0.4
	1998	40.0	69%	18.1	31%	58.0	60.1	0.1
	1999	39.7	65%	21.2	35%	60.9	65.1	0.0
	2000	33.7	55%	27.9	45%	61.6	60.6	0.1
	2001	23.0	54%	20.0	46%	43.0	53.8	0.0
	2002	26.3	55%	21.2	45%	47.5	49.5	0.1
	2003	17.5	40%	25.9	60%	43.5	45.4	0.1
	2004	17.1	38%	28.2	62%	45.3	49.8	0.0
	2005	16.5	43%	22.3	57%	38.8	46.1	0.1
	2006	11.2	29%	27.7	71%	39.0	59.2	0.1
	2007	15.8	42%	22.3	58%	38.1	59.2	0.1
	2008	21.6	50%	21.5	50%	43.1	57.2	0.1

SSL RPA MEASURES IMPLEMENTED

AVG. 27%

AVG. 58%

Notes: Weights are in whole pounds. Discards at sea are excluded from all but the "Discards at Sea" column.
GOA = Gulf of Alaska, ABC= Acceptable Biological Catch, NMFS = National Marine Fisheries Service.

FROM REPORT 09-55 "ANNUAL MANAGEMENT REPORT FOR GROUNDFISH FISHERIES IN KODIAK, CHIGNIK, AND SOUTH ALASKA PENINSULA MANAGEMENT AREAS, 2008" DECEMBER 2009 AOFIG

PO Box 921246
Dutch Harbor, Alaska 99692
907-581-5263
enigma@arctic.net

Jennifer L. Shockley

January 18, 2010

ALASKA DEPARTMENT OF FISH AND GAME
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Re: Proposal 111, Unalaska Bay Trawl Closure

Dear Board Members:

I am writing regarding Proposal 111, to close Unalaska Bay to trawling. I have lived in Unalaska for 20 years, and have fished in both subsistence and sport fisheries in Unalaska Bay for the last two decades. In the last four to five years I have noticed a substantial decrease in the numbers and size of fish being caught in Unalaska Bay, particularly halibut, cod and king salmon. I have also, in the last four to five years, noticed an increase in the number of small commercial trawlers and longliners that plying the waters in Unalaska Bay. There is no doubt in my mind that the decrease in fish stocks is directly attributable to the increase in commercial fishing pressure in the Bay.

Many of us that live in Unalaska rely on locally caught fish as a primary food source throughout the year. Most of us have only small skiffs meant for near-shore fishing, not the large, sea-going vessels used by commercial fisherman. We do not have the means to safely travel thirty or forty miles in order to find food to put on our table. For the commercial fisherman, Unalaska Bay is just one of many places they can fish. For Unalaska residents, it is the only place. I urge you to support the closure of Unalaska Bay to trawling.

Sincerely,

Jennifer L. Shockley

Bristol Bay Economic Development Corporation
P.O. Box 1464 • Dillingham, Alaska 99576 • (907) 842-4370 • Fax (907) 842-4336 • 1-800-478-4370

BBEDC

Alaska Board of Fisheries
BOF Comments, Board Support Section,
Alaska Dept. of Fish and Game,
P.O. Box 115526, Juneau, AK 99811-5526

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FAX TO: 907-465-6094 23 PAGES TO FOLLOW

Dear Chairman Webster and Board Members:

As the Board prepares for its Feb. 2-6 deliberations on the Alaska Peninsula/Aleutian Islands Finfish proposals, it will be helpful if the Board is familiar with numerous aspects of the early history of the salmon fishery on the North and South Peninsula (Area M).

Attached is a history of relevant information compiled during my tenure on the Board, covering the years from 1970 to 1997. This summary was extracted from ADF&G's Annual Management Reports.

Thank you, sincerely.

Robin Samuelsen, CEO & President

CHRONOLOGY OF THE SOUTH AND NORTH PENINSULA AREA M COMMERCIAL FISHERIES FROM 1970-1997 (ABSTRACTED FROM ADF&G's ANNUAL MANAGEMENT REPORTS)

By

Robin Samuelsen

1970 - The North Peninsula red runs exceeded 625,000 (just under the previous 10 year average of 650,000). 85% of the reds were caught in the Nelson Lagoon and Bear River sections. Only 45,000 reds were taken in the Cape Seniavin-Ilnik fishery.

1971 - The North Peninsula catch of 429,000 salmon slightly exceeded the 300-400,000 norm of the past ten seasons. The majority of the reds were taken at Bear River, Ilnik and Nelson Lagoon. The season can be best described as follows: In July, three dozen vessels of the South Unimak drift net fleet moved to Port Moller and fished from Nelson Lagoon to Ilnik. The remainder went to another fishery or switched to seine or set net gear and scattered about the South Peninsula and Northwestern Districts. Overall drift net gear has leveled at 15-30 units at Bear River and decreased slightly. All total about 110 drift net, 60 seiners, and 30 setnetters participated in the 1971 respectively. The majority of the North Peninsula catch was caught in the Bear River section. The management report also included a report on illegal catches - Bear River 19,4000 fish, South Peninsula 74,000 fish, and Balboa-Stepovak 91,700 fish by a total of 19 vessels. Bear River escapements had essentially halted, and the fishery was targeting on milling fish. **Editor's note: (was this the beginning of the interception of Bristol Bay Bound fish?).**

1972 - The North Peninsula sockeye catch was 179,500 (most of these fish were harvested in Sandy and Bear River). Nelson Lagoon's harvests were very poor. Three Hills and Urilia Bay produced a small amount, and no effort was expended for sockeye at Port Heiden. **Port Moller drift-net fleet ranged from 20-35 vessels through most of the season. Back then, standard depth of gillnets was 80-90 meshes. Now, more recently, most gillnets are 120-140 meshes deep with a few being 160-180 meshes deep. These deeper nets are more effective, and the fishermen are getting worthwhile catches of both sockeye and chums in the bottom 15 feet of their nets. Editors note: 180 meshes x 5.25 inches = 78.8 feet deep gillnets being used. Sea lions tend to tear the web of these nets.** The average price paid for sockeye was $1.30 per fish. Illegal fishing operations were as follows: 8,691 total fish were caught with 7 vessels, most of which were pink salmon.

1973 - For the first time salmon were weighed at the time of delivery and purchased by the pound. There was considerably more activity than usual in the fresh, frozen production of salmon in the Ilnik, Port Heiden and Cinder river sections this season. The North Peninsula sockeye catch was 339,600. The Bear and Sandy River systems produced the bulk of the sockeye harvest (67%), and the balance of the run was thinly distributed over the remainder of the North Peninsula. Average

price for sockeye was $ .46 per pound.

E.O.s issues by the department: Bear and Sandy Rivers were closed from the south marker of the King Salmon River to 3 miles north of Sandy River effective June 28- July 2. The limited closures were put in place to protect milling salmon while backing away from the rivers on big run out tides. Fleet effort was about normal as previous years. The Bear River drift fleet expanded slightly to 28-36 vessels (most of which were part of the 90 - 110 driftnetter fleet at South Unimak). E.O. no. 16 closed the Bear River section 1 mile offshore between King Salmon River and a point 3 miles north of Sandy River on June 28-July 2 to protect milling salmon during exceptionally low tides and enhance escapements.

The following regulatory changes were made by the Alaska Board of Fish: 5 AAC 09.320 (c) & (d) Weekly fishing periods in June in the Unimak and Southwestern districts reduced from 6:00 a.m. Saturdays to four 13-hour periods per week. **The purpose was to reduce the interception of migrant sockeyes (Bristol Bay origin) in the South Unimak June fishery.** It was also the Board's intent that the fleet not lose fishing time because of bad weather factors. 5 AAC 09.320 (f) weekly fishing periods in the Southeastern districts reduced during June from 7- days a week to 12:01 a.m. Monday to 6:00 p.m. Thursday. The purpose was to reduce the interception of migrant sockeyes in the Popof Head (Shumagin Islands) June fishery. No intent was expressed to allow compensatory fishing time lost due to stormy weather. 5AAC 09.310 (c) (d) & (f) Season opening in the Southeastern districts changed from June 1 to June 11. This, with other changes, was part of a program to reduce the interception of migrant sockeyes in the June cape fisheries on the South Peninsula.

1974 - Salmon catches on the Alaska Peninsula reflected a very significant degree of illegal fishing and because of the exceptionally weak runs; these illegal catches had a significant adverse impact on escapement.
Illegal catches reflected are as follows: 16.2% of the total South Peninsula catch was illegally caught fish, and 5.2% of the North Peninsula total catch was also illegally caught fish. The department stated a total closure of the South Peninsula salmon fisheries in July and August for two seasons should be seriously considered as a means to attain enough escapement.

This was a year of a major fishermen's strike in the Peninsula fisheries. The North Peninsula fishery commenced on June 10 with a few vessels participating. On June 24, the strike was over and the main fishing effort commenced. **The Ilnik "outside" opening was delayed to July 7 to allow passage of Northeasterly migrant salmon which became apparent in the Three Hills fishery the first week in July.** In 1974, ADF&G staff recommended to the Alaska Board of Fish that starting in 1975, weekly fishing periods on the North Peninsula should be reduced from 5 to 4 days. **This recommendation would promote local escapements and reduce the take of migrant fish.** The North Peninsula catch was 231,600 sockeye. The Bear and Sandy River sections, along with a real strong showing of fish in the Three Hill section, make up the bulk of the North Peninsula catch. **The Three Hills section catch was exceptionally high because sockeye have appeared to be mixed fish bound for up and down the coast. This year the fish appear to**

have been predominately bound for northeasterly, Bristol Bay. Immature salmon are known to pass through the Shumagins in significant numbers some years and those wrapped by seines, gill in the seine web with a 95-100% mortality rate. These immature salmon usually appear in the first week of July and continue through the third week.

During the 1974 season, it became evident the fleet in the Three Hills section was taking above normal catches of red salmon. The fish were noticeably larger than the reds taken at Bear River and it was assumed they were fish headed for Bristol Bay. The opening in the outside waters of Ilnik section was delayed to protect these migrating fish. Peak catches in the Three Hills section correspond directly to the amount of effort and loosely follow the peaks and ebbs of the Bristol Bay runs. 14 to 15 drift net vessels participated in the Three Hills fishery. Currently, the Three Hills section is totally conducted by the fleet tendered out of Port Moller, and the Three Hills section effort is not essential to utilization of these runs. But if a strong run hit Ilnik or Port Heiden, an influx of effort from Port Moller easily could occur and that could present problems. **In summary, it appears a portion of the salmon migrating to the North Peninsula and Bristol Bay hit on shore near Cape Seniavin. Based on the timing of the peak catches made in the Three Hills section, in recent years these fish could conceivably be part of the North Peninsula or Bristol Bay runs.** Average price per pound paid for sockeye was $.55.6.

Emergency order #17: Opening of the outside waters of the Ilnik section was delayed to July 8 to protect apparent easterly migrant reds. 28,000 reds were taken in the Three Hills section the prior week and it was apparent at least some of these reds were migrating to the northeast. **Editors note: ADF&G knew in 1974 that a new intercept fishery was developing on the North Peninsula.** Also in 1974, sockeye runs to Bristol Bay were forecasted to be real weak, and little or no commercial harvest in Bristol Bay was expected. **The Board, therefore, desired that a harvest of migrant chums be allowed, but only to the extent that this was possible without harvesting significant numbers of migrant sockeye.**

1975 - In the first of July (or when the South Unimak harvest is attained) 35 or so driftnet vessels moved from the South Unimak fishery to Port Moller and fished from Nelson Lagoon to Ilnik. Salmon taken in the Three Hills section appear to be bound variously for Bristol Bay and local systems from Cape Seniavin to Cinder River, and to Bear and Sandy Rivers. The North Peninsula sockeye catch total was 234,000. The North Peninsula salmon fishery commenced on June 9 targeting on kings at Port Heiden, with the main effort getting underway at Bear River and Nelson Lagoon commencing June 30. **The Three Hills section is located immediately northeast of Cape Seniavin on the north side of the Alaska Peninsula. Generally 14 to 15 driftnetters from Port Moller fish this section in early July with sockeye catches generally ranging 10-40,000 per annum (8,700 in 1975 by 2 to 10 driftnetters).** It appears that sockeyes taken in this section vary from season to season as to **their terminal destinations which include Bristol Bay**, Bear, Sandy, Port Heiden, and Cinder Rivers. The Three Hills section is now managed on the basis of apparent run strengthens to the nearby Ilnik and Port Heiden systems. In 1975, an attempt by the superintendent at Port Moller to increase the Port Moller driftnet fleet by six (6) vessels was met with stiff opposition by the Port Moller and Nelson Lagoon fishermen. This fleet had been cut back

(from over 65 vessels to approximately 25 vessels) in 1964 by an agreement between the two competing processors. Subsequently the fleet has been slowly increased to 30-35 driftnetters. The fishermen know that a larger fleet will result in fewer fish per boat because the department will not sacrifice escapement to support the fleet. The proposed six vessels did not join the Port Moller Fleet. Price paid for sockeye was $.40 per pound. In 1975 (as in 1974) there were no Dept. of Public Safety Protection personnel on duty on the Peninsula except for a very brief patrol associated with the one day opening on August 22. Three violations were documented and 10 seiners were reportedly spooked out of closed waters. Department of Fish and Game Commissioner James Brooks curtailed the Alaska Peninsula intercept fisheries based on the conservation problems in Bristol Bay. The cape fisheries, or mixed stock fisheries on the Alaska Peninsula, are ranked in the following order of importance: 1. South Unimak 2. Shumagins cape fisheries 3. Three Hills fishery at Cape Seniavin on the North Peninsula. **The department stated that salmon taken in the Three Hills section appear to be bound for Bristol Bay as well as various local systems from Cape Seniavin to Cinder River.**

E.O.s No. 11 & 13: Port Heiden, Ilnik and Three Hills section closed July 2 through July 20. E.O. No. 16: Bear River section closed July 8 - 14. **This is the first year the Alaska Board of Fisheries set a quota for sockeye bound for Bristol Bay - 1.5 % for Shumagin Island, and 6.8 % for the South Unimak.** This quota is based on the preseason Bristol Bay salmon forecast.

1976 - The North Peninsula catch totaled 746,000 sockeye. The average catch from 1960-1975 was 272,000. The North Peninsula fishery essentially got underway June 7 at Nelson Lagoon and Port Moller. The Bear and Sandy Rivers runs came in strong and the fishery was open continuously from June 28 to July 15 and July 19 to 29. The overall catch at Bear and Sandy Rivers totaled 311,000 sockeye as compared to the 160,000 average catch from 1960-1975.

The Three Hills section (above Cape Seniavin) was conducted on a 4 days a week fishery. The catch totaled a phenomenal 220,000 sockeye as compared to the 22,000 average from 1960-1975. Editor's Note: "Gold" was struck in the Three Hills section for the first time this year, although the Ilnik River system were below escapement projections. Vessel effort was still in the normal range, as in previous years. CFEC permits: Purse Seine - 112, Drift Net - 148, and Set Net - 106. Average price paid for sockeye was $.53.9 per pound. Fish and Wildlife Protection and Public Safety renewed enforcement operations on the Peninsula salmon fisheries. "Poachers" were nervous, and approximately 1,000 fish were dumped in the closed waters of Volcano Bay, and another 500 in Dushkin Lagoon. The Alaska Board of Fish established a catch limit of 350,000 sockeye in the South Unimak June fishery, and 75,000 sockeye salmon in the Shumagin Islands June fishery. **Also in 1976, a new management plan was adopted for the North Peninsula salmon fisheries. This plan calls for the fisheries to be managed on the basis of catch/effort indicators, and relative abundance of fish as determined by surveys and escapements.**

BOARD DIRECTIVE TO STAFF ON THE JUNE, 1976 ALASKA PENINSULA SALMON FISHERY

In consideration of the forecasted return to the Bristol Bay system, the Alaska Board of Fisheries hereby directs the department of Fish and Game to manage the South Unimak and Shumagin Island Fisheries in such a manner as to allow no more than a catch of 350,000 red salmon at South unimak and 75,000 red salmon at Shumagin Islands.

This harvest level is applicable during the month of June only and the fishery should be managed in such a manner as to distribute the catch. Weekly fishing periods in the order of two to three per week should accomplish this. Editors Note: Windows were a part of this fishery early on and the Board of Fish had concerns that continous fishing by the South Peninsula fishermen could in fact harm terminal rivers in Bristol Bay.

1977 - The North Peninsula catch was 471,000 sockeye. Sockeye escapements were relatively weak westerly from the Nelson Lagoon systems and easterly of Ilnik. **This year a major portion (approximately 20 vessels) of the Port Moller driftnet fleet departed South Unimak during a 3-day closed period following the June 20 fishery and returned north to commence fishing at Bear River on June 23. This was unusual in that this fleet normally remains thru the entire South Unimak fishery, and enters the Bear River fishery in the last few days in June or first few days of**
July. Bristol Bay forecasts estimate a specific number of returning red salmon, and the figures are used in the Peninsula Management Plan. However, the Bristol Bay forecast should have included an additional 1-2% for minor systems. Therefore, the sockeye catch limit at South Unimak was raised from 187,000 as per the management plan to 195,000 of the catch at South Unimak. **The season chum harvests totaled only 32 % of the catch.**

Judging from subsequent developments in local chum runs, it is possible the June migrant chums were behind schedule. **The Bear River fishery commenced June 22 with the early return of the South Unimak driftnet fleet. Ultimately, 35 driftnetters participated in the Bear River and Three Hills fishery. The Bear and Sandy Rivers produced 269,000 sockeye, and the catch was 100,000 over the 1960-1976 average. Nelson Lagoon's sockeye catch totaled 229,000 sockeye, compared to a respective average of 121,000. 14 vessels fished for four days a week. The Three Hills/Ilnik fishery produced another strong sockeye catch of 98,000 compared to a 45,000 average from 1960 to 1976.** Fleet size (per CFEC) was 127 purse seiners, 167 drifters and 120 set netters. Protection was again present in all fisheries. However, this season three separate incidents occurred in which fisherman fired upon stream-guards in plain sight and upon "stake out" crews. The shootings were the most flagrant on the Peninsula over the past 10-15 years.

The Alaska Board of Fish established sockeye guideline harvest levels for the South Unimak and Shumagin Islands June interception fisheries, both of which are based on the percentage of the projected Bristol Bay inshore sockeye catch as published by the Department of
Fish and Game. **The maximum percentage allowed during 1977 for the South Unimak fishery was 6.8 %, and for the Shumagin Islands fishery, it was 1.5%.** The Ilnik section and "outside" waters remained closed until July 13. 5 AAC 09.331 (a) (3) - Maximum depth of driftnets in

Nelson Lagoon increased from 29 meshes to 38 meshes after August 15. This was proposed by the Nelson Lagoon Fish and Game Advisory Committee and supported by the management staff. Sockeye salmon price was $.63 per pound.

E.O.s issued were 4, 10, 12, 14, 17, 38, and 45. The Nelson Lagoon's section of 4-days per week fishing schedule was extended for additional days on June 10 and June 26, and suspended on June 22, 23 and 30. The fishery was then reopened continuously from noon July 2 through August 4 and from August 8 through August 19. E.O. 4, 14, 18, and 20: The Bear River fishery was opened continuously July 4 -14. The Bear River section catch by 9 to 28 drifters totaled 269,000 sockeye. **E.O's no. 17, 23: Ilnik section "outside" waters remained closed until July 13 were then opened until July 15 on a 4 days per week basis until September 30. Approximate season catches in the Ilnik-Three Hills section by 6 -12 vessels was 98,000 sockeye.**

1978 - The North Peninsula red salmon runs were exceptionally and surprisingly strong at 2.23 million, as compared to an 18 year average of 0.7 million, and 900,000 reds were harvested. The North Peninsula red salmon fisheries were concentrated at Bear River and Nelson Lagoon. 30 to 40 gillnet vessels (briefly 70) participated. At Cape Seniavin-Three Hills-Ilnik, the 32,000 red catch was an unexceptional average and escapement was below average. **It was noted that the fish averaged 5.9 pounds in weight, and these reds were a bit large and to likely be Bristol Bay migrants.**

The fishing effort was: purse seines - 50, drift gillnet - 86, set gillnet - 28. Average price paid per bound for sockeye $.75.9. Questions have arisen over the past year concerning the outer boundaries of the South Unimak fishery. The staff assisted in establishing that all waters northerly of a line from Cape Lutke to the northwest side of Sanak Island be recognized as a historical salmon net fishing area. The alternative was to be a federally-enforced 3-mile limit extending primarily from the nearest shoreline. The parent year for North Peninsula fish was 1973, and sockeye escapements on the North Peninsula totaled a very weak 168,000.
This equals only to half the average and one-third of the escapement goal, and is the weakest sockeye escapement since before 1960. Consequently, the entire North Peninsula sockeye run was expected to be weak. Three Hills section escapement were weak and fishing in this district had to be curtailed. In the Three Hills section, 2-10 vessels took 25,000 sockeye. **Editors Note: although not meeting escapement goals for the North Peninsula, 900,000 sockeye were caught in this district.**

In 1978, a remarkable catch of coho's (40,000), (previous year averages's were 9,600 per year) was taken in the Shumagin Islands cape fisheries from mid-July into early August. These were obvious migrant, virtually none were taken elsewhere but on the capes.

1979 - The South Unimak and Shumagin Islands fisheries were again managed with limits set by the Board of Fisheries. The South Unimak limit was 900,000 sockeye, and the Shumagin limit was 200,000 sockeye. The South Unimak catch totaled only 75 % of the limit, despite the fishery being open the entire month of June, and included three (3) bad weather make-up days in July. The bulk of the catch was taken at Cape Lutke. The South Unimak gillnetters had a disappointing season due to

the fish running too deep and/or too far off shore. The Shumagin Islands June fishery took 85 % of the limit and probably would have reached the limit had not large numbers of immature salmon caused closure of the fishery during late June. Average price paid per sockeye $ 1.11 a pound.

An unusual (another record) number of coho were taken along the South Peninsula (primarily Popof Head) during July and early August. Approximately 340,000 migrant coho were taken. Their destination is unknown. No escapement information abailable.

The North Peninsula produced an all time record sockeye catch: Nelson Lagoon - 320,000 sockeye, Port Moller - 32,052 sockeye, Bear River - 1,279,645 sockeye, and Sandy River - 2,685 sockeye, Three Hills - 140,390 sockeye, and Ilnik - 53,972 sockeye. The department conducted age composition analysis of the sockeye catch and stated this catch "does not include estimate of fish intercepted on high seas, along South Peninsula and the Three Hills - Ilnik areas." It includes all red catches between Harbor Point and Cape Seniavin.

E.O. 11 issued - Due to extremely strong red salmon escapements, the Nelson Lagoon, Herendeen-Moller Bay and Bear River sections were open to continuous fishing effective 12:01 a.m. June 27. Several Kodiak area fishermen expressed interest in fishing herring in Herendeen and Moller Bays on their way to the Togiak fishery. No herring deliveries were reported during 1979 from the North Peninsula.

1980 - The Harbor Point to Cape Seniavin sockeye catch was 781,457. The Nelson Lagoon sockeye catch was 318,526. Three Hills and Ilnik sections catches were 280,916 sockeye. Fishing vessels peaked at 25 for the Nelson Lagoon fishery. E.O. #1 issued: Allowed a seven day per week fishery for the rest of the season in the Bear River, Three Hills sections effective 12:01 a.m. July 1. 2. Allow a seven day per week fishery effective 12:01 a.m. July 1 through August 8 in the Nelson Lagoon section. 12. Open the entire Ilnik section to commercial salmon fishing, seven days per week effective July 2. **Editors Note: In 1979 & 1980, the Three Hills/Ilnik commercial fisheries started to take off, and at the same time the fleet in Bristol Bay started calling for action on the "NEW INTERCEPT FISHERY OF THE NORTH PENINSULA."**

Remember this fishery up to this point was a 4-days a week fishery from 9:00 a.m. Monday to 9:00 a.m. Thursday.

E.O. #5 issued: Extended weekly fishing periods to 12:00 midnight Friday each week in the Port Heiden and Nelson Lagoon sections, effective June 19. E. O. # 1: Allowed a 7-days per week fishery for the rest of the season in the Bear River, Three Hills, and Herendeen-Moller Bay sections, effective 12:01 a.m. July 1. E.O. # 2 issued: Allowed a seven day per week fishery effective 12:01 a.m. July 1 through August 8 in the Nelson Lagoon section. E. O. # 12 issued: Opened the entire Ilnik section to commercial salmon fishing, seven days per week effective July 2.

1981 - The North Peninsula sockeye catch was again exceptionally strong with a catch of 1,844,000. Sockeye were selling at $1.00 a pound. Port Moller Bay to Cape Seniavin produced a

sockeye catch of 1,345,569. In the Three Hills and Ilnik sections, 68,893 sockeye were caught with an average of 25 vessels participating.
E.O.s issued allowed continuous commercial salmon fishing for the remainder of the season in the Bear River section starting July 2, 9:00 p.m. **M-21 Allowed continuous commercial salmon fishing in the Ilnik and Three Hills section.** Approximately 61 seiners, 90 drift gillnetters and 10 set netters participated in the South Unimak and Shumagin Islands June fisheries. 26 vessels participated in the Nelson Lagoon fisheries. E.O.s issued: M-8 Extended current weekly salmon fishing periods until 9:00 a.m. Friday June 12 in the Nelson Lagoon, Bear River and Herendeen-Moller Bay. M-13 Extended current weekly salmon fishing periods until 9:00 a.m. Friday June 19 in the Nelson Lagoon, Bear River, and Herendeen-Moller Bay sections. M-17 Allowed continuous commercial salmon fishing for the remainder of the season in the Bear River an Herendeen-Moller Bay sections. Continuous commercial salmon fishing was allowed in the Nelson Lagoon section until 9:00 a.m. July 2. M-20 Extended the Nelson Lagoon section to continuous commercial salmon fishing through 9:00 a.m. Friday July 10. **M-21 Allowed continuous commercial salmon fishing in the Ilnik, Three Hills, and Nelson Lagoon sections through August 14.**

Coho runs appeared strong everywhere except in the Southeastern district. No escapement information available.

1982 - The Department of Public Safety's vessel "Trooper" patrolled the North Peninsula during early July. The South Peninsula June chum catches were 160,00 and 934,000 for the Shumagin Islands and South Unimak fisheries. Chum returns in Western Alaska were good but down from the previous two years. The fall Yukon River chum return was a failure. Consequently considerable concern was expressed by residents of the AYK Region, and a proposal was made to limit the June South Peninsula chum interception to no more than 264,500 fish. The proposal was rejected except that wording in the management plan was changed to express concern for chum interception. The Board of Fisheries also instructed the Department to do more research in determining the origin of the June chums.
Vessels that participated in the South Unimak and Shumagin Islands June fisheries were as follows: seine 75, drift gillnet 130 and 15 set gillnetters. The North Peninsula sockeye catch was again very strong. Sockeye price per pound was $.85. **The sockeye catches for the North Peninsula were as follows: Bear River - 900,667, Sandy River - 85,818, Three Hills/Ilnik section - 142,506 with a total catch of 1,435,280. Nelson Lagoon had 31 vessel participate.**

Fall coho runs along the South Peninsula appeared to be mediocre. Shumagin Island coho catch was 207,273, no escapement data available.

This was also the first year a commercial roe herring catch was reported on the North Peninsula. Between May 31 and June 12, three purse seine vessels harvested a total of 505 tons of roe herring. Roe content ranged from 8% to 12% with a average price of $500.00 per ton.

E.O.s issued: M-8 Allowed continuous salmon fishing in the Bear River and Herendeen-Moller Bay sections until 6:00 p.m. June 24, and the Nelson Lagoon section until 9:00 p.m. June 24 Thursday.

Effective Thursday June 17. M-9 Allowed continuous commercial salmon fishing in the Bear River and Herendeen-Moller Bay sections during the remainder of the fishing season. M-17 Extended commercial salmon fishing time in the Port Heiden and Ilnik sections continuously until 6:00 p.m. August 12. Allowed continuous fishing time in the Three Hills section through September 30. This emergency order was effective July 9.

1983 - Approximately 92 purse seiners, 139 drift gillnetters and 41 set gillnetters fished salmon along the South Peninsula during June. This effort was a drastic increase over 1979 when there were 33 seiners, 100 driftnetters, and 22 setnetters. In 1982, there were 85 seiners, 126 driftnetters, and 33 setnetters. **The primary factor responsible for the large gear increase was CFEC issuing separate permits for each gear group when limited entry was created.** All salmon gear permits owned by an individual should have been placed on one card. 1983 produced an large chum catch. The reason for such abnormally large numbers of chums is not so obvious. Had as much fishing time been allowed during 1983, as had been allowed during each of the previous four years, the chum catch likely would have been 2-3 million chums for both South Unimak and Shumagin Islands.

Massive growth in fleet size, because limited entry permits are being fully utilized. Coho catch was 92,000 in the shumagin Islands, no escapement data available.

The North Peninsula sockeye salmon catch was 2,009,000, setting a new North Peninsula harvest record. Average price paid per pound of sockeye was $1.09.8. Catch breakdown per district were as such: Bear River section - 1,126,208, Three Hill/Ilnik section - 739,613 sockeye. **E.O.s issued: M-14 extended fishing in the Three Hills section until July 7, and opened the Ilnik section on July 2 and allowed fishing from July 2 to July 7.** M-16 Extended fishing time until 12:00 p.m. midnight Friday July 8, in the Nelson Lagoon, Ilnik and Three Hills sections. M-17 Extended fishing time in the Ilnik and Three Hills sections until 12:00 p.m. midnight Saturday July 19.

The Alaska Board of Fish adopted a management plan to decrease the catch of chums, and imposed a limit of no more than 96 hours of fishing per week. No more than 72 hours may be allowed consecutively, with the preference being no more than 48 hours, with at least 24 hour breaks between fishing periods. The commercial herring sac roe fishery on the North Peninsula occurred only in the Port Moller/Herendeen Bay area. A total of 637 tons was harvested by 16 seiners and 3 gillnetters during the period May 9 through May 29. The average price per ton was $ 500.00 for 10 % roe recovery.

1984 - Scale analysis was done in 1983 by the department in the Shumagan Island-South Unimak to show who's chums were being caught in these commercial fisheries. Bristol Bay, Kuskokwim and Yukon area chums were combined in the catches. 1984 was the first time additional restrictions were placed on the South Unimak and Shumagin Islands June fisheries in an attempt to spread out the incidental catch of chums. No more than 96 hours fishing per week would be allowed and no more than 72 (the board indicated that it preferred no more than 48 hours) consecutive fishing hours would be allowed without at least a 24 hour closure. Due to extremely high daily sockeye catch

rates, these additional restrictions were not a factor during 1984. **The catching power of the fishing fleet continued to increase due to additional permits being used. More and more permit holders were transferring a permit for one type of gear while using different gear and permits. This problem could have been solved easily when limited entry was created but there appears to be no remedy at the present.** Consequently, the purse seine gear effort in the Shumagins and at South Unimak rose to approximately 104 during 1984, as compared to 33 in 1979. **Editors Note: This calculates to about a 310 % increase of effort in 5 years.** The drift gill net gear increased from 100 in 1979 to 143 during 1984 in the June South Unimak fishery, **a 50% increase**. The South Unimak-Shumagins June fishery caught 1,338,000 sockeye, and an incidental chum salmon catch of 337,000. Average price of sockeye per pound was $ 1.20.7.

The catching power of the fishing fleet continued to increase due to additional permits being used. Coho catch was 309,000 in the Shumagin Islands and 51,719 in the Southwestern district. No escapement data available.

The North Peninsula sockeye catch was largest on record with 1,735,000 sockeye caught. The catch breakdown for the North Peninsula fisheries was as follows: Nelson Lagoon-118,756, Bear River-542,374, Sandy River-17,713, **Three Hills- 333,832, Ilnik-409,883 sockeye.**

E.O.s issued: 4-f-m-16 - this emergency order opens the commercial salmon fishing season in that portion of the Ilnik section located outside Ilnik Lagoon at 12:00 a.m. noon July 3rd, 36 hours earlier than the originally scheduled opening on July 5. **Justification: The escapement of sockeye salmon into the Ilnik system is presently estimated to be at least 20-30,000. This is approximately the level estimated at this time during previous seasons when the desired escapement level of 35 to 70,000 had been exceeded. Fishing in Ilnik Lagoon to date has not been an effective method in harvesting the surplus due to plant material in the water and light effort.**

An earlier fishery on the outside of Ilnik Lagoon is needed to enable the fleet to adequately harvest the resource. E.O.17 - close Bear River section. E.O.19 - Nelson Lagoon continuous fishing from July 9 to August 3.

E.O. 21- allow continuous fishing from July 11-20 on for all North Peninsula districts. E.O. 26- allow continuous fishing July 21-27 in the Three Hills, Ilnik and Bear River sections. The North Peninsula herring fishery had 19 seine vessels and one gillnet participate. They took 431 tons at $550.00 a ton for 10% recovery. This fishery is in the Port Moller/ Herendeen Bay area. The North Peninsula sac roe ex-vessel value was $125,000.00 for ten vessels that participated, and the Dutch Harbor food and bait ex-vessel value was $749,000, with nine seiners harvesting the herring.

1985 - Beginning in 1985, additional restrictions were placed on the South Unimak and Shumagin Islands June fisheries in an attempt to spread out the incidental catch of chum salmon. It is anticipated that both fall Yukon and Kuskokwim chum stocks returns will be at low levels during the

next 2 or 3 years. It is questionable how effective curtailment of the South Peninsula interceptions will be in solving problems caused by in river fisheries. Tagging and scale analysis indicate the South Peninsula June fisheries intercept chums are originally from a wide variety of areas. This situation has become quite emotional. The South Unimak- Shumagins totaled. 1,862,000 sockeye and 479,000 chums. The average price paid for sockeye was $ .90.9.

115,659 coho were taken in the Shumagin Islands section and 40,101 in the Southwestern district, no escapement data available except for stream surveys which showed very little coho escapement.

The North Peninsula again set a new catch record for sockeye at 2.6 million. There were reports of illegal fishing offshore and in the area above STROGONOF Point. Consequently at least a small amount of the North Peninsula sockeye catch were not destined for local streams. It is felt that most, if not all of the Three Hills-Ilnik sections legal catch is produced by local streams, mainly Bear River. The North Peninsula sockeye catch per river system is as follows: Nelson Lagoon section - 706,346, Bear River - 567,377, Sandy River - 88,673, Three Hills section - 469,267, and Ilnik - 508,887. Vessels participating in Nelson Lagoon fishery were up to 31 vessels.

E.O.s issued: E.O. 4-18 extends commercial salmon fishing time June 16-22 in the Nelson Lagoon section. E.O. 21- allows continuous commercial salmon fishing in the Nelson Lagoon section June 17-27. E.O. 24 - extends commercial salmon fishing in the Three Hills, Bear River, and Nelson Lagoon. E.O. 28 - extends fishing time in Bear River, Three Hills and Ilnik sections until July 6. E.O. 31- extends commercial fishing time in the Bear River, Three Hills, Ilnik and Moller Bay sections.

The North Peninsula herring fishery in Port Moller/Herendeen Bay harvested 716 tons. Thirteen seiners and two gillnet vessels participated. The price per ton was $ 500.00 for 10 % recovery. The Dutch harbor food and bait herring fishery harvested 3,200 m.t. with a harvest ceiling set by the Board of fish. These herring are taken by purse seine using large 250 fathoms long and approximately 25-35 fathoms deep seines.

The ex-vessel value for herring were as follows: North Peninsula sac roe - $370,000.00, Dutch Harbor food and bait - $563,000.00.

1986 - The Shumagins and South Unimak sockeye catches were 474,000 sockeye and 351,000 chums. The 1986 season was the first year that a chum salmon limit had been placed on the South Unimak and Shumagin Islands fisheries. It proved that it's not feasible to catch the target species (sockeye) quota if there is also a substantially low quota on a numerous incidental species (chums).

Coho catch in the Shumagin Islands section was 201,519 and 28,027 in the Southwestern district. No escapement data available except for stream surveys which showed very little coho escapement.

The North Peninsula sockeye salmon catch was the second highest on record. The catch of 2,464,000 sockeye was second to the 1985 catch of 2,601,000. Nelson Lagoon sockeye run was a disappointment. At Urilia Bay, fishing effort for sockeye has greatly increased after the record 1984 run. During 1986, effort was intense in the small terminal fishing area, consisting of hand purse seine, drift gillnet, and set gillnet gear. Due to an excellent enforcement program by the Alaska Department of Public Safety in the Port Moller-Port Heiden vicinity, it was feasible to keep the Ilnik section closed during the weekends, while extending fishing time in Three Hills and Bear River sections to harvest Bear River sockeye. **There is no doubt that Ilnik sockeye significantly contribute to the fishery in the Ilnik section. THERE HAS BEEN A TENDENCY FOR THE FLEET TO CONCENTRATE MORE IN THE**

THREE HILLS AND ILNIK SECTIONS THAN IN THE BEAR RIVER SECTION, DURING RECENT YEARS. FISHING WELL TO THE EAST OF BEAR RIVER, BASICALLY NEAR THE CLOSURE LINE (WHICH IS EITHER CAPE SENIAVIN, THREE HILLS OR STROGONOF POINT), ENABLES FISHERMEN TO CATCH THE FISH AS THEY ARRIVE IN THE OPEN AREA. CONSEQUENTLY FISHING IS OFTEN POOR CLOSE TO THE TERMINAL AREA. During 1973 through 1983, an average of 19% of the Port Moller to STROGONOF Point sockeye catch was caught east of Cape Seniavin. During 1984 through 1986, an annual average of 54% of the Port Moller to Strogonof Point catch was taken east of Cape Seniavin.

DURING 1985, THERE ALLEGEDLY WAS A CONSIDERABLE AMOUNT OF ILLEGAL FISHING BOTH OFFSHORE (FEDERAL LAW PROHIBITS FISHING SALMON WITH NETS BEYOND THREE MILES) AND EAST OF STROGONOF POINT. This caused a considerable outcry from both Alaska Peninsula area and Bristol Bay area fisherman for more enforcement. In 1986, the vessel "Wolstad" (a Department of Public Safety vessel) patrolled this area and the fishery was better managed. HOWEVER, SOME BRISTOL BAY FISHERMEN CHARGE THAT AREA M FISHERMEN INTERCEPTING BRISTOL BAY DESTINED SOCKEYE ARE LEGALLY CAUGHT IN THE THREE HILLS AND ILNIK SECTIONS. The salmon gear on the South side of Alaska Peninsula area during June 1986 was: purse seine - 102, drift gill net - 153, and set gill net - 50. **The sockeye catch was as follows: Bear River section - 938,177, Three Hills - 588,501, and Ilnik - 560,339.** Average price paid per pound for sockeye $ 1.40.

E.O.s issued: E.O. 16 - continuous fishing in the Nelson Lagoon until June 26. E.O. 20 - more fishing time in Bear River section. The E.O. extends fishing time in Three Hills , Bear and Moller River sections until June 28. E.O. 24 - extends fishing time in Three Hills, Bear and Moller Bay sections until June 28. The E.O. allows continuous fishing until June 30 in Three Hills, Bear River, and Moller Bay, this also includes Ilnik. E.O. extend fishing time in the Bear River, Three Hills and Moller Bay sections until July 10. The ex-vessel estimated value of the herring fisheries were as follows: North Peninsula sac-roe - $489,000.00, Eastern Aleutians
(Dutch Harbor) food and bait - $634,000.00. The North Peninsula/Moller herring fishery had sixty-

one purse seine vessels participating.

1987 - In the June South Unimak and Shumagin Island fisheries in 1986, the fishery had a 400,000 chum cap was in place. Also in the fall of 1986, three Board of Fish members resigned at the Board of Fish meeting. A tagging program was carried out during 1987 indicating that chums go to a variety of places after passing the South Peninsula in June. The Yukon River fall contributions was small during this year. Details of the study will be printed in a later Alaska Department of Fish and Game publication. The sockeye catch in the South Unimak-Shumagin Island June fishery was 1,107,000 sockeye and 470,000 chums.

South Peninsula coho harvest was 224,000. Most of the catch was taken during July and August when pink and chum salmon were the target species. The September coho catch was 23,000. Escapement information was very incomplete.

1988 The North Peninsula sockeye salmon catch was 1.2 million (lowest since 1978). During the fall season, 17 Area T vessels in addition to the local Port Heiden fleet fished the overlap area off Port Heiden down to Three Hills. The Bear River section west of Sandy River was closed effective July 3 until July 13. The reason was to protect fish that gathered in the terminal area during the weekend closures until adequate escapement counts were achieved, but still allowed the fleet to work on fish coming into the area. The Ilnik section was not extended because of poor sockeye escapement estimated at 17,400. **The Ilnik section is receiving more fishing pressure. The set gillnet fishery in the lagoon is expanding with effort mainly targeted on Unangashak River stocks. THE NUMBER OF DRIFTNETTERS FISHING OUTSIDE THE SEAL ISLANDS IS INCREASING AND MAY DRASTICALLY INCREASE DURING THE FALL IF LARGE NUMBERS OF AREA T FISHERMAN MOVE INTO THE ILNIK SECTION.** The price paid per pound of sockeye salmon was $1.64.7.

The Dutch Harbor food and bait herring fishery has an harvest of 3,200 m.t., and a limited harvest which has been in effect since 1983. The ex-vessel estimated value was as follows: North Peninsula sac-roe - $ 350,000.00 and Eastern Aleutians (Dutch Harbor food and bait) - $750,000.00. The North Peninsula/Moller herring fishery had 40 purse seine vessels participate in 1987.

1988 - During the spring Board of Fish meeting, a 500,000 chum cap was placed on the June South Unimak- Shumagin Island fisheries. In 1988, the South Unimak sockeye harvest was reduced by approximately 669,000 fish by the 500,000 chum cap.
This reduction is in addition to the estimated reduction of 117,000 sockeye that would have been caused by other restrictions (hours fished). The Shumagin fishery harvested its 1988 sockeye allocation.

Shumagin Island coho catch was 351,362 and the Southwestern catch was 84,980 an all time record of 506,000. Coho escapement information is very incomplete, but based on available information was probably in the 50,000 to 100,000 range. In streams where coho counts are not available, estimates are based on streams where data exists. The factors

contributing to the high incidental catches of sockeye and coho during July were: 1. A very high abundance of both sockeye and coho along the South Peninsula. 2. Prior to 1986 very little fishing effort was evident on the west side of Unga Island.

The North Peninsula catch for 1988 was 1,528,000 sockeye. The Ilnik section at Strogonof Point harvested 487,014 sockeye. Sandy and Bear Rivers had a catch of 444,016, and Three Hills section's catch was 258,983. The Strogonof Point fishery is becoming a source of controversy as Area T fishermen feel many of the fish are destined for Bristol Bay area spawning grounds. A stock separation study (using scale pattern analysis) is being done for the first time, however the 1988 results won't be available for at least several months. The average price paid for sockeye salmon was $ 2.37 a pound.

E.O.s issued: 4-f-m-12 extends fishing in the Ilnik section June 12-18. E.O. 23 closed the commercial salmon fishing season in that portion of Bear River section located between a point 2,000 yards northeast of Sandy River and a point 1,000 yards southwest of King Salmon River. Justification: The Bear River sockeye escapement is only 8,000. Closing the area from Sandy River to King Salmon River will protect the fish in the terminal area until an adequate number enter the river while allowing the fleet to harvest incoming fish. E.O. 24 June 28, reopens commercial salmon season between King Salmon and Sandy River, extends commercial salmon fishing until June 30 in the Ilnik lagoon section. E.O. extends commercial fishing time in the Bear River, Three Hills and Moller Bay until July 1. E.O. 26 July 1 extends commercial salmon fishing time in Three Hills, Bear River, and Moller Bay until July 7. E.O. July 6 extends fishing time in the Ilnik section 24 hours during July and also allows continuous fishing until July 14 in the Bear River, Three Hills, and Moller Bay sections E.O. July 13 closed the commercial salmon season in the Bear River section after July 12. Justification: Bear River is lagging in escapement. daily escapements have been under 2,500 fish. This closure protects fish in the terminal area while **allowing fishermen to harvest fish entering the area through the Three Hills and Ilnik sections.**

In 1988, the Alaska Board of Fish implemented a Bering Sea Herring Fisheries Management Plan which established a criteria for calculating the Dutch Harbor food and bait quota. The 1988, Dutch Harbor food and bait fisher quota was 3,100 tons. Seven seine and one gillnet vessel participated. The ex-vessel valve for this fishery was $505,000.00 or $252.00 per ton. The North Peninsula sac roe fishery was worth $235,000.00 to nine seiners. Average price was $1,000 a ton for 10% roe recovery.

1989 In the South Unimak and Shumagin Islands fishermen harvested their June sockeye allocations. In 1989, the sockeye allocations were exceeded due to a very high sockeye abundance. Also in 1989, large numbers of immature sockeye salmon were reported in the Shumagins during late June. However, monitoring by a Department of Public Safety vessel indicated that the number of immature salmon was low (25-20 per set) during the July 6-7 fishery. During July 12 however, large numbers (200 per set) of immature sockeye were observed by ADF&G, resulting in the closure of the Shumagin Islands seine fishery. On July 25, approximately 15 immature salmon were observed per set and it was decided to allow the fishery to continue. This was the first time since 1979 that

immature salmon being gilled in seines was a problem in the Shumagin Islands. In years previous to 1979, when immature salmon plagues the Shumagin purse seine fishery were: 1963, 1968, 1969 and 1974.

July-August coho catch was the second highest on record. Major coho harvest areas were the Shumagins 243,000, South Unimak 108,000 and Balboa-Stepovak 70,000. The Shumagin coho catch likely would have gone another 60,000 had seining not been closed due to presence of immature salmon during July 13-14. Approximately 266,000 (64%) of the South Peninsula July-August coho catch was taken during July 25-August 5. Coho escapement information is very incomplete, however based on what information that was collected, the total South Peninsula 1989 escapement was probably in the 25,000 to 75,000 range.

The North Peninsula sockeye catch was 1,719,000. **Approximately 1.3 million sockeye were harvested between Port Moller and Strogonof Point. The Nelson Lagoon catch was 325,000. In 1989, the Alaska Board of Fish limited locations in the Alaska Peninsula Area that Area T permit holders could operate in Ilnik Lagoon, Inner Port Heiden section, and Cinder River section.** The average price paid for sockeye was $ 1.59.8 a pound.

E.O.s issued: 14 - June 14 extends commercial fishing an additional 6 hours in the Ilnik section. E.O. June 21, extends fishing period 48 hours in Ilnik section. E.O. June 26-18- Extends commercial fishing June 25-July 1 in the Ilnik , Nelson Lagoon sections. E.O. July 3 closed fishing period in Bear River, Three Hills and Moller Bay. E.O. 27 July 9 closes the commercial salmon fishing season in the Ilnik section after July 9.

Regulation changes by the Alaska Board of Fish in the January 1990 meeting: Maximum depth of seines is 375 meshes and mesh size may not exceed 3-1/2 inches. Lead may not be less than 50 fathoms and no more than 150 fathoms in length. Drift nets may not exceed 90 meshes in depth in Unimak and Southwestern districts. **In the Northwestern and Northern districts drift gillnets may not exceed 70 meshes in depth, except in the Nelson Lagoon section where drift gillnets may not exceed 29 meshes through August 15, or more than 38 meshes in depth after August 15.** In the Unimak , Southwestern, South Central and Southeastern Districts, the maximum depth of set gillnets shall not be over 90 meshes. The chum cap was raised to 600,000 from 500,000. **The fishing periods during June in the Bear River and Three Hills sections was reduced 24 hours to 6:00 A.M. Monday until 6:00 P.M. Wednesday. The season in that portion of the Ilnik section located between Loran C line 990-Y-33265 and Strogonof Point will not open Until July 15. There is no open season in the Outer Port Heiden section. Area T Permits are no longer valid in the Outer Port Heiden section and that portion of the Ilnik section not enclosed by the Seal Islands.** The Dutch Harbor food and bait herring fishery produced a catch of 3,100 tons by seven seine and one gillnet vessel. The ex-vessel value was $873,100. The North Peninsula sac roe fishery ex-vessel value was $113,000.

1989 1990, sockeye were not available in large numbers (this may have been partly due to the

reduction in gear depth) at either the Shumagins or South Unimak, despite the Bristol Bay fishery experiencing one of its largest runs on record. The Shumagin Islands sockeye harvest was 256,000 compared to a guideline harvest level of 240,000. At South Unimak, the harvest was 1,091,000. A total of 64,000 chums were caught in the Shumagin Islands and 455,000 were caught at South Unimak for a combined total of 519,000.

248,000 coho were caught in the South Peninsula Post-June fishery. Coho escapement information is incomplete but a substantial number of systems were surveyed. Over 50,000 coho were documented in South Peninsula streams as escapement.

Editors note: The chum cap is working. Chum reduction is occurring and Peninsula fishermen are within the range. The North Peninsula sockeye harvest of 2,415,900 was the third highest on record. Sandy River was not reaching escapement goal of 20-30,000. The catch break-down is as follows: Bear and Sandy River - 756,561, Three Hills section - 189,248 and Ilnik - 753,000 sockeye. Average price per pound for sockeye $ 1.53.4.

E.O.s issued: 23 - June 24- closes Bear River between the South regulatory marker at King Salmon River and the North regulatory marker at Sandy River. Justification: Bear River escapement at 4,000. E.O. June 28 - extends fishing time 24 hours in Nelson Lagoon. E.O. July 2 - closes salmon fishing until further notice in the Bear River, Three Hills and Moller Bay until further notice. E.O. July 4 - extends salmon fishing time until July 7 in Ilnik Lagoon. E.O. 33 July 5 - extends fishing time 24 hours in Nelson Lagoon. E.O. 34 - July 6- continuous commercial salmon fishing until July 12 in Nelson Lagoon section. E.O.36 - July 8- allows continuous fishing until July 11 in Moller Bay up to cape Seniavin. E.O.37 - July 12 allows continuous fishing until July 26 in Nelson Lagoon section. E.O. 38 July 11- allows continuous fishing in the Moller Bay, Ilnik, Three Hills sections. In 1990, the Dutch Harbor food and bait herring fishery harvested 820 tons of herring at $350.00 a ton for an ex-vessel value of $287,000.00.

1990 - The Shumagin Islands June sockeye salmon fishery harvest was 333,000, slightly under the allocation of 347,000. A total of 102,000 chum salmon were harvested in the Shumagins. The South Unimak June sockeye salmon catch was 1,216,000, which was well under the guideline harvest level of 1,573,000. The reason for the guideline harvest level not being reached was the chum salmon cap being exceeded. The South Unimak chum harvest was 669,000.

320,000 coho were caught along the South Peninsula in July through late August. Most coho salmon are caught incidental to fishing periods targeting pink and chum salmon during July and early August. Due to high numbers of coho present in shumagin test net sets, and a high drift gill net harvest at South Unimak it appeared that summer coho salmon abundance was high. Had the seine fishery not been curtailed by the presence of immature salmon, a record coho salmon harvest may have occurred. This year the BOF changed the management plan for the post June fisheries. No data on escapement.

The North Peninsula sockeye catch was 2,392,100 sockeye. Approximately 44 percent of the total North Peninsula sockeye salmon harvest was taken in the Bear River section. The combined Three Hills and Ilnik sections harvest accounted for 36 percent of the total harvest. Ilnik and Strogonof Point catch was 610,975, Three Hills catch was 253,880, and Bear and Sandy Rivers catch was 1,044,665. Average price paid per pound of sockeye was $1.13.6. The Alaska Board of fish in its regulation change process and 1991 November and March 1992 meeting made the following changes: Increased the chum cap from 600,000 to 700,000. **Increased the maximum gill net depth to 90 meshes in the Northwestern District. Eliminated gill net mesh size restriction in the Bear River after July 20.**

E.O.s issued: E.O. 08-June 19- extends commercial fishing time in the Ilnik section, E.O. June 26-14- extends commercial fishing 54 hours in Ilnik section and 24 hours in Nelson Lagoon section. E.O. 15 June 28-allows continuous fishing in Ilnik Lagoon June 28 to July 31. E.O. 16 July 1- closes Bear River section between the south regulatory marker at King Salmon River and the North regulatory marker of Sandy River. Justification: The Bear River sockeye escapement will be slightly less than the goal of 60,000 through June 30. Increasing the closure in the terminal area will allow fish to escape into the river while letting the fleet to harvest incoming fish. E.O. 19 July 6- allows continuous fishing in Moller Bay, Bear River and Three Hills sections and continuous fishing until July 31 in the Ilnik system.

The Dutch Harbor food and bait herring fishery was allocated 931 tons of herring. However, 1,325 tons were taken by eight seiners. The ex-vessel value was $397,500.00 and fishermen were paid $300.00 a ton.

1992 - The North Peninsula sockeye catch was 3,575,000, again setting a new record. The majority of the harvest (87%) occurred within the Port Moller to Strogonof Point fisheries (3,098,472 salmon). Bear River's catch was 1,398,257, and approximately 39% of the total 1992 North Peninsula harvest occurred in the Bear River section. 52% of the Bear River section harvest occurred post July 15. **The 1992 catch in the Three Hills section was 959,223 sockeye with the peak catch occurring during the week of June 28-July 4 when 487,00 sockeye were harvested. Sockeye harvest in the Three Hills section accounted for 27% of the total North Peninsula catch. Prior to July 16 , the Ilnik section is managed on the basis of Ilnik River sockeye through the weir. Post July 15 , the section is managed using Bear River stocks. However, if a conservation concern is found in either the Bear River or Ugashik River (Bristol Bay Management Area) prior to July 15, then time and area closures may be considered.** The portion of the Ilnik section from Three Hills to Unangashak Bluffs was scheduled to open to commercial salmon fishing on July 5. However, inside Ilnik Lagoon , which is predominantly a small set gillnet fishery, was open to commercial salmon fishing prior to July 5. The first commercial opening outside Ilnik Lagoon occurred form July 6 through July 8 in which about 510,000 sockeye were harvested in 2.5 days. At this time Ilnik River escapement began to lag slightly and Ugashik River escapement appeared to be considerably later than usual. Based on these two circumstances, the Ilnik section was closed in order to achieve escapement objectives. The next opening was July 15 for the entire Ilnik section. The season catch in the Ilnik section was 740,992

sockeye, which represents 21% of the North
Peninsula catch. Nelson Lagoon harvest was 378.707 sockeye.

The South Unimak-Shumagin Islands chum cap was raised by the Alaska Board of Fish from 600,000 fish to 40 percent of the sockeye salmon allocation and the cap was not to exceed 900,000 chums. An error in the 1987 tagging study was discovered and the chum cap was reduced back to a 700,000 chum cap in March 1992.

Although coho salmon are harvested through September, most South Peninsula coho salmon are harvested incidentally while fisheries are targeting pink and chum salmon during mid-July to mid-late August. This year the department took a new approach in discussing and presenting post June fisheries from prior annual management reports. 386,000 coho was caught during the post June South Peninsula fisheries. Catch statistics indicate an increasing catch of coho salmon by set gillnet fishers. Escapement data is not collected annually. Using expansion factors for sockeye and coho salmon the area-under-the-curve method is used to determine pink and chum salmon escapements, the South Peninsula estimated total escapement was 41, 690 coho. The Shumagin Island fishery was closed July 15-28 due to the presence of immature salmon(mostly sockeye). The catch from the July 5-20 harvest in locations outside of the Southeastern District Mainland and the terminal location where the BOF allowed fishing prior to July 20 was approximately 44,000 coho, this is the area between Kupreanof and McGinty Point.

The harvest allocation was South Unimak - 1,959,000 sockeye and the Shumagin Islands - 432,000 sockeye. The 1992 Shumagin Island allocation was exceeded by 44,000 sockeye and the fishery could not open until June 26. The South Unimak fishery was open eight days for a total of 139 hours and produced a catch of 2,046,022 sockeye and 323,891 chum salmon. The combined South Unimak- Shumagin Islands June harvest was 2,457,856 sockeye and 426,203 chum salmon, well below the 700,000 chum salmon cap, but exceeding the sockeye allocation by 66,856 salmon. 1992 was the year of immature salmon of three species: sockeye, king salmon and chum's. Large numbers were caught in the commercial fisheries (100-176 per set) during some opening. On July 10, immature average 58 per set, on July 11, the average was 70. By July 15, the average of immature salmon became a real problem in the Shumagin Islands section averaging 301 per set, and during subsequent fishing periods from July 17-28 only set net gear was allowed. On July 27, test fishing resulted in 92 immature salmon per set then purse seine gear was allowed commercial fish in the South Peninsula. On July 28, during the commercial opening an average of 100 immature salmon per set was observed and purse seining was again closed in the Shumagin Islands. July 29, the catch of immature salmon had decreased to an acceptable level and purse seining was again allowed. Average price per pound $1.62.9 for sockeye.

1993 - The South Peninsula salmon harvest was 14,899,999 salmon and comprised of 14,413 chinook, 3,689,074 sockeye, 220,000 coho, 9,928,107 pink and 1,048,277 chums. The 1993, the combined catch was the third largest catch since 1908. The sockeye catch was a record breaker. The coho catch was the lowest in the past 10-years. The pink harvest was the third largest and the

chum harvest was the second lowest since 1980. Few coho are harvested during June (most are caught incidentally from mid-July through mid-August while fisheries are targeting pink and chum salmon). These coho are migrant salmon bound for area's unknown.

The coho catch 220,000 was the lowest in the past 10-yeare. The pink harvest was the third largest and the chum harvest was the second lowest since 1980. Few coho are harvested during June (most are caught incidentally from mid-July through mid-August while fisheries are targeting pink and chum salmon). These coho are migrant salmon bound for area's unknown. Using the expansion factors for coho, the South Peninsula total estimated escapement was 16,608.

The North Peninsula sockeye salmon harvest of 3,868,000 fish set a new harvest record. The previous record was 3,576,000 sockeye salmon in 1992. The area between Port Moller and Strogonof Point accounted for 3,340,000 sockeye harvested. The Nelson Lagoon sockeye harvest was 453,000 fish. Sockeye prices ranged from $. 80 - 1.05 a pound and then dropped to $.70-.90 a pound for sockeye.

1994 - The South Unimak and Shumagin Islands June Fisheries were 8.3% of the inshore Bristol Bay forecast. This total was 3,586,000 salmon (2,938,000 fish for the South Unimak fishery and 648,000 for the Shumagin Islands fishery). The chum harvest ceiling was 700,000. During the Alaska Board of Fish March meeting, the time period guideline harvest level periods were
eliminated and the board allowed fishing prior to June 13 (ADF&G later issued a news release stating the fishery would not open prior to June 13, 1994).

The combined sockeye harvest was only about 41% of the allocation. According to fishers, the reasons for the low harvest were cold inshore water temperatures, unusual currents, and constant NW winds. The combined chum harvest was 118,074 salmon, below the 700,000 cap.
South Peninsula Post June Fisheries remained closed until July 20. Test fishing in the Shumagin Islands section prior to the July 20 general fishing period indicated that although immature salmon were present, they were not abundant enough to warrant closure of South Peninsula fisheries to purse seine gear. A general South Peninsula period was announced for July 20 but a price dispute delayed purse seine effort until July 24. On July 24, ADF&G observers noted excessive incidental catches of immature salmon and the Shumagin Islands section was closed to commercial salmon fishing with purse seine gear until July 29. The coho catch in the South Peninsula fisheries was 255,905.

The coho catch in the South Peninsula fisheries was 255,905. South Peninsula escapement of coho, zero. July 20 through August 1 177,290 coho were caught, most of these were migrating coho based on run timing.

The North Peninsula salmon harvest was: 2,751,158 sockeye, 241,303 coho's, and 18,646 chinook. The chinook salmon harvest was above the 1984-93 average harvest of 15,800. Almost half of the 1994 harvest occurred in the Port Heiden section (8,100), followed by Nelson Lagoon (3,700), the Port Moller/Strogonof Point (3,400) and Cinder River (2,400).
2.35 million and was the third largest on record. The bulk of the 1994 sockeye harvest

occurred in the Port Moller to Strogonof Point (2.38 million) and Nelson Lagoon (325,000) areas.

The North Peninsula sockeye harvest of 2.75 million exceeded the 1984-93 average harvest of The 1984-93 average sockeye harvest in the Port Moller to Strogonof Point was 1,890,550 and 316,000 in Nelson Lagoon. The coho salmon harvest of 241,000 fish was above the 1984-93 harvest of 186,000 fish and was the largest on record. The harvests were: Nelson Lagoon fishers harvested 62,000 fish, Port Moller to Strogonof Point was 49,000 and Port Heiden fishers harvested 33,000 coho. Cinder River fishermen harvested 90,000 coho (these fishers are Bristol Bay Area T fishermen). Coho catch and escapement into the Nushagak and Togiak River systems is so weak that closures of sport, subsistence and commerical fishing prevailed.

1995 Editors Note - In the Nushagak River total closures of commerical, subsistence and sport fishing for coho was again implemented. The total run was 46,340 coho. This has cost the Nushagak River fishermen roughly 945,000 sockeye in the last two years to over escapement into the Wood River system.

The post June coho harvest was 254,686. Coho salmon due to their late run timing are not generally surveyed for escapement data.

The North Peninsula sockeye harvest of 3.27 million was the third largest on record. The projected preseason harvest was 2.7 million sockeye. The bulk of the harvest occurred in the Port Moller to Strogonof Point (which includes the Bear River, Three Hills and Ilnik sections and Nelson Lagoon. The sockeye harvest in the Bear River section was 1.54 million sockeye, Three Hills 0.93 million and the Ilnik section 0.32. Escapement into the Ilnik River was 39,000 sockeye. The coho harvest was 135,000 and because of limited funding no escapement monitoring was done.

1996-South Peninsula Post June Fisheries again harvested a lot of coho prior to August 15. In 1996 this harvest 237,000 coho. **The North Peninsula fisheries harvested 1.9 million sockeye. Ilnik caught 479,637 sockeye, Strogonof Point 121,897, Three Hills section 188,556.** North Peninsula river systems either have weired systems or indexed totals for escapement. **The Department allowed continuous fishing in 1996.**

July 20 to August 17, 234,381 coho were caught in the South Peninsula Post June fisheries. Remember based on run timing the department feels that these coho stocks that are being caught during this time period are migrating coho.

1997- 12 MILLION SOCKEYE SALMON FAIL TO RETURN TO BRISTOL BAY. The South Unimak and Shumagin Islands June fisheries harvest roughly 11.7% of Bristol Bay sockeye, catch was based on a 24 million sockeye catch to Bristol Bay when only 12 million returned to be caught. From July 26 to August 13 fishermen were on strike. Migrant Coho catches were down 65 coho

from July 1-19 and 73,834 from July 20 to August 28. North Peninsula sockeye catch was 2,151,010. Three Hill section 270,000, Outside Ilnik 635,775, Ilnik Lagoon 14,650 and Strogonof Point 104,480.

The coho catch was 73,000 for the Shumagin Islands. This was due to the fact that the fishermen went on strike.

The North Peninsula sockeye salmon escapement (systems with weir counts plus indexed totals for other systems) was 820,000. Editors Note: This type of escapement date is weak, at best. One only has to look at the escapement into Ilnik Lagoon 82,000 with a catch of 650,000, and see the whole picture. I would ask the department to show the return to spawner ratio's for all North Peninsula river systems as well as fishing districts.

STOCK IDENTIFICATION OF THE NORTH ALASKA PENINSULA BY ADF&G:

In 1988, the Department of Fish and Game conducted a stock identification study in the Northern Alaska Area M Peninsula sockeye salmon fishery, from Harbor Point to Cape Seniavin. The study was to find out if Bristol Bay sockeye were being intercepted in the North Peninsula commercial fisheries. This study was conducted by using scale pattern analysis and the project was conducted by Hal Geiger, statewide salmon biometrician for the Department of Fish and Game. A re-cap of the report follows: Scale pattern analysis was shown to be an effective tool for discriminating between Bristol Bay and North Peninsula stocks in the 2.3 age class in North Peninsula sockeye salmon fisheries in 1988. Evidence was found for interceptions in the Cape Seniavin to Cape Strogonof fishery, with considerable interception after July 5th when fishing was allowed northeast of the Three Hills section. The change in boundary lines is considered the most likely explanation for the increased interception. During first sampling of the fishery, following this northeastern opening, an estimated 66 % of the 2.3 sockeye salmon were bound for Bristol Bay. An estimated 296,000 or 2/3 of the North Peninsula sockeye salmon harvest was fish of Bristol Bay origin in 1988, following fishing northeast of the Three Hills section. There is also strong evidence that Bristol Bay stocks were present in high levels after fishing North of Three Hills section was allowed, beginning on the 5 th of July. In conclusion, from this study, it is clear there were significant interceptions of Bristol Bay bound sockeye salmon in 1988.

It is not clear how the results of this analysis could be used to predict what the rate of interception will be if the fishery is similarly managed in the future. Geiger (1989) using scale pattern analysis estimated that North Peninsula stocks contributed 66%, 55%, 64%, while Bristol Bay (Ugashik stock only) comprised 34%, 45%, 36% of the sockeye salmon catch within the Cape Seniavin to Strogonof Point reach during 5 July-21 July 1987, 1988, 1989, respectively. However, Geiger stated that stock proportions could fluctuate interannually owing to variation in migration patterns, and fleet dynamics.

In 1990, another Alaska Department of Fish and Game report was produced entitled "Origins of

Sockeye Salmon Caught within the Harbor Point to Strogonof Point Reach of the Alaska Peninsula Area M management area, July 8 through July 21, 1990. This technical report No. 91-4007 was conducted by Charles O. Swanton and Robert L. Murphy. A narrative of the report follows: In 1990, a total of 2,415,889 sockeye salmon were commercially harvested in the North Peninsula area, with 880,101 caught in the Harbor Point to Cape Seniavin area and 942,900 fish caught within the Cape Seniavin to Strogonof Point area. Approximately 50% (881,943) of the total catch for both areas combined occurred during July 8 through July 21, with 13% and 81% of this catch occurring within the Harbor Point to Cape Seniavin and Cape Seniavin to Strogonof Point areas, respectively.

Total sockeye catch during July 8-14 was 57,713 fish, with an estimated 6,593 (11.4%) age 2.2 and 48,743 (84.5%) age 2.3. For the age 2.2 component, 4,437 (67.3%) were estimated as Bristol Bay origin, 1,503 (22.8%) Nelson River and 653 (9.9%) Bear River fish (figure 4).

Age 2.3 sockeye salmon were estimated to be 14,184 (29.1%) Bristol Bay fish, 31,448 (64.5%) Nelson River and 3,110 (6.4%) Bear River (figure 5).

Within the period July 15-21, 60,444 sockeye salmon were caught, including an estimated 15,359 (25.4%) age 2.2 and 41,419 (68.5%) age 2.3 fish (table 3). Stock composition estimates for age 2.2 fish were 9,154 (59.6%) Bristol Bay, Nelson River 3,101 (20.2%) and Bear River 3,101

(20.2%) (Fig 4). The age 2.3 catch was 19,011 (45.9%) Bristol Bay, 18,142 (43.8%) Nelson River and 4,26 (10.3%) Bear River fish (Fig.5). In composite, North Peninsula local stocks contributed 58.3% and non-local stocks 41.7% of the sockeye harvest.

Cape Seniavin to Strogonof Point total sockeye catch during July 8-14 was 453,538. Total sockeye catch combining periods and age classes (age 2.2 and 2.3) was 671,501 fish of which an estimated 524,289 were Bristol Bay, 72,750 Nelson River and 74,461 Bear River fish. Local stock contribution for July 8-14 were 19.0% and 18.7% for July 15-21. Bristol Bay stock contributions were 81.0% and 81.3% respectively. See figure.

In the Harbor Point to Strogonof Point areas, a total of 881,943 salmon were harvested during July 8-21, 1990. Stock composition estimates generated for the age 2.2 and 2.3 fish are applicable to all other age classed present, then 10.9 % (96,666) were of Bear River origin, 15.9 % (139,931) were from Nelson River, and 73.2 % (645,457) were Bristol Bay stocks, (see figure 8).

The numbers of Bristol Bay sockeye caught within the Harbor Point and Strogonof Point area are substantially higher than those found by Gieger (1989) within the same areas and time periods. However this could be attributed to the inclusion of Bristol Bay stocks other than Ugashik. From a run strength perspective, the number of Bristol Bay sockeye salmon caught within the North Peninsula area in 1990, may not be deviant but rather reflective of a near record run to Bristol Bay.

Editors note: In conclusion, the data presented from 1970-1997 Annual Management Reports by the Alaska Department of Fish and Game clearly shows an increase in effort for all gear

types in the Area M fisheries. This data also clearly shows the shift of fleet effort from the Port Moller section to the Three Hills and Unik sections and the start of a new and expanding intercept fishery on the North Peninsula targeting Bristol Bay bound sockeye salmon.

Editors note: All information in this report came from the "Annual Management Reports" issued by the Alaska Department of Fish and Game. When "editor notes" appears, it is my own personal comments or observations.

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January 15, 2010

Alaska Board of Fisheries
PO Box 115526
Juneau, AK 99811

Dear Chairman Webster and Board Members;

I am writing to provide some further background on the implementation and management of chum pools in the South Peninsula June fishery. This should be useful to you in consideration of Proposal 115 and serve as some background as to why we have used this tool in the June fishery.

The idea of utilizing a chum pool originated with the fishing fleet in the mid 1990's. They wanted to demonstrate in a real way that they were not purposely targeting chums in the June fishery and were willing to forego the direct monetary benefit of doing so. The concept was to pool the proceeds from the sale of chums and distribute them equally among the participants in the pool. Originally participation in a pool was voluntary with most fishermen opting in. As processors we were tasked with managing these pools and quickly found out the process was more difficult than the concept. With three fleets (seine, drift and set), two areas (South Unimak and Shumagins) and varying levels of participation; this proved to be very difficult to track and do an accurate accounting of. Over the years we have improved our procedures some and have eliminated one important variable by cooperatively agreeing that participation in the chum pool should be mandatory. Now we administer a chum pool for each fleet in each area. Chum catch totals for the season are averaged over the number of fishing days and participants are given a credit for however many days they participated in the fishery.

While generally accepted as the status quo way of doing things these chum pools have not been unequivocally acceptable by everyone all of the time. After the restrictive fishing time allocation result of the 2001 BOF meeting there was substantial pushback by the fleet on keeping the chum pools in place but with the support of the regions fishing groups and the Aleutians East Borough we chose to do so. Upon the establishment of the current less restrictive management plan in 2004 we were told in no uncertain terms that Board Members felt the establishment and maintenance of chum pools was an important consideration in its justification. We are committed to continuing to put forth the effort to make these chum pools work as are the other established processors in the region. We hope that neither our efforts nor the original intent the fleet had in establishing these chum pools is ever taken for granted.

I hope that this short history of chum pools in the June fishery will be of some help especially for the new Board Members that have not been exposed to this concept. I will be attending the Area M Board of Fisheries meeting and would be happy to answer any questions about this issue or any you may have about our operations or concerns in Area M.

Sincerely,

Dale Schwarzmiller
Vice President – Alaska Production

January 13, 2010

Alaska Department of Fish and Game
Board of Fisheries
Boards Support Section
PO Box 115526
Juneau, Alaska 99811-5526

Dear Board of Fisheries:

I am writing today to voice my opposition to Proposal # 158 regarding the Dutch Harbor Food and Bait Herring Fishery.

I am one of the local herring gillnet fishermen who participates in the Dutch Harbor Food and Bait gillnet fishery. I view this proposal as an attempt by an outside large vessel to come in and take away our local small boat fishery.

The local gillnet fishermen are trying to harvest herring. We are attempting to build a small boat fishery that will provide opportunities for local small boats. Taking away our quota will be catastrophic to our efforts.

The timing of the arrival of herring into Unalaska Bay has been getting later and later in the summer every year. Ten years ago the fish arrived near the end of June, however for the past 4 -5 years the fish have not arrived until early to mid July when the seine season starts. The last few years I have been out fishing after the seiners have finished up their quota because the fish have been late in arriving in the bay and we have not had a chance to catch them.

Thank you for the opportunity to comment on this issue that is so important for the small boats in the Unalaska / Dutch Harbor area.

Please do not support this proposal as it will spell the end of the gillnet herring fishery in Unalaska.

Sincerely,

David M Gregory
Local Small Boat Fisherman
Unalaska, Alaska 99685

Shirley M. Shapsnikoff
P.O. Box 83
Unalaska, Alaska 99685

Alaska Department of Fish & Game
Boards Support Section
P.O. Box 115526
Juneau, Alaska 99811-5526

January 13, 2010

RE: Proposal number 111 Unalaska Bay Trawl Closure

Dear Board Members;

I'm Shirley Shapsnikoff from Unalaska and I'm writing a letter of support for proposal number 111.

We have our fish camp at Devil Fish Point in Unalaska, which is across from Little South America. We have not seen much fish at all this year and in 2008 we got maybe 20 reds. We also tried fishing in what I've known as Roofs Bay around the corner from Devil Fish Point and didn't get anything this year and in 2008 maybe 20 to 25 reds.

As far as Halibut we didn't get any this year or last year, we fish around Roofs Bay, Hog Island and towards Recess Bay. In 2008 we got a piece from friends.

We have seen a steady decline in Halibut, Cod fish and King Salmon in the bay and have to travel thirty to forty miles in our skiffs to get fish. In 2009 we didn't get anything in Unalaska bay. We haven't seen any King Salmon or Halibut in two years. Large vessels can fish outside the bay where we have risk our lives when we have to travel outside the bay to catch fish. It's just a matter of time before someone is lost in pursuit of fish.

So please **close Unalaska Bay to Trawling**

Sincerely,

Shirley M. Shapsnikoff

Shirley M. Shapsnikoff

January 15, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

I am in full support of proposal 111 from the City of Unalaska in regards to the Unalaska Bay Trawl Closure.

My name is Fredrick C. Lekanoff and I am 29 years old. I now serve on the Tribal Council for the Qawalangin Tribe of Unalaska and I am also on the Board of Directors for the Ounalashka Corporation. I have grown up in Unalaska all my life and I work very closely with the fishing industry in Unalaska as a lot of our community does.

We do understand the economics of what the fishing industry brings to our community however, we also understand where Unalaska was well before the fishing industry was ever an entity.

In my time here in Unalaska as a local native using these waters for subsistence use, I have seen a direct affect from the fisheries in Unalaska Bay. The Halibut are not as bountiful as they once were, and the salmon run seems to be diminishing with every year that this goes on! Getting on the Tribal Council and getting involved with our Native people on the political side has brought forth an obligation to see that the ways of our culture be preserved. The salmon harvesting in the spring and late summer is a way that we can all feel connected. This is also a huge factor for our people to store subsistence foods for the long winters we see. With the Salmon runs being at a huge decrease, I would like very much that something be done in the beginning before it is too late!

With the numbers of bye catch for Kings being at 1/metric ton in our area, that's around an average of 4000-5000 King Salmon each year. Being on the Qawalangin Tribal Council I have also seen the direct numbers from the McLeese Lakes annual fish count (conducted by the Department of Fishing Game) take a huge hit. We were upwards of 200,000 salmon 5-7 years ago and now we shut it down early with a run of around 8000. The numbers don't lie and the growing frustrations are evident with not only the Native people of Unalaska, but the community members who have called Unalaska home for many years as well. We all as a community are feeling the consequences of these actions.

We are a very tight community and we who live here have been affected the most by these decreasing numbers.

There are Processing Plants here in Unalaska that have raised opposition to this resolution. They have come up with the points of how their fish processing plants depend on the fish of Unalaska Bay as well as their boats and families depend on the fish of Unalaska Bay.... I ask you this one questions. Where is the majority of the money made off these fish being spent and invested from Unalaska Bay? Sure there is a tax that we see, but the remainders of the funds are not being spent in Unalaska Bay. A lot of the revenues being made and paid to employees are not even being spent in our country!

With this being said, I feel it as an obligation of the State of Alaska and the Department of Fishing Game to stand behind the people who have the most to lose in this case. The community members of Unalaska! With the dangers the Bering Sea already presents, it would be far safer to have a major fishing company's trawler go just a few more miles outside of our local bays and fish out where their vessels are built to fish! It's not safe for locals to travel outside of our bays to fish. It hasn't really ever been called for to be fishing in our local fishing grounds where the community loses a lot more in its way of life rather than a few dollars on the fishing tax of this area. Our way of life for Unalaska community members far out measures what the fishing companies stand to lose by having to travel farther to find these fish.

With Regards,

Fredrick C. Lekanoff
P.O. Box 63
Unalaska, AK 99685

QAWALANGIN
Tribe of Unalaska

January 14, 2010

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Alaska Dept of Fish and Game Board Support
Attn: Jim Marcotte
PO Box 115526
Juneau, AK 99811-5526

Re: Proposal No. 111, Unalaska Bay Trawl Closure

Dear: Mr. Marcotte

I am writing to you today on behalf of the Qawalangin Tribe of Unalaska ("Q-Tribe") regarding the Unalaska/Dutch Harbor Fish and Game advisory committee's proposal No. 111, Unalaska Bay Trawl Closure.

Many of our Tribal members have traditionally used this bay to fish for Halibut, Cod fish and King Salmon, as it is a protected bay and is safe for traveling in an open skiff. Because of the trawling, and I'm sure other factors, we have noticed a steady decline in the amount of fish caught. Having to travel a greater distance in an open skiff to catch fish for the year is extremely dangerous for our membership. However, the commercial trawling vessels are larger and better suited for the "open water"

Therefore, the Q-Tribe is in complete support of the Unalaska/Dutch Harbor Fish and Game Advisory Councils proposal No. 111. We thank you in advance for your consideration of their proposal.

Please feel free to contact me via email at qt_president@live.com if you have any questions.

Denise M Rankin

Denise M. Rankin,
President

P.O. Box 334, Unalaska, Alaska 99685 (907) 581-2920 FAX (907) 581-3644

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Alaska Department of Fish and Game
Boards Support Section
PO Box 115526
Juneau, AK 99811-5526

We are in Support of proposal number 111, the Unalaska Bay Trawl Closure.

The bay is a traditional subsistence fishing area for our community residents and we are having to venture further from town as a result of the fishing effort placed by the trawl fleet. The severe weather in the Aleutians can create a dangerous situation for our small boats that the larger trawl fleet can handle.

We are also concerned about the stocks of salmon, halibut, herring and other sea life being caught as bycatch and disturbed by the amount of fishing effort on this area. Also there has been some lost gear over the years we attribute to the trawl fishing.

Thanks for your consideration.

Walter and Brenda Tellman
PO Box 88 Unalaska, AK 99685

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Adak Community Development Corporation

January 18th, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

RE: Proposal #114

Dear Chairman Webster,

Adak Community Development Corporation is a non-profit group elected by the residents of Adak to promote local fisheries based economic development.

We request that the Board of Fish maintain the 60' limit for the AI state water B season, but adopt a roll over provision similar to that found in the GOA state water cod management plans which would allow the commissioner to modify the vessel size restriction in the fall if the commissioner determines the GHL is not likely to be reached by Dec. 31st.

Proposal 114 proposes a rollover date of August 1st. We believe that is too early in the summer to make a determination whether the GHL will be reached by the end of the year. We support a date in September.

Adak has no commercial salmon fishery to sustain the community during the summer and fall months. The statewater cod fishery is our one hope for a local fisheries economic base during that time of year.

Representatives of the community of Adak came to the BOF in October of 2005 and presented an RC highlighting the problems of maintaining an economically viable fishing community in Adak. That became the basis for the AI state water cod fishery plan adopted at your February 2006.

In 2008 the state water B season quota was taken in just 30 days. Over 80% of the harvest was processed at sea by five catcher processors. In response to this compressed season, the BOF adopted a 60' limit for the AI statewater B season last year at the request of Adak community representatives.

In 2009 two factors resulted in the B season GHL not being fully harvested. The cod market crashed, and the local processor in Adak went into bankruptcy. These are short term problems. We believe that the BOF should take a long term view and tailor the regulations to provide maximum long term benefit to the local areas of the state.

One of the 5AAC28.089 - Guiding principles for groundfish fishery regulations, is the "extension of the length of fishing seasons by methods and means and time and area restrictions to provide for the maximum benefit to the state and to regions and local areas of the state".

When the BOF was considering proposal 371 last year, we testified in favor of a rollover provision similar to that included in the GOA state water cod fishery management plans:

> **5 AAC 28.577. South Alaska Peninsula Area Pacific Cod Management Plan**
> (g) If at any time ***after October 30***, the commissioner determines that the guideline harvest level for Pacific cod will not be reached by December 31, the commissioner may close, by emergency order, the fishing season and immediately reopen a state waters season. When the commissioner acts under this subsection, to increase the harvest rate in an attempt to reach the guideline harvest level, the commissioner:
> ...
> (3) if needed, in addition to (1) and (2) of this subsection, may allow a vessel of any size to register to fish for Pacific cod in the South Alaska Peninsula Area.

In summary, we ask that the BOF maintain the 60' limit for the B season, but add a provision allowing the commissioner to raise the size limit in the fall if he determines that the GHL will not be harvested by Dec. 31st. We believe this is consistent with the intent of the BOF in creating the fishery to provide benefit to the region and local area while achieving full utilization of the GHL.

Thank you for considering our comments.

Sincerely,

Michael Swetzof

President, ACDC
PO Box 1943
Adak AK 99546
Tel. 907-592-2335
Fax. 907-592-2336

CONCERNED AREA M FISHERMEN

35717 Walkabout Road, Homer, Alaska 99603
(907) 235-2631

January 19, 2010

Vince Webster, Chairman
Alaska Board of Fisheries
P.O. 25526
Juneau, Alaska 99802-5526

Re: Alaska Peninsula Proposals

Dear Mr. Webster and Board Members:

Concerned Area M Fishermen (CAMF) submits these comments on proposals you will be considering at the upcoming meeting concerning fisheries of the Alaska Peninsula, also known as Area M. CAMF represents the interests of Area M drift gillnet fishermen. Our members participate in both South and North Peninsula fisheries, including the South Unimak and Shumagin Islands June Salmon Fishery (the June fishery). CAMF has been active in the Board process for over 25 years and we look forward to working with you again this year.

These comments are in three parts. We first provide general comments describing the June fishery and prior Board action concerning the June fishery management plan. We then explain the nature and benefits of the dispersed management approach that applies to the North Peninsula fishery. We conclude with a statement of our position on specific proposals.

A. The June Fishery

Bristol Bay-bound sockeye have been harvested at South Unimak and in the Shumagin Islands during the month of June for nearly a century. There's a reason for this: the sockeye we catch are in prime condition and of the highest quality, bringing top dollar in the market. The June fishery is very valuable to its participants, to the Alaska Peninsula economy, and to the State, and deserves to be managed in a manner that recognizes and enhances its economic and social importance. This is especially important in this time of competition with farmed salmon and as Alaska seeks to generate greater revenues from its natural resources. Past Boards have understood the value of the June fishery and have been committed to assuring us a viable sockeye harvest.

In 2004, the Board adopted significant changes to the South Unimak and Shumagin Islands June Salmon Management Plan, 5 AAC 09.365. These revisions simplified the management approach, ending a two-decade long experiment of imposing increasingly complex and untested regulations aimed at constraining our harvest of migrating salmon, especially chum salmon. That experiment culminated in 2001 with the adoption of a management plan that drastically cut our fishing time and severely impaired the area managers' ability to maintain a reasonable sockeye harvest. The Board in 2004 recognized multiple problems with the prior plans – not the least of which is that the various limits imposed on the June fishery over time had no effect on the fisheries intended to benefit from such limits – and opted instead for a straightforward management regime of scheduled openings that give us enough time on the water to sustain a reasonable harvest while providing a balance of closed periods. We encourage Board members to review the findings prepared by the Board in 2004 (2004-229-FB), which explain the basis for the Board's actions.

In adopting these changes to the June fishery management plan, the key question the Board asked was whether the fishery would still perform within historical levels of harvest. The Department answered yes. Our experience under the 2004 plan confirms that the Department was correct. The harvest of sockeye in the June fishery has ranged from roughly 1.7 million in 2008 to 900,000 in 2006, while the harvest of chum salmon has been below 500,000 fish in five of the last six years. These harvest levels are in the lower middle range of our historical catches for both species, and are **smaller** than the error in estimates of the size of the Bristol Bay sockeye and AYK chum runs after the season is over. Harvests of this magnitude in the June fishery are biologically insignificant.

Nor did the 2004 plan result in any significant increase in the amount of effort. The number of permits fished remained relatively constant from prior years, and is considerably lower than the number of permits that fished during the 1980s and 1990s.

The only time the chum harvest in the June fishery exceeded 500,000 under the current management plan was this past season, when approximately 700,000 chum were caught. Most of this harvest occurred in the Shumagin Islands (where drift gillnetters are not allowed to fish) and was a function of chum being present throughout the month, which is not the usual situation. Area M fishermen well understand the need to control their harvest of chum salmon and have taken several steps toward this end. For instance, the commercial fleet participates in "chum harvest pools" where all chum we catch are pooled then divided equally among the fleet. This eliminates any incentive for an individual to target chum. In addition, the fleet has voluntarily stood down and not fished when there has been an abundance of chums present. But it must also be recognized that occasionally there will be a year like 2009 when the presence of chum in area waters is so continuous that they are hard to avoid, and that at some point, vessels need to fish if they are to maintain a reasonable sockeye harvest.

We also think it is important to dispel the notion advanced by some that the chum harvest in the June fishery should only be considered as by-catch to our harvest of sockeye. Chum salmon have been harvested in the June fishery as long as it has existed and constitute an important economic component of the fishery.

Detractors of the June fishery have long asserted that the mixed stock nature of the June fishery risks adverse biological impacts. We disagree. Based on a number of studies of the June fishery – including tagging; genetic stock identification (GSI); and mark-recapture – certain conclusions have become clear:

-- Bristol Bay sockeye stocks in the fishery are highly mixed, and there is no risk that we will tap into a vein of fish from one river and have a disproportionate impact on a single stock;[1]

-- the chum salmon harvested in our fishery originate from a wide geographic area – Japan, Russia, the AYK, Bristol Bay, the Alaska Peninsula, Southcentral Alaska – and only about a third are AYK summer chum;

-- Yukon fall chum, whose declines in the mid-1980s were cited as the basis for imposing the first chum cap, are not even present in the June fishery; and

-- only a fraction of any migrating runs pass through the area of the June fishery, with the rest returning through Aleutian passes to the west.

In short, the June fishery has little or no biological impact on the salmon runs migrating through the South Peninsula area and there is little or no conservation risk from permitting a viable fishery to be prosecuted there.

We also note that western Alaska chum salmon runs have generally improved since the 1990s and are in relatively good shape, with only a couple of stocks in Northern Norton Sound that are identified as yield concerns. For instance, returns to the Kuskokwim River have been strong, including this past year. The Kuskokwim chum run represents a significant percentage of the AYK summer chum complex and is the closest AYK system to the Alaska Peninsula. The improved performance of AYK chum runs notwithstanding the 2004 June fishery management plan confirms what some Boards have recognized in past findings, that the June fishery has little measurable impact on chum salmon escapements in western Alaska. Even if all chum salmon could be passed through the fishery – which could only be accomplished by a complete closure – they

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[1] A CAMF board member, Tom Wooding, has prepared a power point presentation summarizing various studies on migration route and timing for sockeye and chum salmon, and has submitted that presentation to you on a disc. We encourage you to review this presentation before the Area M meeting as it contains a lot of information. Mr. Wooding will, of course, be happy to respond to any questions you may have about his presentation during his public testimony.

would do very little to alleviate the few yield concerns in the AYK. In fact, it is more than likely that "savings" of this magnitude would not even be measurable in the rivers of origin, a point recognized by past boards. *See, e.g.,* Findings FB-1-92 at 3 (impact of the June fishery on AYK chums "so minimal, if detectable at all, as to be insignificant"); 94-150-FB (formerly 94-04-FB) at 6 (savings "would be totally undetectable in areas as large as Northern Norton Sound or the Yukon River"); and 96-164-FB (formerly 96-08-FB) at 5 ("further reductions in the June Area M fishery would not alleviate the remaining conservation concerns" for AYK rivers).

In sum, the current June fishery management plan is working well, and we urge the Board to resist any calls for a return to the unworkable and unreasonable management plans and policies of the past.

B. The North Peninsula Fishery

The fishery in the Northern District of Area M, on the north side of the Alaska Peninsula, is primarily a drift gillnet fishery, and is managed under the Northern District Salmon Fisheries Management Plan, 5 AAC 09.369. Operating out of Port Moller, our fleet fishes in the Bear River, Three Hills, Ilnik, and Outer Port Heiden Sections, and targets sockeye returning to local rivers. The North Peninsula fishery is orderly and well-managed, and our harvest is in line with production from area rivers. The Board has consistently rejected proposals from Bristol Bay fishermen and groups to severely restrict our fishery, and we request that you do so again this year.

We believe it would be helpful to review and summarize several aspects of the North Peninsula fishery, including prior Board action and the biology, history, and management of the fishery.

1. Prior Board Action

We first refer you to Board Findings 96-165-FB (formerly 96-09-FB) prepared at the meeting in January 1996. The Board had considered North Peninsula issues many times before that meeting, but this was the first time the Board prepared a set of findings to explain its actions. The findings summarize the comments of staff and the public, and provide the Board's rationale for rejecting all the proposals aimed at greatly restricting the North Peninsula fishery. The findings conclude (at page 3):

> Like past Boards that have rejected proposals to restructure the North Peninsula fisheries, the Board found no reason to reduce fishing districts, seasons or harvests in the Northern District. The Board recognizes that there may be some amount of interception of Bristol Bay fish in the Northern District. The Board further finds that the Northern District

fishery is not an expanding fishery, and does not warrant action under the Board's mixed stock policy.

Consistent with these findings, the Board at its meeting in January, 1998, again rejected proposals to severely restrict the North Peninsula fishery. The main action taken at that time was to adopt the Northern District Salmon Fisheries Management Plan, 5 AAC 09.369. This plan confirmed the Board's and the Department's commitment to maintaining a management regime that has succeeded in achieving escapements, maintaining production, and allowing a steady harvest of high quality fish from local stocks on the North Peninsula. In fact, the principal action the Board took in 1998 for the Northern District was to adopt a regulation (5 AAC 09.369(j)) permitting us earlier access to the harvestable surplus from the Ilnik River, so that the fishery better fits the timing of the run.

Northern District proposals were next considered by the Board at its meeting in January 2001. As usual, Bristol Bay stakeholders advocated drastic restructuring of the fisheries in the Northern District, relying primarily on their concerns for the status of Kvichak sockeye . The Board committee that reviewed these proposals found "There are no new or expanding fisheries on these stocks," and recommended status quo for the Northern District fisheries (RC # 384, January 29, 2001). The Board unanimously voted in favor of this recommendation and rejected all the Bristol Bay proposals for our area.

The Board in 2004 made additional revisions to the Northern District plan, including easing restrictions on when our fleet could fish in the Ilnik Section. These changes were intended to provide additional management flexibility for the Department to harvest local runs while assuring that escapements are met.

Finally, in 2007 the Board responded to information presented by the Department showing a foregone harvest of more than 100,000 sockeye annually in the Meshik River. Our fleet has always fished this run, but restrictions on fishing in this area resulted in escapements that were consistently exceeding the Department's goal. The Board opened up a portion of the Outer Port Heiden Section to the drift fleet, allowing us to fish on the north side of Port Heiden. This regulatory change has succeeded in harvesting the available surplus and bringing escapements in line with the established goal. In its comments submitted at your Bristol Bay meeting in December, the Department stated that use of the Outer Port Heiden Section has been "effective at controlling escapement into the Meshik River." *See* Staff Comments, Regional Information Report No. 2A09-02, at 41 (commenting on proposal 30). It should also be noted that fishing schedule in this area is conservative, allowing us to fish only 2 ½ days per week, not continuously as implied by some.

In sum, the Board over the years has taken several steps to improve management in our area and provide the Department the necessary management flexibility to harvest local runs while assuring that escapements are met. These actions should be seen as an endorsement of, and a demonstration of confidence in, the current management regime.

2. History of Fishing

Area M drift gillnetters have fished the Northern District since statehood. The 1960 Annual Management Report (AMR) shows that as many as 50 vessels were fishing the Ilnik Section (as it was defined at that time). The amount of effort in the Ilnik and Three Hills Sections increased in the early 1980s, but this was primarily a function of increased returns to the North Peninsula. The same phenomenon also occurred in the Ugashik and Egegik Districts of Bristol Bay, where returns to those systems resulted in nearly identical percentage increases in effort and harvest. Since 1983 our harvest has been relatively stable and has not increased out of proportion to the size of North Peninsula escapements. As the above quote from the 1996 findings shows, the Board specifically found that the North Peninsula fishery was not a new and expanding fishery and did not require action under the mixed stock policy. The North Peninsula fishery has existed for many years and has been examined intensely by past Boards, none of which found any justification for adopting the kind of restrictions advocated by interests from Bristol Bay.

3. Dispersed Management

The North Peninsula drift fishery is very orderly and well-managed. By keeping our boats dispersed along the beach instead of concentrated around stream termini, Area M managers are able to avoid costly and management-intensive pulse fishing. This approach allows the managers to obtain a steady stream of escapement throughout the season. Our season lasts from June to mid-September, three or four times longer than the majority of Bristol Bay fisheries. The long coastline in our area is completely exposed to westerly weather, and fishing is inevitably interrupted in-season. If the fleet fished only in small areas in front of river mouths, these interruptions would produce excess escapement. Because of the small size of our rivers we do not have the flexibility to move in-river to reduce over-escapement. Dispersing the fleet over a larger area provides a crucial buffer of time between weather interruptions and the build-up of fish in front of rivers as they prepare to move upstream.

Dispersed management has also proven effective when escapement is lagging. The Department presently creates sanctuary closures in front of river mouths yet keeps the fishery open some distance away. This allows managers to monitor and moderate the build up. These management techniques have been in use at least since statehood (*see* 1960 AMR) and they are appropriate for the

geography, the salmon runs, the fleet size and the management tools available. As reflected in the Findings 96-165-FB, at 2, the Department has expressed concerns that altering management of the North Peninsula fishery could result in management errors and problems meeting escapement objectives, could decrease management flexibility, and could disrupt the current orderly harvest. The bottom line is that dispersed management has been shown to work on the North Peninsula over decades of experience.

Dispersing the fleet also minimizes conflicts among boats vying for sets and removes incentive for line violations. We have developed a system of self-regulation in which those who want to fish the line take turns making drifts. This style of management results in a quality product – exactly what the state should support in light of present market conditions.

4. Productivity

The Department's most recent studies of North Peninsula systems demonstrate that our harvest is in line with productivity. *See* Murphy, R.L. and T.G. Harthill (2009), "The North Alaska Peninsula Salmon Report to the Alaska Board of Fisheries," Fishery Management Report 09-53, at 29 (Table 7). An analysis by the Department based initially on return-per-spawner data for the August run of reds to the Bear River (when no other sockeye runs are present) shows that production of that system in terms of return-per-spawner is exceeded only by Egegik and parallels production for all Alaska Peninsula systems from Naknek to Nelson Lagoon. As a result, the Department has made a conservative estimate of production on the North Peninsula. The most reasonable interpretation of this work is that the fishery along the North Peninsula is catching **fewer** fish than are produced there.

5. Migration Route and Timing

The primary complaint against our fishery leveled by Bristol Bay interests is that our fleet is intercepting "their" fish. While there may be some amount of Bristol Bay sockeye mingled in our catch, examination of the migratory path and timing of Bristol Bay sockeye runs indicates that our fleet's ability to impact any of those runs is very limited. The bulk of the Bristol Bay return migrates some 25-40 or more miles offshore of the North Peninsula. Over 30 years of data from the Port Moller test fishery demonstrate this migration route and timing. A comparison of Port Moller 1990-95 test fishery data in relation to the timing of the run in Bristol Bay shows that, **by July 10**, an average of **97%** of the Bristol Bay sockeye run has passed offshore of the North Peninsula, and fishermen in Bristol Bay have caught 72% of their season total catch. In contrast, up to two-thirds of the season harvest total for the North Peninsula fishery is taken **after** July 10 on runs that extend through mid-September. This comparison demonstrates that we have little or no effect on Bristol Bay sockeye stocks.

For all these reasons, we urge the Board again to reject all proposals that seek to restrict our Northern Peninsula fishery and impose Bay-style management in our area. The present management regime on the North Peninsula is a success. North Peninsula runs are in very good shape, with annual escapements of about 1 million fish. We turn out a high quality product, and we don't experience many of the management and enforcement problems encountered in the Bay.

C. Comments on Specific Proposals

We now turn to our position on specific proposals:

Proposals 29 and 30 – These proposals, submitted by a Bristol Bay fisherman who has long railed against our fishery, seek to expand significantly the opportunity for Bristol Bay (Area T) drift gillnetters and setnetters to fish in Area M, effectively creating a new sockeye fishery for Bristol Bay fishermen, but in Area M. CAMF strongly opposes these proposals. The current regulations that allow Area T boats to fish in Area M at specific times and in specific places have a very limited purpose of preserving historical fishing for Chinook and coho salmon in the Inner Port Heiden and Cinder River Sections, primarily by residents of Port Heiden and Pilot Point. We submitted a written comment on these proposals at your Bristol Bay meeting, and attach a copy for your reference. The conclusion is that our fleet is fully capable of harvesting the available surplus in Area M, and there is no justification for authorizing the significant expansion of effort that likely would occur if either of these proposals were adopted.

Proposal 115 – This proposal was submitted by CAMF and is intended to facilitate continued use of chum pools in the June fishery.

Proposal 116 – This proposal seeks to return management of the June fishery to a regime that has long been discredited. The problem statement alleges that we are overharvesting Bristol Bay sockeye, an assertion that is difficult to square with the current health of the Bristol Bay run. We obviously oppose this proposal.

Proposal 117 – CAMF submitted this proposal to increase the depth of our nets in the June fishery from 90 meshes to 120 meshes. This change will allow us to use more efficient gear for targeting sockeye during established openings.

Proposal 118 – This is another CAMF proposal. Although most of our fleet moves to the North Peninsula after the June fishery, some of our members, particularly including boats operating out of local communities, continue to fish the South Peninsula, targeting pink salmon. They, along with the set gillnet fleet, need more fishing time to target these abundant runs.

Proposals 119-129 – We take no position on these other proposals related to the Post-June salmon management plan.

Proposal 130 – CAMF submitted this proposal as a companion to proposal 118. By allowing deeper nets to be used by drift and set gillnetters in the Post-June fishery, they will be better able to target abundant pink salmon.

Proposals 131-144 – We take no position on these proposals, which primarily pertain to the Southeast District Mainland fishery.

Proposal 145 – We oppose this proposal. It is confusing, poorly thought through, and appears to have goals unrelated to the stated justification of revising the existing fishing schedule "to accommodate the fresh fly-out market." Although it appears to focus on the Cinder River Section, this proposal deletes, and thus closes, the Outer Port Heiden Section (which may be the real aim). It would also reduce the weekly fishing schedule from 2 ½ days to 12 hours. These effects cannot be reconciled with the claimed justification of improving the marketing of fish.

Proposal 146 – This proposal suffers from some of the same infirmity as the prior proposal, in that it is confusing and increases the potential for complicating management. Moreover, this proposal is not necessary, as the Department already has emergency order authority to adjust the weekly schedule as necessary to accommodate marketing concerns. The Department used its E.O. authority to that effect in the Cinder River Section in September of 2007 and 2008, and there is thus no need to make the regulatory change requested in this proposal.

Proposals 147-152 – These proposals, mostly submitted by Bristol Bay fishermen or groups, seek to restrict fishing time and area by Area M boats. For the reasons discussed above in our general comments on the North Peninsula fishery, we strongly oppose these proposals.

Proposal 153 – CAMF opposes this proposal to open additional area on the North Peninsula to seine gear. Escapements into the Ilnik River are at or near the upper end of their range, and there is little overescapement as this proposal suggests. Also, the Ilnik River no longer flows through Ilnik Lagoon but empties directly into the Bering Sea. Opening Ilnik Lagoon would not target Ilnik sockeye.

Proposal 154 – We oppose this proposal to cut the depth of our nets from 70 meshes to 45 meshes on the North Peninsula. The stated justification appears to be that the nets we currently use are preventing the Department from achieving minimum escapement goals in the area. The data do not support that contention. A change of this magnitude would be very costly to our fleet.

Proposal 155 – We do not understand why a Bristol Bay fisherman is proposing to allow another gear type to fish in the Outer Port Heiden Section. The area that is open in this section is relatively limited as it is, and putting set gillnets along the beach would inevitably create gear conflicts.

Proposal 156 – We oppose this proposal. It's yet another effort by a Bristol Bay fisherman to meddle with our fishery.

Proposal 157 – CAMF submitted this proposal to adjust the line in the Outer Port Heiden Section to address problems our fleet has experienced since this area was opened in 2007. This is a housekeeping item that will conform the line to other management lines used in the North Peninsula fishery. We have discussed this line adjustment with enforcement personnel, who expressed no concerns about pivoting the line as requested in this proposal.

This concludes our comments. We anticipate providing additional information in testimony and written presentations at the meeting, and would be happy to answer any questions you may have concerning CAMF's position on these proposals.

Sincerely,

Steve Brown

Steve Brown
President

CONCERNED AREA M FISHERMEN

35717 Walkabout Road, Homer, Alaska 99603
(907) 235-2631

November 17, 2009

Vince Webster, Chairman
Alaska Board of Fisheries
P.O. 25526
Juneau, Alaska 99802-5526

Re: Proposals 29 and 30

Dear Mr. Webster and Board Members:

Concerned Area M Fishermen (CAMF) submits these comments on two proposals you will be considering this year concerning fishing by Bristol Bay (Area T) boats in the Northern District of Area M. These are proposals 29 and 30. We understand that the Board will take public testimony on these proposals and discuss them in committee during your upcoming Bristol Bay meeting, but that you do not intend to deliberate or take action on them until the Area M meeting in February. CAMF members will testify regarding this "overlap" issue at the Area M meeting, but we want to state in advance that we oppose these proposals to expand the presence of Area T boats fishing in Area M.

For those of you who are new to the Board, CAMF represents the interests of Area M drift gillnet fishermen. Our members participate in both South and North Alaska Peninsula fisheries. CAMF has been active in the Board process for nearly 25 years and we look forward to working with you again this year.

Proposal 29

This proposal seeks to expand significantly the opportunity for Area T boats to fish in Area M, particularly in the Outer Port Heiden and Ilnik Sections. We agree with the Department that this additional effort "would likely create a resource conflict" and would "complicate management of the fishery." *See* Staff Comments, Regional Information Report No. 2A09-02, at 38. The size of the fleet in Area M is sufficient to harvest the available surplus in this area, and there is no basis to consider authorizing a potentially substantial increase in effort. As the Department also notes, this proposal would be in conflict with the net registration regulations adopted by the Commercial Fisheries Entry Commission.

The proponent refers to a "new fishery" that was opened up in the Outer Port Heiden Section in 2007. While the Board did provide some additional fishing area in which Area M boats would operate in this section, this effort was directed at a run that we have always fished, Meshik River sockeye. Escapements into that system were consistently exceeding the Department's goal, and the Board sought to better target this run. The 2007 regulatory change has succeeded in allowing our fleet to harvest the available surplus. No expansion of effort is needed to accomplish this goal.

The proponent also claims that Area T fishermen "traditionally" fished the Outer Port Heiden and Ilnik Sections until the early 1980s. This was never true for the month of July. As explained in the Department's comments, allowing Area T boats to fish in Area M was intended to preserve historical fishing for Chinook and coho salmon in the Inner Port Heiden and Cinder River Sections, primarily by residents of Port Heiden and Pilot Point. Allowing Area T boats into the Outer Port Heiden and Ilnik sections, especially in June and July, would represent a significant expansion of effort by Area T boats in Area M, which effort would certainly be directed at sockeye.

Proposal 30

The stated rationale for this proposal is that Area T boats need more opportunity to catch kings in the inner portion of the Cinder River Section (in Cinder River Lagoon) during the month of July. However, the proposal also seeks to allow Area T boats access to the Inner Port Heiden Section during this time. We question the likelihood of Area T boats abandoning their sockeye fishery at it peak in order to fish the back end of a Chinook run down in Area M. Perhaps what the proponent really seeks is more opportunity to harvest sockeye, not kings. Should the Board desire more effort directed at Cinder River sockeye in June and July, there is positive evidence from the Board's action in opening up a portion of the Outer Port Heiden Section so our fleet could gain better access to the Meshik River run, that we would be capable of harvesting any available surplus from the Cinder River. The Department's comments on proposal 30 state that use of the Outer Port Heiden Section has been "effective at controlling escapement into the Meshik River" (Staff Comments at 41), and there is no reason to think that the same would not also be true if the Area M fleet were allowed greater access to the Cinder River run.

One final point regarding the Cinder River. The proponent of proposals 29 and 30 also submitted proposal 48, pertaining to fishing periods within Bristol Bay. He seeks to add language to an existing regulation that would preclude fishermen in some districts from fishing in the Ugashik or Cinder River Sections during the same week. However, the outer portion of the Cinder River Section does not open until August 1 (5 AAC 09.310(a)(1)(B)), so the reference to Cinder River in proposal 48 is confusing and should be deleted.

In sum, we urge the Board to reject both proposals 29 and 30. Our fleet is fully capable of harvesting the available surplus in Area M, and there is no justification for authorizing the significant expansion of effort in our area that likely would occur if either of these proposals were adopted. Thank you for considering these comments.

Sincerely,

Steve Brown

Steve Brown
President, CAMF

By

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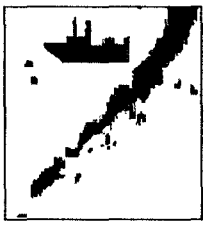


C.A.M.F.

Concerned Area M Fishermen
35717 Walkabout Rd.
Homer, AK 99603 907-235-2631

Dec. 20, 2009

Dear Board of Fisheries Member:

Concerned Area M Fishermen (CAMF) is a fishing organization representing salmon drift fishermen on the Alaska Peninsula. In advance of the Alaska Board of Fisheries meeting in February, CAMF is submitting three documents for your review. A copy of these papers has also been submitted to Jim Marcotte at Board Support in Juneau.

First, is a copy of the 2004 Alaska Board of Fisheries findings from the February, 2004 meeting (#2004-229-FB). CAMF feels these finding accurately reflect the rationale for the adoption of the management regulations for the South Peninsula June fishery that the fishery currently operates under. Hopefully, the findings will give some perspective and background for the fishery and how the current regulations were established.

Second is a paper titled "Do Sea Surface Temperatures Influence Catch Rates in the June South Peninsula, Alaska, Salmon Fishery?" by Pat Martin. Mr. Martin is a salmon permit holder and participates in the Area M salmon fishery. His paper, while technical, may offer some insight into some of the issues on what influences catch rates of sockeye in the "False Pass" fishery.

Finally, CAMF is aware that the Bristol Bay Economic Development Corporation (BBEDC), a western Alaska CDQ group, has presented testimony concerning chum catches on the Alaska Peninsula to the joint BOF/NPFMC (North Pacific Fishery Management Council) meeting recently held in Anchorage. A few days later, at a NPFMC meeting, BBEDC was seeking formal Council action to ask the Alaska Board of Fisheries to take management action to limit chum catches in Area M. Currently the Council is dealing with salmon by-catch issues in the Bering Sea/Aleutian Islands Pollock fishery.

We feel that it is important for the Board to realize the South Peninsula June fishery management is complex, and has a long history of regulation going back to before Statehood. This fishery is a directed salmon fishery managed by the State of Alaska, and therefore it is improper to refer to our catch as "by-catch", similar to the catch of Chinook or chums in the Pollock fishery. It is also important to understand there is a substantial fishery for locally spawning pink and chum salmon that occurs throughout July and

August and into September (what we call the "post-June" fishery). Escapements often exceed 500,000 chums, and catches may reach up to a million or more. There is a difference between the June (False Pass) fishery, and the later fishery for predominately local stocks, and unfortunately in the information the BBEDC presented at the joint BOF/Council meeting, BBEDC seemed to confuse the catches between the two. In many cases, particularly after 1998, BBEDC used catch information that was apparently from the post-June fishery, rather than the June fishery. Again in most cases, using wrong catch data shows catches that are substantially higher than what was actually harvested in June. CAMF has submitted a table for your review that compares the actual June harvest of chum with the data presented in the BBEDC testimony to the joint BOF/NPFMC. We feel that it is important to use accurate information particularly when data is presented in a regulatory forum. CAMF also notes that since 2004, the June fishery chum and sockeye catches have been well within the historical performance of the fishery.

We hope the information we have submitted will be helpful for the Board to learn some about the Area M fishery before the February meeting. CAMF looks forward to working with the Board on the various proposals that will be considered at our meeting.

Sincerely,

Steve Brown

Steve Brown, President

June South Peninsula Chum Catches 1998-2009, Combined South Unimak/Shumagin Islands.

Year	ADF&G	BBEDC testimony at BOF/NPFMC Joint Meeting, Nov, 2009
1998	245,619	465,907
1999	245,306	571,660
2000	239,357	815,959
2001	48,350	873,636
2002	378,817	440,213
2003	282,438	354,867
2004	482,309	387,799
2005	427,830	311,630
2006	299,827	876,019
2007	297,539	788,650
2008	410,932	391,742
2009	696,755	696,755

Red indicates, where BBEDC numbers are too high, blue indicates numbers lower than ADF&G 2008 AMR. Except for 2007, these numbers appear to be close to post-June chum catches. For 2007, BBEDC's harvest number is approximately 100,000 fish larger than the total season's harvest of chums on the South Peninsula for that year (per ADF&G 2007 was June 297,539 + Post-June 382,248=679,787 season total for whole South Peninsula).

Sources: 2008 South Alaska Peninsula Management Report, fishery management report 09-10, appendix B21. 2009 Alaska Peninsula Season Summary, ADF&G.

ALASKA BOARD OF FISHERIES

Findings on February 2004 Amendments to
South Unimak and Shumagin Islands June Salmon Management Plan
(5 AAC 09.365)
 # 2004 – 229 - FB

I. Introduction.

The Alaska Board of Fisheries took action on the South Unimak and Shumagin Islands June fisheries during its regularly scheduled Alaska Peninsula/Aleutian Islands (Area M) Finfish meeting that took place between February 15-26, 2004.

The Alaska Department of Fish and Game (department) staff presented a series of written area management reports, technical reports, and scientific analyses as well as a number of oral reports. They provided the board with comprehensive information relating to the historical and current commercial and subsistence fisheries, stock composition of the respective fisheries, and the status of salmon stocks in the Alaska Peninsula/Aleutian Islands area. Also presented were the most recent scientific information and analysis of that information by the staff.

The board took testimony from over 100 members of the public and advisory committee representatives. The board then broke into committee meetings on the numerous issues before it, including a meeting considering the proposals addressing the South Peninsula June fishery. Those members of the board received further information and discussion from public panel advisors and department staff.

The purpose of the committee meeting was to receive any new information that had not been handed out during staff reports and public testimony, and to allow public panel members and staff to interact with each other in front of the board committee in a "New England Town Hall" style setting. This allowed staff information and public panel member's recommendations to be discussed in more detail, to provide more information for the board to use during deliberations.

On February 25, the board began deliberations of the June fishery. Members of the board subcommittee provided both a written and oral summary to the full board. Deliberations on the pertinent proposals then began. Proposal 207 was brought to the record. An amendment was offered to replace proposal 207 with language from RC126, a proposed South Unimak and Shumagin Island June Salmon Management Plan.

This amendment resulted in several hours of deliberation and debate on the core issues surrounding the June fishery in Area M. Several attempts were made to amend the new management plan. All failed either by a 3-4 or a 2-5 vote. The plan contained in RC126 finally passed 4-3 (except for the language regarding area of the fishery in paragraph b, which had previously been dealt with under proposal 206), with members Dersham, Andrews, Morris and Jensen voting in favor, and members R. Nelson, A. Nelson, and Bouse opposed.

II. Background on the South Peninsula June Fishery.

The South Peninsula June fishery takes place in two primary locations: south of Unimak Island, where the majority of the harvest occurs, and in portions of the Shumagin Islands. The

South Unimak and Shumagin Island June fisheries harvest both sockeye salmon and chum salmon in a mixed stock fishery. The sockeye salmon are predominately of Bristol Bay and Alaska Peninsula origin. The chum salmon are bound for a number of areas, including Japan, Russia, the Arctic-Yukon-Kuskokwim (AYK), Bristol Bay, the Alaska Peninsula and southcentral Alaska. The salmon stocks have historically been harvested along the south Alaska Peninsula during the month of June. There is not a paucity of information about this fishery. The 1987 tagging study and the genetic stock identification (GSI) studies of the 1990s provide valuable data for analysis. Combined, they show that the June fishery is a low impact fishery with very low harvest rates (in the low and mid single-digit range, percentage-wise) on the separate stocks involved.

A. Sockeye Salmon in the June Fishery.

Several small tagging studies have taken place at South Unimak and in the Shumagins, from 1925 through the 1960s, but the largest, most recent, and most comprehensive was a study conducted by the department and contractors in both locations during the 1987 season.

For that study, 5,442 sockeye salmon were tagged at South Unimak and 1,545 were tagged in the Shumagin Islands during June and very early July. Almost all tag recoveries occurred in the Bristol Bay, North Alaska Peninsula, South Alaska Peninsula, and Chignik areas. There were high rates of tag return reporting and good assessments of terminal runs (catch and escapement) for stocks where tags were recovered. Based upon reasonable estimates and assumptions of tag loss, fish mortality, and tag reporting, the study estimated the stock composition of sockeye salmon harvested in the two fishing areas: 84 percent of the sockeye salmon harvested at South Unimak sockeye were bound for various systems in Bristol Bay, while 54 percent of those caught in the Shumagin Islands were destined for Bristol Bay.

These estimates of stock composition compare the number of fish harvested in a fishery that originate from any specific stock to the total number of fish harvested in that fishery. A related, but distinct and more important parameter is the harvest rate (or exploitation rate) of a fishery, which compares the same number of fish harvested in the fishery that are from a specific stock, but in this case, to the total number of fish in that stock (the total sum of catches and escapement).

Because the total sockeye salmon run into Bristol Bay (tens of millions) is so much larger than the total catch of sockeye in the South Peninsula June fishery (hundreds of thousands to low millions), the harvest rate of the June fishery on the Bristol Bay sockeye salmon run will necessarily be much lower than the stock composition of Bristol Bay sockeye in the June fishery harvest. Estimates from the 1987 tagging study bore this out: harvests of Bristol Bay-bound sockeye at South Unimak represented a little over 2 percent of the entire Bristol Bay sockeye run that year, while harvests of Bristol Bay-bound sockeye in the Shumagin Islands was less than 0.5 percent of the Bristol Bay run that year (c.f., RC 9).

Thus, the proportion of Bristol Bay sockeye in the June fishery sockeye catch (i.e., stock composition) is quite high, but the impact of these catches on the total Bristol Bay sockeye run (i.e., harvest rate) is very low. While these parameters may fluctuate somewhat from year to year, it is estimated that the South Peninsula June fishery annually exerts well less than a 5 percent harvest rate on Bristol Bay sockeye runs, thus 95 percent or more are available each year for commercial, sport, and subsistence harvests in Bristol Bay itself.

The sockeye salmon harvested in the June fishery are very high quality, and the timing of the harvest is early. These factors contribute to a high market price potential.

B. Chum Salmon in the June Fishery.

The 1987 study also tagged 3,495 chum salmon at South Unimak and 2,828 in the Shumagin Islands. Tags were recovered from locations all across the North Pacific, from British Columbia and southeast Alaska, through central and western Alaska, to Russia and Japan. Tag reporting and assessment of total run size for these chum salmon stocks were not nearly as reliable as for the sockeye salmon stocks. Moreover, complications regarding the extended travel time and potential for additional tag loss and mortality for fish bound particularly for Asia required that a number of assumptions and alternative scenarios for mortality be considered. Initially, a single set of stock composition estimates was published (RC 10), but in revisions to the study three "cases" were proposed (RC 12): Case 1 using assumptions that favored higher stock composition estimates for individual AYK chum stocks; Case 2 being the estimates originally published and considered intermediate; and Case 3 which incorporated assumptions favoring stock composition estimates for Asian stocks of chums.

Since the results of this tagging study were published and revised, a comprehensive GSI study was conducted (RC 13), comparing catches sampled from the South Peninsula June fisheries for 1993-1996 against a North Pacific-wide baseline of allozyme signatures for individual chum stocks. The GSI work could not distinguish as well among individual Alaskan stocks as the 1987 tagging study. But it did provide reliable, and repeatable, estimates of the proportion of the June fishery harvest composed of a grouping called the NW Alaska summer chum group comprising Bristol Bay, Kuskokwim, Yukon summer, and Norton Sound chum salmon stocks combined. Finally, the GSI studies confirmed that the Asian contribution to the South Peninsula June fishery harvests was quite high, suggesting that the Case 2 to 3 estimates of the revisions to the 1987 tagging study were more appropriate than Case 1.

The GSI work estimated that NW Alaska summer chum stocks composed between 40 and 65 percent of the South Unimak June chum salmon harvests (1993-1996). Similarly, the NW Alaska summer chum stock composition estimate for the Shumagin Island June fishery (1994-1996) was 36 to 52 percent. A weighted mean of these estimates indicates that about 53% percent of the June fishery chum harvest is composed of NW Alaska summer chum salmon. However, from results of the 1987 tagging study, and from comparisons of respective total run sizes, it is apparent that Bristol Bay chum salmon constitute about 40 percent of the June fishery catch of NW Alaska summer chum in any particular year. Thus, it can be expected that AYK summer chum stocks compose about one-third of the South Peninsula June chum catch.

While stock composition estimates for AYK summer chum in the June fishery harvests may range around 33%, the harvest rate of the June fishery on the millions of fish annually returning to AYK summer chum runs would be much lower.

Based upon an evaluation of the stock-specific "cases" derived from the 1987 tagging study, and information from the GSI work confirming high Asian contributions to the June fishery catches, plus an acknowledgment that most estimates of total returns to AYK systems are low due to relatively poor escapement monitoring, it is apparent that the combined South Peninsula June fishery, prior to 2001, exerted a harvest rate of perhaps 4 to 7% on any particular

AYK summer chum stock. This would mean that roughly 95% of each run was subsequently available to commercial, sport, and subsistence harvests in more terminal locations.

The GSI studies were able to distinguish Yukon fall chum salmon from the other chum salmon stocks in the June fishery catches. Estimates of stock composition ranged from 0 to 6 percent of portions of the June fishery harvests between 1993 and 1996; the resulting estimates of harvest rate on annual Yukon fall chum returns are negligible.

In summary, the chum salmon involved migrate across a broad area Only a relatively small portion of any run passes through Area M, and of these, only a portion are caught in the June fishery. About one-third of the chums harvested in the June fishery are summer chums bound for AYK river systems; the rest are headed somewhere else. The June fishery harvest rate on this aggregation is only a few percent of the AYK summer chum run. The chums that are present in the June fishery are highly mixed and spread out over the month. There does not appear to be any serious risk that a single chum stock could be significantly impacted by the June fishery. Nor is it possible to manage the June fishery for improvement to specific AYK chum stocks of concern.

This board agrees with prior boards which have found that the impact of the June fishery on specific stocks of AYK chum salmon is negligible and that reducing the chum harvest in the fishery would not produce detectable results or measurable benefits to AYK chum runs. (c.f., board finding # 96-164-FB).

III. Problems with Current Plan.

In 2001, the board removed a longstanding sockeye salmon guideline harvest level (GHL) for the June fishery which equaled 8.3 percent of the total projected harvest of Bristol Bay sockeye each year; 6.5 percent was applied to the South Unimak fishery and 1.5 percent to the Shumagin Islands. The board also eliminated a chum cap that had been imposed on the June fishery, at various levels, since 1986. In place of the sockeye GHL and chum cap, the board established nine 16-hour open fishing periods (144 total hours), between June 10 and June 30 along with some other incidental prescriptions. The effect of this new management plan was a substantial reduction in sockeye salmon catches but not much reduction in chum salmon catches; the exact opposite of the long-standing June fishery management objectives of harvesting the historical percentage of sockeye while minimizing chum harvest.

The 2001 June fishery management plan was a significant break with prior plans. Now that it has been in place for three years, its problems are evident. The main problem is that it severely limits the time the fleets have on the water. This denies the fleets the flexibility needed to avoid chum salmon. The fleets do not have the ability to move away from a concentration of chum salmon, as they have demonstrated in the past. The 2001 plan is not very effective for conserving chum salmon and was unduly restrictive on the fishery's opportunity to harvest sockeye salmon.

IV. The New 2004 Plan Amendments.

The plan amendments in RC 126 replaced the 2001 plan with a schedule providing for a maximum of 416 hours of fishing over a span of 19 days, between June 7 and June 29. Essentially this establishes 88-hour open periods, followed by 32-hour closures (windows); the

final open period is only 64 hours long. This plan will increase allowable fishing time in hours during June by a factor of 2.89 compared with the 2001 regulation. It will increase the number of days available for fishing by a factor of 2.11. A significant amount of the added time will come during nighttime hours, when harvests are expected to be significantly lower than during daytime hours. Depending upon the efficacy of nighttime fishing and other changes in behavior of fishermen, it is anticipated that harvests in the June fishery may double compared to those since 2001, depending upon the annual abundance of sockeye and chum salmon returns. The new 2004 regulations bring the allowable fishing time in the June fishery back to levels experienced prior to 2001 but, with reductions in fleet size and other changes since the late 1990s, it is unlikely that catches will exceed, or even return to, levels experienced prior to 2001.

The board has given weighty consideration to concerns expressed about potential impacts of the plan amendments on Bristol Bay sockeye and western Alaska chums. While the exact net effect that these regulatory changes may have on the South Peninsula June fishery catches is unknown, subsequent harvest rates on Bristol Bay sockeye and AYK chums are not expected to increase beyond the levels experienced in the 1980s and 1990s. Thus, the impact of the June fishery on those stocks, and subsistence fisheries on those stocks, is expected to be minimal. Over the past 20 years or so, the board has experimented with different management approaches for the June fishery, making significant changes every time it has met on the area's fisheries. The 2004 amendments represent another approach in response to the perceived failures of the 2001 measures. If after another three years the 2004 measures result in unexpected consequences, the board will be able to make adjustments accordingly. Based on the information before the board now, no significant harmful impacts are expected on AYK salmon stocks from the 2004 changes.

V. The 2004 Regulatory Amendments are Consistent with Sustained Yield and all other Statutory and Regulatory Standards.

The 2004 June Fishery Management Plan is consistent with sustained yield principles, the subsistence statute (AS 16.05.258), the Policy for the Management of Sustainable Salmon Fisheries (5 AAC 39.222) and the Policy for the Management of Mixed Stock Salmon Fisheries (5 AAC 39.220). The board considered the allocation criteria applicable to the fisheries as set out in AS 16.05.251(e) and 5 AAC 39.205.

The board considered the best scientific data available in making its decisions about the June fishery (5 AAC 39.222(d)(2)(A)). As noted above, there is a substantial amount of data on the June fishery and the fishery resources harvested there. Indeed, the board is often faced with tough decisions for other fisheries where there is much less scientific information available to consider than is available for the June fishery. The board believes the decision it has made here is based on sound science and consideration of all the appropriate data and factors. The board considered all the department reports, the advisory committee reports and comments, and the public testimony and written comments. In addition to the information presented at the February 2004 meeting, the board had also recently held a meeting on AYK fishery issues in January 2004 and Bristol Bay issues in December 2003 and there received extensive reports, written comments and testimony concerning western Alaska salmon stocks. The board relied on all this information in reaching its decisions on the June fishery.

A. Sustained Yield.

The board understands that sustained yield means "conscious application insofar as practicable of principles of management intended to sustain the yield of the resource being managed." The board has consciously applied principles of management to the June fishery. It has limited the amount of gear that can be used. It has limited the amount of time that may be fished. The board reviewed the plan in light of the conservation standards contained in the sustainable salmon and mixed stock salmon policies. The best available information shows that the 2004 changes to the June fishery management plan will not cause sustained yield concerns on western Alaska salmon stocks. The plan this board adopted is still a "windows" plan that is consistent with the direction of the sustainable fisheries policy. Department staff stated during final deliberations that they believed sockeye and chum harvest numbers under this plan will fall within the historical range of harvests of the last ten years or so in the June fishery.

Although the revisions to the management plan authorize more fishing time than the plan adopted in 2001, the increased opportunity is not inconsistent with principles of management for a mixed stock fishery that has minimal impacts on AYK chum runs. Principles of management do not suggest that the board should impose substantial restrictions on fishing in Area M during June if the benefits, in terms of improvements to chum stocks of concern, are negligible or not even detectable. In addition, allowing more fishing time in Area M is consistent with the sustained yield of sockeye.

Another important point is that the effort in the June fishery has been significantly reduced because of curtailed harvest opportunity, and in part due to low prices being paid for salmon. So while fishing hours have been increased by the 2004 amendments, the expected increase in harvest will likely to continue to be below that of earlier years because of reduced participation. While the 2004 changes may encourage some level of increase in participation, it is not expected to quickly return to the levels of the 1980s or 1990s.

A large sockeye run is projected to return to Bristol Bay in 2004. Processing capacity in the Bay has declined, and may not be able to handle the catch. Harvesting a portion of these fish in Area M, while they are in prime condition, helps assure that more of the harvestable surplus is taken. The sockeye harvested in the June fishery are high quality and bring considerable value to Alaska Peninsula fishermen and communities and to the state.

B. Sharing the Burden of Conservation.

The sustainable salmon fisheries policy states that salmon management objectives should be appropriate to the scale and intensity of uses (5 AAC 39.222(c)(3)(A)). The policy also provides that the burden of conservation should be shared among all fisheries in close proportion to their respective use (5 AAC 39.222(b)(4)(D) and (f)(4)). This idea of proportional burden sharing is also found in the mixed stock policy, which likewise provides that the burden of conservation should be shared among all fisheries in close proportion to their respective harvest on the stock of concern (5 AAC 39.220(b)).

Since the June fishery has relatively low impact on any chum stocks (i.e., low harvest rate), including AYK chum, it is not necessarily appropriate to impose substantial restrictions on the June fishery in an effort to conserve specific chum salmon stocks. The management measures adopted in 2001 imposed more conservation burden on the June fishery than was appropriate in view of its low impact on AYK chum stocks of concern.

C. The Precautionary Approach in the Face of Uncertainty.

The 2004 amendments are consistent with the precautionary approach to management urged in the sustainable fisheries policy. Several provisions of the policy indicate that salmon management objectives should be related to measurable risks and benefits; 5 AAC 39.222(c)(5) recommends a precautionary approach in the face of uncertainty; subsection (A)(iv) states that "where the impact of resource use is uncertain, but likely presents a measurable risk to sustained yield, priority should be given to conserving the productive capacity of the resource." The precautionary approach does not require imposition of significant conservation restrictions where the potential impact of a use is likely so minimal as not to be measurable.

In section 5 AAC 39.222(d), the policy states that management plans should contain goals and measurable and implementable objectives. The policy does not support the idea of imposing management measure whose benefits are not detectable. The sustainable salmon policy does not suggest that the board avoid restoring some amount of fishing time in the June fishery.

A variety of scientific studies have provided a good idea of the stock composition of the fishery and its low impact on migrating chum runs. There is not a great deal of uncertainty concerning the overall effect of the chum harvest in the June fishery. Some suggest that the board should not act without precise knowledge of which AYK chums are being harvested at any given time during the June fishery. This implies a degree of certainty that will likely never exist. The board is acting reasonably based on the information before it.

D. The 2004 Amendments are Consistent with the Subsistence Statute.

The board is well aware of yield and management concerns for chum stocks in northern Norton Sound, particularly in the Nome Subdistrict. The board has taken the steps necessary to provide a preference for subsistence uses in the Nome Subdistrict, including adoption of a Tier II permit system. The board intends to continue monitoring subsistence uses in northern Norton Sound and will take the actions it believes are necessary and appropriate under the sustained yield principle and to provide for reasonable subsistence uses.

Salmon in Norton Sound, and in particular chum salmon in the Nome Subdistrict, are not manageable as a unit with salmon harvested in the Area M June fishery. Previous board findings on this point have been recognized as valid by the Supreme Court of Alaska in its opinion in the case of *Native Village of Elim v. State*, 990 P.2d 1, 12-13 (Alaska 1999). While about one-third of the chum salmon harvested in the June fishery may be AYK chums, the impact of the fishery on any particular chum run is likely very low if measurable at all. The board and the department cannot manage the June fishery in connection with the subsistence fishery for chums in the Nome Subdistrict. Even if some number of chums bound for the Nome Subdistrict is present in the June fishery, the fisheries are very distant form each other, and there are many potential sources of mortality to those chums between Area M and northern Norton Sound. Even a complete closure of the June fishery would not likely produce measurable improvements to subsistence fishing in the Nome Subdistrict or other subsistence fisheries in western Alaska.

E. Allocation Issues.

The board recognizes that its 2004 amendments could have some allocative impacts different from the 2001 plan. In general, these impacts will be insignificant to any one stock. One purpose of the 2004 amendments is to restore some of the historical sockeye allocation to the June fishery. It is not expected that the changes will result in a June fishery harvest that exceeds the long-term historical averages for sockeye harvest. The board reviewed the allocation criteria under AS 16.05.251 and 5 AAC 39.2005 as follows:

1) The history or each personal use, sport, guided sport, and commercial fishery: The history of the fisheries was considered and discussed. There is no developing or existing sport fishery on Area M sockeyes or chums on the South Peninsula. The commercial fisheries have existed since the early 1900s and some subsistence fishing has occurred for thousands of years. Other than Bristol Bay, which is also a long-standing commercial fishery, most commercial fisheries in western Alaska are of more recent origin and are smaller scale fisheries. The subsistence fisheries in the both the Alaska Peninsula and western Alaska predate recorded history. The 2001 amendments resulted in June Ffishery sockeye catches well below historical averages. The 2004 amendments are intended to return the harvests closer to historical levels.

2) The characteristics and numbers of participants in the fisheries: The number of participants in the June fishery has changed in recent years with fewer than half of the gillnetters and one-fourth of the seiners still fishing as compared to the years of peak fishing activity. The majority of the participants in the June fishery are Alaska residents. The number of participants in some of the western Alaska chum fisheries has also been reduced by closures of commercial salmon fisheries.

3) The importance of each fishery for personal and family consumption: Salmon fishing in both the June fishery and throughout western Alaska are very important for providing residents the opportunity to obtain fish for personal or family consumption. The June fishery itself may not be critical to personal and family consumption: however, it is noted that a subsistence fishery does exist and some salmon are also likely retained from June fishery commercial catches for family use.

4) The availability of alternative fishery resources: Other resources are available to some of the June fishery seiners, who can fish jigs and pots for cod and trawl for some other species of bottomfish if they have made the investment. The driftnetters might be able to jig for cod and rockfish; however, being primarily winter fisheries, opportunity is likely limited. Setnetters mainly fish out of skiffs and likely have few other resources available. In western Alaska, north of Bristol Bay, alternative commercial fishery resources are also limited.

5) Importance to the economy of the state: This is especially critical in that the fish taken in the Alaska Peninsula fisheries are some of the freshest and, therefore, most valuable in the entire state. The value to the fishermen and the state is enhanced since higher prices mean more fish tax dollars. Providing fishing time and the opportunity to catch sockeyes, greatly improves the value of the fishery to all participants. The Bristol Bay sockeye fishery is very important to the economy of the state. The western Alaska fisheries outside of Bristol Bay, while important, are probably not as important to the economy of the state. However, the 2004 changes are not expected to impact those fisheries one way or the other.

6) Importance to the economy of the region and local area: The economy of the Alaska Peninsula area is greatly enhanced with the increased value of the salmon and therefore the

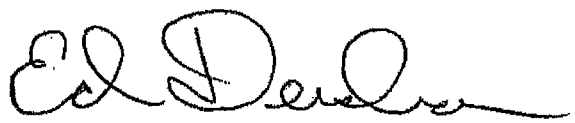
fishery in total. Successful commercial fisheries would be greatly beneficial to the regional and local economies in western Alaska. However, the 2004 changes are not expected to impact those fisheries one way or the other.

7) Importance of recreational fisheries: Recreational opportunities are not a factor in the June fishery. These are primarily chum and sockeye fisheries. Recreational fisheries on Bristol Bay sockeye are important, but rely upon relatively small proportions of any stock's total return.

VI. Summary

The board finds that the 2004 amendments to the South Peninsula June salmon management plan (5 AAC 09.365) are based upon the best available information and are consistent with the statutory and regulatory criteria for board decisions. Upon adoption of these findings, the Board incorporates by reference all prior findings relative to the Area M June fishery, to the extent the prior findings are unmodified by this finding.

Approved: April 22, 2004
Vote: 4 – 3



Ed Dersham, Chair

Members votes as follows:

Andrews: Yes
Bouse: No
Dersham: Yes
Jensen: Yes
Morris: Yes
A. Nelson: No
R. Nelson: No

Do Sea Surface Temperatures Influence Catch Rates in the June South Peninsula, Alaska, Salmon Fishery?

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Martin, P.C. 2009. Do sea surface temperatures influence catch rates in the June south peninsula, Alaska, salmon fishery? N. Pac. Anadr. Fish Comm. Bull. 5: XX–XX.

Abstract: The influence of sea surface temperature (SST) on sockeye salmon catch per unit effort (CPUE) of the June south Alaska Peninsula fishery and on the run size of the western Alaska sockeye salmon was investigated for the period 1975–2008. CPUE was positively related to the size of the western Alaska sockeye salmon run but not to SST over the pooled time period. Time-stratified analysis before and after 1994/1993 revealed significant negative relations between the June fishery CPUE and winter and spring SST in the area to the east of the fishery. There were positive relations between the size of the western Alaska run and SST for temperature time series in the central Bering Sea, eastern Aleutian Islands, and between Kodiak and the Shumagin islands for one- and two-year lags prior to the adult return. Time-stratified analysis showed that there were significant changes in the influence of temperature on the June fishery CPUE and in the size of the western Alaska run. Combined the results suggest that warming temperatures in the Bering Sea have shifted regions of importance to the west for all ocean ages.

Keywords: sockeye salmon, sea surface temperature, ocean distribution, migration, western Alaska, Bering Sea, Alaska Peninsula, CPUE

INTRODUCTION

During June a coastal net fishery takes place on the Pacific Ocean side of the Alaska Peninsula and eastern Aleutian Islands targeting maturing sockeye salmon (*Oncorhynchus nerka*) with an incidental harvest of maturing chum salmon (Rogers 1986). Annual catches are typically between one and two million sockeye salmon and about one quarter that number for chum salmon (*O. keta*). Tagging studies have identified the majority of the sockeye salmon catch as of Bristol Bay origin (Eggers et al. 1991). Results of genetic stock identification show that the majority of the chum salmon catch is of western Alaska origin with one-quarter to one-third of Asian origin (Seeb and Crane 1999).

Most of the variance in June fishery sockeye salmon catches can be explained by a positive linear relation between catches and the total western Alaska sockeye salmon abundance alone ($P = 5.8 \times 10^{-7}$, $R^2 = 0.55$). Catch per unit effort (CPUE) in the fishery has been highly variable over time but is not closely related to changes in the management of the fishery (Fig. 1). For example, the depth of nets allowed in the fishery was reduced and restricted for the first time in 1990 following the year with the highest CPUE on record. Following modest CPUE in 1990 and 1991, the sockeye salmon CPUE in 1992 and 1993 were the third and fourth highest on record. Since 1994 the average June south Peninsula fishery sockeye salmon CPUE has dropped by about 30% while western Alaska sockeye salmon abundance has been above average. Years such as 1996 with near record returns of sockeye salmon to Bristol Bay but unexpectedly low CPUE in the June fishery have prompted speculation that the availability of salmon to the fishery is influenced by environmental conditions along the migratory path of salmon at sea (Poetter 2009).

The freshwater reproductive and early life history of salmon is relatively attractive for study, but salmon populations experience most of their mortality at sea (Groot and Margolis 1991). Variability in marine survival is thus closely related to the abundance of returns. There has been considerable work aimed at understanding the influence of climatic variables such as sea surface temperature (SST) on growth, distribution and production of salmon (Beamish and Boullion 1992; Francis and Hare 1994; Adkison et al. 1996). These studies have focused on large-scale effects frequently related to the regime shift in about 1977 that marked the beginning of the present period of high production. Both Rogers (1987) and Isakov et al. (2000) studied the effects of temperature on growth of Bristol Bay sockeye salmon and found the greatest effects in the early marine life history stages. Francis and Hare (1994) have shown that the abundance of western Alaska sockeye salmon adult returns is correlated with winter temperatures on Kodiak Island two years prior. Welch et al. (1995, 1998) have shown that salmon distributions at sea have sharp thermal limits that vary by area during different months of the year.

Nagasawa et al. (2005) found a strong positive relation between sea surface temperature trends along the dateline in the Bering Sea in July and trends in CPUE of immature

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sockeye and chum salmon in Bering Sea research gillnet surveys (P = 8.15 x 10^{-7}, R^2 = 0.586). Greater abundance of immature fish with warmer temperatures would be consistent with a greater proportion of western Alaska sockeye salmon using a larger area in the Bering Sea for a longer period in the summer. This would correspond to a reduced distribution in the North Pacific during the following winter and spring. Perry et al. (2005) relate distribution shifts for marine fishes to SST changes in the North Sea using CPUE data and suggest "profound impacts on commercial fisheries through continued shifts in distribution and alteration of community interactions". They also found that species with rapid generational turnover were more likely to show changes in marine distribution.

Because the June fishery is restricted to a relatively small nearshore area, changes in the migratory path of maturing salmon could have a large impact on availability to the fishery. Thus previous research suggests that SST might influence June CPUE both via changes in western Alaska sockeye salmon abundance and changes in ocean distribution and migration patterns (Welsh et al. 1995, 1998; Nagasawa et al. 2005; Perry et al. 2005; Francis and Hare 1994; Beamish and Bouillon 1993). For example, later departure from the Bering Sea after summer feeding would limit the extent of eastward migration in the Subarctic Current in the winter. Reduced eastward distribution in winter would result in a westward migration farther offshore in the Alaskan Stream in spring with lower availability to the June fishery. The purpose of this study is to evaluate the potential importance of SST at specific ocean areas and times on the June fishery CPUE and to determine whether the importance of those locations has changed in concert with changes in the June fishery CPUE.

First I hypothesize that the June fishery CPUE is positively related to western Alaska sockeye salmon abundance and to SST in five regions of the North Pacific and Bering Sea from 1975–2008 and that there are significant changes in those relations before and after 1994/1993. Second, I hypothesize that the abundance of western Alaska sockeye salmon has been positively related to SST in those five regions from 1975–2008 and that those relations also changed before and after 1994/1993.

MATERIALS AND METHODS

Sea Surface Temperature

Five locations were chosen to evaluate the influence of temperature by region on the June south Peninsula fishery catch rates (Fig. 2). T. Nagasawa (nagasat@affrc.go.jp, unpublished data) provided time series of SST for the Bering Sea and for an area near the eastern Aleutian Islands which includes the location of the June south Peninsula fishery. He has identified these areas as particularly important for immature sockeye salmon at sea. A Kodiak winter air temperature time series was constructed from the Alaska Climate Research Center (http://climate.gi.alaska.edu/Climate/Location/TimeSeries/Data/adqT) to serve as a surrogate for SST, according to Francis and Hare (1994). An average for each year was computed by averaging the monthly average air temperatures for the period November through March, where March is the identified year. Time series of direct observation of SST are lacking for the winter and spring from the Gulf of Alaska and North Pacific Ocean in the vicinity of the Alaska Peninsula. However a global time series of average monthly SSTs (Smith-Reynolds Optimum Interpolation SSTs) is available for sub-sampling online at the NOAA site (http://nomads.ncdc.noaa.gov/cgi-bin/ncdc-ui/define-collection.pl?model_sys=sst&model_name=ersst&grid_name=999). For the Gulf of Alaska area between 55°N–60°N, 140°W–150°W, I extracted the minimum monthly average SST for each year, usually occurring in February or March in order to test whether the degree of extreme cold might keep fish

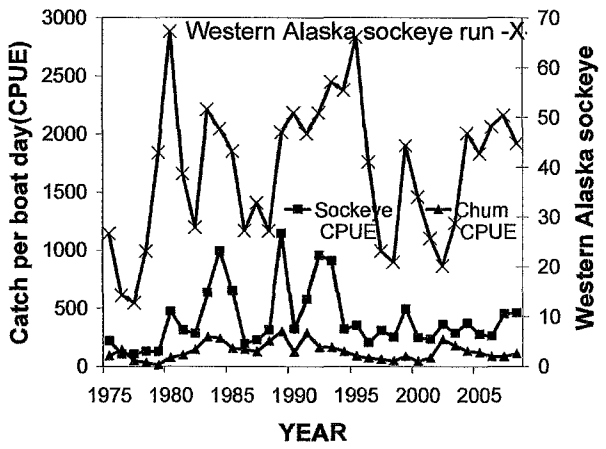

Fig. 1. Western Alaska sockeye run size and June south Peninsula fishery catch per boat per day for sockeye and chum salmon, 1975–2008.

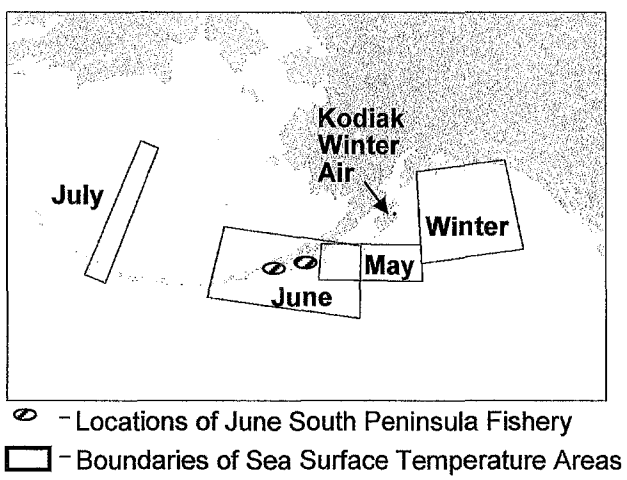

Fig. 2. Location of the June south Peninsula fishery and areas of temperature time series.

farther offshore. For the area offshore and between Kodiak and the Shumagin islands bounded by 54°N–56°N, 150°W–160°W, I extracted the May average SST. Maturing adult salmon migrate through this area in the period immediately preceding the fishery. The four time series of SST and one SST surrogate are shown in Table 1.

Catch per Unit Effort

Catch and effort information for the June south Peninsula fishery were obtained from the Alaska Department of Fish and Game (ADF&G) (Poetter 2009). The abundance of the western Alaska sockeye salmon run was computed from ADF&G data files as the sum of catch plus escapement for Chignik, the north Alaska Peninsula and Bristol Bay. Abundance, catch, effort and CPUE data are shown in Table 2.

Catches may not be simply dependent on availability of sockeye salmon during June along the south Peninsula. Throughout most of the period of this study, 1975–2008, fishing time in the June fishery was regulated based on fore-

Table 1. Temperature by time and area for the North Pacific Ocean and Bering Sea.

Year	July Bering Sea*1	June Eastern Aleutian*1	May Kodiak-Shumagin*2	Kodiak winter Air*3	Gulf winter monthly minimum*2
1972	7.28	5.22	5.06	-2.51	2.87
1973	7.03	5.53	5.09	-1.78	4.06
1974	8.10	6.21	5.62	-1.29	3.83
1975	6.63	5.23	4.84	-2.53	4.53
1976	6.85	5.65	4.85	-2.42	4.07
1977	7.95	7.13	5.59	1.68	5.46
1978	7.43	6.55	5.84	0.23	4.77
1979	7.55	7.39	5.88	1.97	4.47
1980	7.98	6.29	5.35	0.63	4.29
1981	8.58	7.69	6.38	1.99	4.84
1982	6.85	5.96	4.96	0.42	4.07
1983	7.60	7.31	6.19	2.41	4.79
1984	8.10	7.73	6.05	1.43	5.28
1985	7.30	5.91	5.12	1.62	4.77
1986	7.95	6.24	5.64	0.58	4.84
1987	7.20	6.34	5.64	1.92	5.12
1988	7.55	6.63	5.39	0.28	4.91
1989	7.78	6.15	5.70	-1.03	3.70
1990	8.20	6.79	6.22	-0.50	3.99
1991	7.80	6.56	5.56	-0.83	4.34
1992	6.98	7.23	5.97	0.09	4.88
1993	7.73	7.19	6.35	-0.14	4.29
1994	7.50	6.96	5.79	0.83	4.94
1995	7.88	6.40	6.00	-0.90	4.47
1996	8.43	6.97	6.45	0.39	4.42
1997	8.35	7.83	6.18	0.34	4.54
1998	8.03	6.73	5.92	0.56	5.42
1999	7.15	5.92	4.78	-2.14	4.29
2000	8.05	6.69	5.75	-0.97	4.19
2001	7.15	7.13	5.99	1.46	5.11
2002	8.03	6.89	5.78	-0.88	4.17
2003	8.25	6.97	6.27	1.83	5.80
2004	8.10	6.99	6.27	-0.31	4.86
2005	7.91	*NA*[4]	7.11	1.33	5.14
2006	7.24	*NA*	5.65	-0.98	4.40
2007	7.30	*NA*	5.09	-2.77	3.77
2008	7.44	*NA*	4.68	-0.87	4.21

*1Provided from T. Nagasawa
*2NOAA NCDC Smith-Reynolds Optimum Interpolation SST
*3Alaska Climate Research Center average of monthly values
*4Data not available

Table 2. Effort, catch and CPUE for the June south Alaska Peninsula fishery and total western Alaska sockeye salmon abundance.

Year	Days fished	Units of gear	Gear days	Sockeye catch (x 1000)	Sockeye CPUE	Chum catch (x 1000)	Chum CPUE	Western Alaska sockeye run (millions)*
1975	10	109	1,090	240	220	101	93	26.7
1976	19	149	2,831	305	108	410	145	14.3
1977	17	131	2,227	242	109	116	52	12.8
1978	23	159	3,657	487	133	122	33	23.2
1979	33	198	6,534	851	130	104	16	42.9
1980	30	226	6,780	3,206	473	509	75	67.3
1981	24	243	5,832	1,821	312	564	97	38.6
1982	30	251	7,530	2,119	281	1,095	145	27.9
1983	11	281	3,091	1,964	635	786	254	51.6
1984	5	280	1,400	1,388	991	337	241	47.7
1985	9	305	2,745	1,791	652	434	158	43.3
1986	8	298	2,384	471	198	352	148	27.3
1987	12	290	3,480	794	228	443	127	32.8
1988	8	301	2,408	757	314	527	219	27.2
1989	5	305	1,525	1,745	1,144	455	298	47.1
1990	13	321	4,173	1,345	322	519	124	51.0
1991	8	334	2,672	1,549	580	773	289	46.8
1992	8	321	2,568	2,458	957	426	166	50.9
1993	10	328	3,280	2,974	907	532	162	57.1
1994	14	324	4,536	1,461	322	582	128	55.5
1995	18	331	5,958	2,105	353	537	90	66.1
1996	16	313	5,008	1,029	205	360	72	41.1
1997	18	292	5,256	1,628	310	322	61	23.1
1998	18	283	5,094	1,289	253	246	48	21.0
1999	10	277	2,770	1,375	496	245	88	44.4
2000	18	278	5,004	1,251	250	239	48	34.0
2001	5	128	640	151	236	48	75	25.7
2002	9	181	1,629	591	363	379	233	20.2
2003	9	177	1,593	453	288	282	179	28.8
2004	19	190	3,610	1,348	373	482	134	46.8
2005	19	190	3,610	1,004	278	428	119	42.8
2006	19	188	3,572	932	261	300	84	48.2
2007	19	185	3,515	1,590	452	298	85	50.4
2008	19	196	3,724	1,714	460	411	110	44.8

* Catch plus escapement for Chignik, north Alaska Peninsula and Bristol Bay.

casts of abundance of Bristol Bay sockeye salmon. Effort, measured as the product of the total number of days the fishery was open and the total number of vessels fishing during the month, varied over a wide range as the result of management measures and variable participation by fishermen. Adding effort as an independent variable in step-wise multiple regression only results in a small change in the amount of variance explained in the relation between June fishery catches and total western Alaska sockeye salmon abundance ($P = 2.15 \times 10^{-7}$, $R^2 = 0.63$ vs. $P = 5.8 \times 10^{-7}$, $R^2 = 0.55$). Because management measures had a relatively small effect on catches, CPUE should be a measure of the availability of salmon to the June fishery. The time series of CPUE for sockeye salmon and the CPUE for chum salmon have a significant linear positive relation ($P = 4.4 \times 10^{-5}$, $R^2 = 0.42$). However, total abundance data are only available for sockeye salmon, so the balance of the analysis was restricted to sockeye salmon.

Regressions

Regressions and step-wise multiple regressions were performed between time series of annual June south Peninsula fishery CPUE, the abundance of the western Alaska

sockeye salmon run, and five SST time series for the areas in Fig. 2 for the same year and for lags in temperature preceding the catch by 1, 2, and 3 years. Adult returns in a single year incorporate several ages since out-migration. Rogers (1987) and Isakov et al. (2000) have shown that age since out-migration is most important with respect to the influence of temperature on growth and subsequent survival. This analysis, similar to that of Francis and Hare (1994) but different from Rogers (1987) and Isakov et al. (2000) was conducted from the perspective of year of adult return which results in a dilution of the power of the analysis.

The analysis was performed for all years combined and separately for the periods 1975–1993 and 1994–2008 in order to detect changes that might be associated with the apparent shift in CPUE in the fishery. An important consequence of partitioning the 34-year time series is the reduction in sample size by a factor of two with a consequent reduction in analytical power.

Ryding and Skalski (1999) found a non-linear relation between SST and survival for hatchery released coho salmon (*O. kisutch*) in Washington State which they evaluated with quadratic regressions and interpreted as reflective of an optimum for survival of salmon in the marine environment. In this study, all linear regressions were evaluated for the evidence of such an optimal relation and a quadratic model was fit for the case where it occurred in the Bering Sea.

RESULTS

Time-Pooled Analysis

June CPUE and SST

There were no areas with statistically significant relations between June fishery CPUE and SST over the period 1975–2008.

June CPUE and Western Alaska Run Size

There is a significant positive relation between CPUE in the June fishery and total western Alaska sockeye salmon abundance ($P = 0.001$, $R^2 = 0.284$, b = 9.9) over the period

Table 3. Results of regression analysis of sea surface temperature with June south Peninsula sockeye salmon CPUE (A) and with the run size of the western Alaska sockeye salmon (B). Asterisks * and ** indicate $P < 0.05$ and $P < 0.01$, respectively. Bold italic categories reflect decrease of importance across time-stratified analysis.

A. June south Peninsula sockeye salmon CPUE

Area	Time-pooled analysis				Time-stratified analysis					
	1975–2008				1975–1993			1994–2008		
	Lag (years)	*P*	R^2	b (/C)	*P*	R^2	b (/C)	*P*	R^2	b (/C)
May Kodiak-Shumagin	0	0.760	0.003	25.7	0.137	0.125	244.8	0.002	0.521	-100.8
Kodiak Winter Air	0	0.800	0.002	-8.5	0.964	0.000	-2.6	0.005	0.473	-46.0
May Kodiak-Shumagin + Kodiak Winter Air								*P* 0.006	R^2 0.578	b -65.73 -23.18
Western Alaska Sockeye run size		*P*	R^2	b (/10^6)	*P*	R^2	b (/10^6)	*P*	R^2	b (/10^6)
	0	0.001**	0.284	9.9	0.002**	0.450	15.2	***0.193***	***0.126***	***2.3***
June south Peninsula CPUE		400				458			***327***	

B. Western Alaska sockeye salmon run size

Area	Time-pooled analysis				Time-stratified analysis					
	1975–2008				1975–1993			1994–2008		
	Lag (years)	*P*	R^2	b (10^6/C)	*P*	R^2	b (10^6/C)	*P*	R^2	b (10^6/C)
July Bering Sea	1	0.009**	0.263	parabolic	0.138	0.129	parabolic	0.034*	0.430	parabolic
June Eastern Aleutian	1	0.124	0.080	6.6	0.037*	0.231	10.3	***0.698***	***0.016***	***-4.0***
	2	0.017*	0.175	9.3	0.073	0.177	8.7	0.054	0.297	17.3
May Kodiak-Shumagin	1	0.155	0.062	6.7	0.061	0.191	14.2	***0.860***	***0.002***	***1.2***
	2	0.024*	0.150	10.4	0.0498*	0.208	14.6	***0.180***	***0.134***	***10.0***

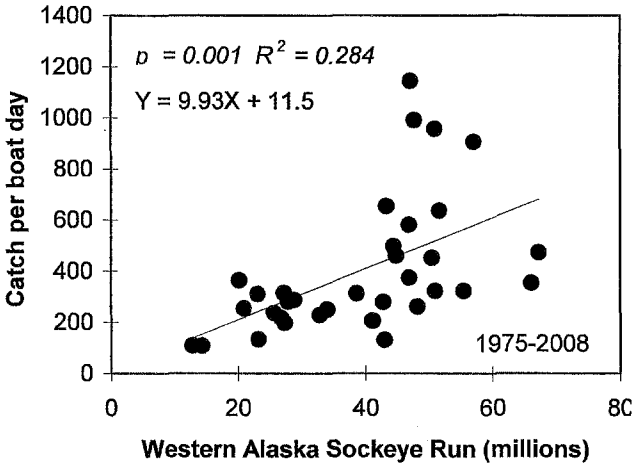

Fig. 3. Relation between June south Peninsula sockeye CPUE and the size of the western Alaska sockeye run, 1975–2008.

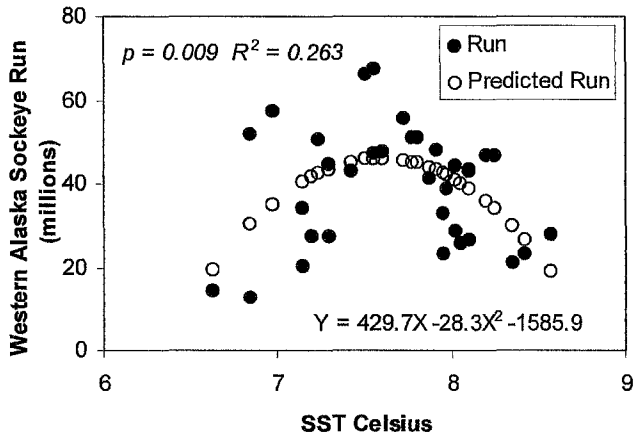

Fig. 4. Relation between western Alaska adult sockeye salmon abundance and previous year July Bering Sea dateline sea surface temperature, 1975–2008.

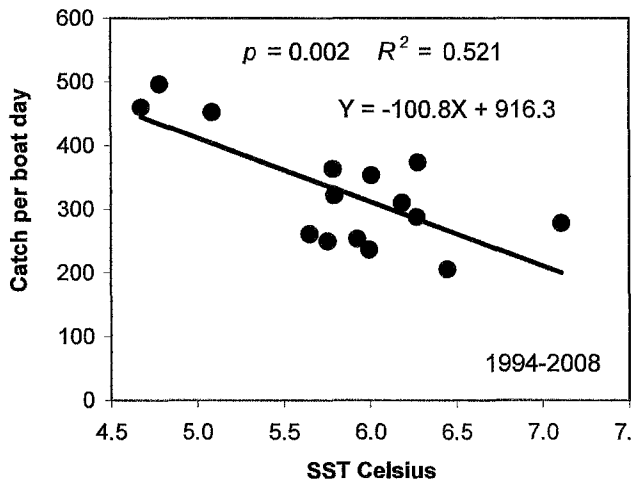

Fig. 5. Relation between June south Peninsula sockeye salmon CPUE and May Kodiak-Shumagin SST 1994–2008.

(Table 3A, Fig. 3). Addition of each of the temperature time series to the abundance of the western Alaska sockeye salmon run size in step-wise multiple regression did not result in significant improvement in the explanatory power with respect to the June fishery CPUE. This was true at lags in temperature with respect to the year of adult returns of one, two and three years.

Western Alaska Run Size and SST

There are significant positive relations between total western Alaska sockeye salmon abundance and July Bering Sea, June eastern Aleutian and May Kodiak-Shumagin SST (Table 3B). A narrow range of July Bering Sea temperatures produced uniformly large returns of sockeye salmon to western Alaska the next year. The temperature range 7.40–7.93°C corresponds to average returns one year later of 52 million, with a minimum return of 41 million fish. Cooler years averaged 29 million and warmer years averaged 34 million adult sockeye salmon returning to western Alaska. While there was no significant relation between the abundance of western Alaska sockeye salmon and a linear model for the previous year July Bering Sea SST, the relation with the parabolic model was significant ($P = 0.009$, $R^2 = 0.263$) for temperatures the summer previous to the adult return (Fig. 4).

Temperatures two years prior to the adult return were positively related to the adult return for both June eastern Aleutian June SST ($P = 0.017$, $R^2 = 0.175$, b = 9.3 M/°C) and May Kodiak-Shumagin SST ($P = 0.024$, $R^2 = 0.150$, b = 10.4 M/°C). One-year lags in temperature ahead of year of adult return did not produce significant results for these same areas over the 1975–2008 time period.

For time-pooled analysis the null hypothesis that there are no significant relations between June fishery CPUE and SST is not rejected ($P < 0.05$) but the null hypothesis of no significant relation between June CPUE and the size of the western Alaska sockeye salmon run is rejected ($P < 0.01$).

Time-Stratified Analysis

June CPUE and SST

The only significant relations between June south Peninsula sockeye salmon CPUE and SST occur for the period 1994–2008 for May Kodiak-Shumagin ($P = 0.002$, $R^2 = 0.521$, b = -100.8) and Kodiak winter air temperature ($P = 0.005$, $R^2 = 0.473$, b = -46.0) (Table 3A, Fig. 5). Cooler winter and spring temperatures to the east of the fishery are related to higher CPUE in June.

June CPUE and Western Alaska Run Size

The significant positive relation from 1975–2008 between June fishery CPUE and the size of the western Alaska run is split before and after 1994/1993 with a significant relation for the early period ($P = 0.002$, $R^2 = 0.450$, b = 15.2) but not for the late ($P = 0.193$, $R^2 = 0.126$, b = 2.3). In step-wise multiple regressions for the period 1994–2008 the size

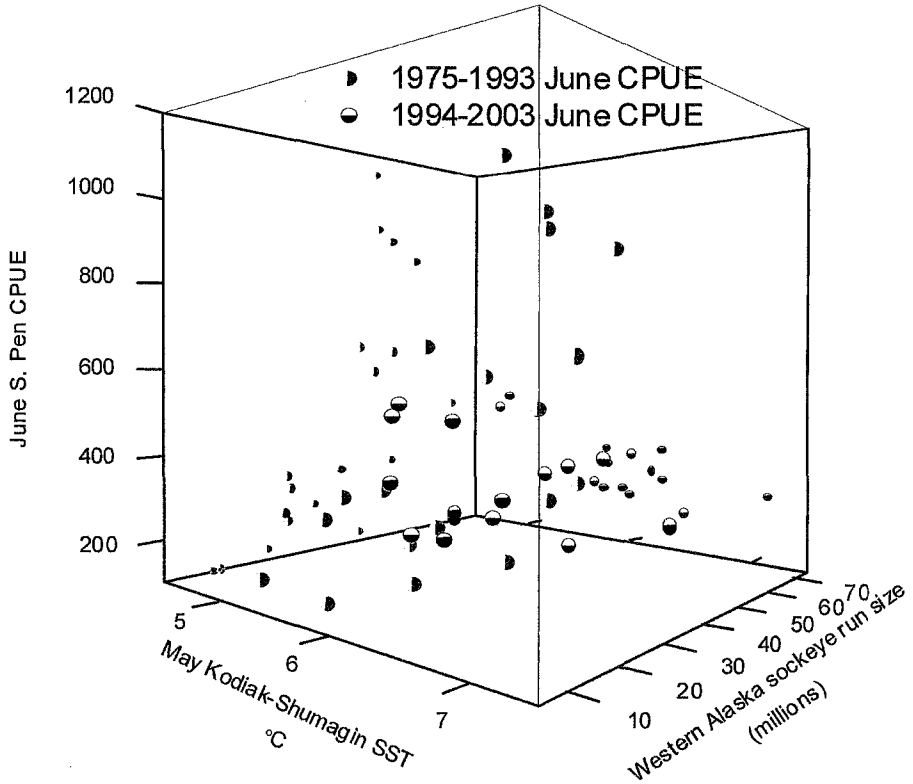

Fig. 6. The combined effect of May Kodiak-Shumagin SST and the size of the western Alaska sockeye salmon run on June south Peninsula sockeye CPUE for time-stratified analysis. Small grey symbols on the CPUE/western Alaska run size plane and small black symbols on the CPUE/May Kodiak-Shumagin SST plane show the shift of dominant influence on June CPUE from the size of the western Alaska sockeye salmon run for 1975–1993 (P = 0.002, R^2 = 0.450) to May Kodiak-Shumagin SST from 1994–2008 (P = 0.002, R^2 = 0.521). See Figs. 3 and 5.

of the western Alaska sockeye salmon run adds only a little explanatory power with respect to the June fishery CPUE compared to those of each of May Kodiak-Shumagin and Kodiak winter air temperature time series alone.

The combined effects of temperature and the size of the western Alaska sockeye salmon run on the June south Peninsula sockeye salmon CPUE over the period 1975–2008 appear to have been dominated by the positive relation with size of the western Alaska sockeye salmon run, but since 1994 temperatures immediately to the east of the fishery have had a significant effect. The combined effects of different dominant influences on June CPUE before and after 1994/1993 are shown in a composite 3D view of June CPUE against western Alaska run size and May Kodiak-Shumagin SST with the respective 2D linear relations shown in the background (Fig. 6).

Western Alaska Run Size and SST

For immature sockeye salmon (one-year lag) the area of greatest influence on the size of the adult return in the early period was the June eastern Aleutian Islands (P = 0.037, R^2 = 0.231, b = 10.3), while in the later period the region of greatest importance had shifted to the central Bering Sea (P = 0.034, R^2 = 0.430) with very little influence of temperature in the June eastern Aleutian and May Kodiak-Shumagin areas (P = 0.698, R^2 = 0.016, b = -4.0; P = 0.860, R^2 = 0.002, b =1.2, respectively). The influence of a narrow range of temperatures in the central Bering Sea on the size of the western Alaska sockeye salmon run increased from the early period (Table 3B, Fig. 7). For juvenile sockeye salmon (two-year

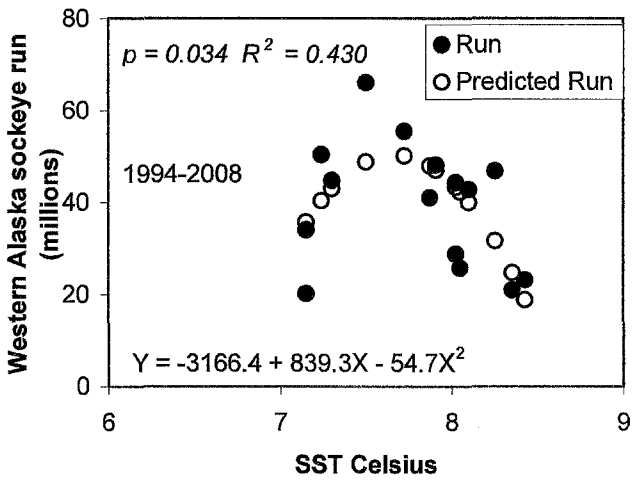

Fig. 7. Relation between western Alaska adult sockeye salmon abundance and previous July Bering Sea dateline sea surface temperature, 1994–2008.

lag) the greatest decline in area of importance was for the May Kodiak-Shumagin which had been more important than the June eastern Aleutians in the early period but became less important in the later period. For juvenile sockeye salmon the June eastern Aleutians area has become somewhat more important in the recent period ($P = 0.054$, $R^2 = 0.297$, b = 17.3).

For time-stratified analysis, the null hypothesis that there are no changes in significance of relations across the time strata for the influence of SST on June CPUE is rejected for two of the five areas examined ($P < 0.01$). Kodiak-Shumagin May SST and Kodiak winter air temperatures both have had a significant negative relation with June CPUE since 1994 but not before. The null hypothesis of no change in significance for the influence of the size of the western Alaska sockeye salmon run on June CPUE is also rejected ($P < 0.01$). The positive relation of western Alaska sockeye salmon on June CPUE from 1975–1993 is not significant for the later period.

The null hypothesis that there are no changes in the significance of relations across the time strata for the influence of SST on the size of the western Alaska sockeye salmon run is also rejected ($P < 0.05$). For one year of lag between SST and abundance, the Bering Sea became more important and the eastern Aleutians area became less important after 1993. For two years of lag of SST to adult run size, the Kodiak-Shumagin area became less important after 1993.

DISCUSSION

There is a clear pattern of decreasing influence of temperature on western Alaska sockeye salmon run size for most maturity stages of sockeye salmon in areas to the east of the Bering Sea, and an increase in the influence of temperature in the central Bering Sea with time. For maturing sockeye salmon June south Peninsula CPUE was positively correlated with the abundance of the western Alaska sockeye salmon run before 1994 ($P = 0.002$, $R^2 = 0.450$, b = 15.2/M run) but not after.

If the abundance of maturing adults is primarily driven by marine mortality then juvenile sockeye salmon appear to be about 50% more sensitive to temperature than immature sockeye salmon for the time-pooled analysis (b_2/b_1; (9.3 + 10.4)/(6.6 + 6.7) = 1.48. For the 1975–1993 period in time-stratified analysis the influence of temperature by age is not apparent, but for the combined maturity stages temperatures in May to the east of the Shumagin Islands were about 50% more important than temperatures in June to the west of the Shumagins for survival to adult maturity. Apparently at sea younger western Alaska sockeye salmon initially utilized waters offshore of the eastern Aleutian Islands, Alaska Peninsula, Kodiak and Shumagin Islands and only as immatures relied significantly on waters of the Bering Sea (Table 3B).

Time-stratified analysis by maturity stage in the eastern Aleutians and Kodiak-Shumagin areas shows that the influence of temperature on the survivial of immature fish to adult maturity virtually vanished for the 1994–2008 period which suggests that there was a reduction in use of these areas during the later period. In contrast, the effect of temperature on immature sockeye salmon survival to adult maturity increased in the central Bering Sea between the early and late periods in time-stratified analysis. These apparent shifts in use are probably a combination of changes in both the seasonality of use and annual use. The selection of the May–June time period was intended primarily to address the adult maturity stage with respect to the June south Peninsula fishery, and analysis of other seasons might produce different results for younger maturity stages.

Earlier work by Francis and Hare (1994), Rogers (1987), and Isakov et al. (2000) found evidence for the importance of Gulf of Alaska temperatures for growth and survival of juvenile sockeye salmon. Both studies relate the influence of temperature to possible ocean distribution early in marine life. The later period in the time-stratified analysis of this study continues well after the years of the earlier studies, and it appears that shifts in areas of influence and implied shifts in migration patterns have occurred. Temporal-spatial shifts in oceanic habitat utilization over time are probably normal.

Unlike the studies mentioned above, this analysis included temperatures from the central Bering Sea. It is interesting that a narrow range of SST in the middle of the Bering Sea is correlated with strong production of western Alaska sockeye salmon, probably reflecting an environmental optimum to which these populations are adapted. This effect has been stronger since 1994 than from 1975–1993.

Spatial Considerations

The apparent shifts in area of use for juvenile and immature sockeye salmon are likely to have occurred for maturing fish as well. If the June south Alaska Peninsula fishery location were in a position central to the shoreward distribution of sockeye salmon returning to the Bering Sea then variations in run size should be reflected in a positive relation with the June fishery CPUE. The data show that this was the case before 1994 but not since, which suggests that the fishery takes place at the eastern and shoreward margins of the migration of sockeye salmon toward the Bering Sea.

Warmer temperatures in the Bering Sea likely lead to expansion of the margins of optimal habitat for immature sockeye salmon up to about 7.6°C. Above that temperature the location of the optimal habitat is likely further north, although the areal extent of optimal habitat may start to diminish. Warmer July temperatures also imply a longer duration of suitable habitat in the Bering Sea. The combination of more northerly distributions and longer durations in the Bering Sea must result in shorter durations and less geographic extent for immature sockeye salmon in the North Pacific through the next winter. Apparently the eastward extent of immature sockeye salmon has been reduced enough by ex-

tended use of the Bering Sea to lead to reduced CPUE of maturing salmon in the south Peninsula fishery the following June.

One model which is consistent with the aggregate of these results focuses on the role of the Alaskan Stream in the homeward migration of maturing salmon. The Alaskan Steam may act as a collector and conveyor to the west for salmon across a wide area of the eastern North Pacific Ocean. If photoperiod were the dominant factor over SST on the timing of northward departure from the Alaskan Stream toward the Alaska Peninsula and Aleutian passes into the Bering Sea this would be consistent with the observed stable timing of catches in the June south Peninsula fishery. If SST were the dominant factor in the timing of the initiation of migration northward into the Alaskan Stream then warmer conditions would result in more westerly distribution within the Alaskan Stream prior to departure toward the Alaska Peninsula and Aleutian passes. This is consistent with the observed lower CPUE in the June fishery in spite of high abundance during the warm period from 1994–2005. Homeward migration may also be more protracted in time and space for warmer years where the onset of migration occurs earlier. The corollary is that the distribution of returning adults in cooler years would be relatively more concentrated in time and space and further to the east which is consistent with the observed higher CPUE in cooler springs. If ocean distributions are far enough to the east of the June fishery, the abundance of western Alaska sockeye salmon could become the dominant factor in the June fishery CPUE instead of nearby spring SST. The interplay of these factors, and doubtless many others, must be variable and subtle.

French and Bakkala (1974) found "Evidence of varying catch rates of Bristol Bay sockeye salmon by the Japanese mothership fishery west of longitude 175°W (rates have varied between years from 2.2 to 35.2% of the total run) suggests that the distribution of maturing sockeye salmon shifts to the east in fall and winter and that the magnitude and extent of this movement governs the availability of sockeye salmon to the Japanese fishing fleet." This variability is remarkably similar to the results for the June fishery CPUE, with the difference that the June fishery harvest rate on Bristol Bay stocks is much smaller (ave. ~3%, range 2–8%). It seems likely that variations in east-west distribution would have reciprocal influence on catch rates in each fishery and that SST is a major factor contributing to variations in the east-west distributions.

Changes in Temperature Trends

The influence of temperatures from the years 2006–2008 on trends in the time series is significant. All three of the time series west of Kodiak had significant warming trends from 1975–2005 but the addition of the last three years of data has diminished the significance those trends. Data are not available for the June eastern Aleutian SST time series since 2004, but cooling for the July Bering Sea dateline and May Kodiak-Shumagin time series since 2005 has decreased the slope of the those temperature relations since 1975 by a factor of two in just three years (decreased R^2 by a factor of three and increased $P > 0.05$). If warming SSTs account for the reductions in the June fishery CPUE since 1994 it will be interesting to see if cooling will reverse that effect. June fishery CPUE increased in 2007 and 2008, which were the coldest and seventh coldest temperatures for the May Kodiak-Shumagin area in the 34-year analysis period. Temperatures from the years 2006–2008 for July Bering Sea on the dateline were in the cooler half of the 34-year temperature range but not at the coldest end of that range.

CONCLUSIONS

A variety of management measures were implemented for the June south Peninsula fishery throughout the period of this study and while those measures are certain to have produced variations in CPUE it is notable that environmental factors are still apparent in the relation between CPUE and SST. One interpretation of these results is that there may be a geographic cline from east to west for the importance of environmental factors on all stages of marine life for western Alaska sockeye salmon and that there may have been a shift to the west for this cline around 1994. The evidence of an optimum temperature in the Bering Sea with respect to adult abundance suggests that the extended period of high western Alaska sockeye salmon production is a consequence of a historically unprecedented period of near-optimal utilization of the Bering Sea.

Implementation of a similar analysis but with the incorporation of ocean age-specific returns as those data become available should further clarify the potential for shifts in regions of importance for the marine survival of sockeye salmon. Sea surface temperature databases performed well relative to the Kodiak winter air time series with respect to effects on juvenile (two-year lag) and immature sockeye salmon.

To the extent that the Alaskan Stream may be an important factor in the migration of maturing salmon south of the Alaska Peninsula and Aleutian Islands, some means to measure and understand its movement is needed. Finer spatial resolution for measurement of SST from satellite observations might be enough to provide some insight into variations in the position of the Stream and the consequences for CPUE of nearshore fisheries. Salinity is also important for salmon migration (Fujii 1975) and it should not be neglected in spite of the difficulty in measuring it remotely.

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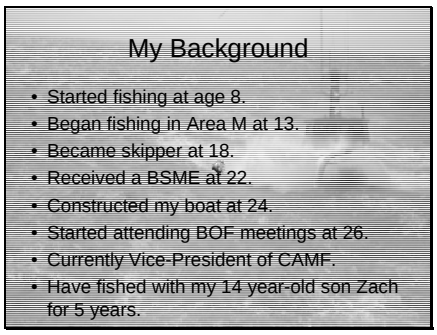
Seeb, L.W., and P.A. Crane. 1999. Allozymes and mitochondrial DNA discriminate Asian and North American populations of chum salmon in mixed-stock fisheries along the south coast of the Alaska Peninsula. Trans. Am. Fish. Soc. 128: 88–103.

Welch, D.W., A.I. Chigirinsky, and Y. Ishida. 1995. Upper thermal limits on the oceanic distribution of Pacific salmon (*Oncorhynchus* spp.) in the spring. Can. J. Fish. Aquat. Sci. 52: 489–503.

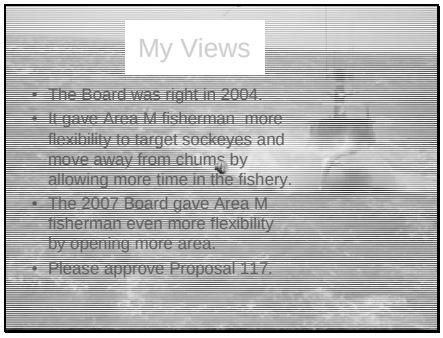
Welch, D.W., Y. Ishida, and K. Nagasawa. 1998. Thermal limits and ocean migration of sockeye salmon (*Oncorhynchus nerka*). Can. J. Fish. Aquat. Sci. 55: 937–948.

Slide 1



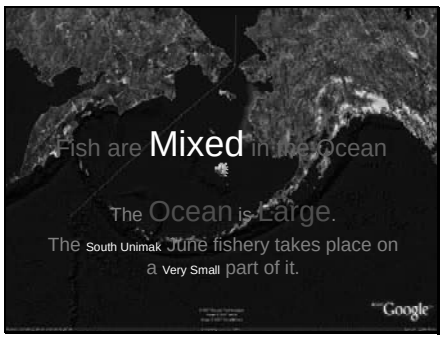
I started fishing in Area M at 13 and I've fished with my son 14 year-old son Zach for 5 Years.

Slide 2



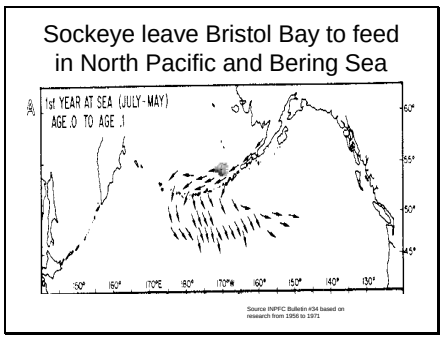
The Board was right in 2004.
It gave Area M fisherman more flexibility to target sockeyes and move away from chums.

Slide 3



The purpose of my testimony today is to convey the fact that Sockeye and Chums are well mixed in the Ocean and the June fishery is a Ocean Fishery.

Slide 4

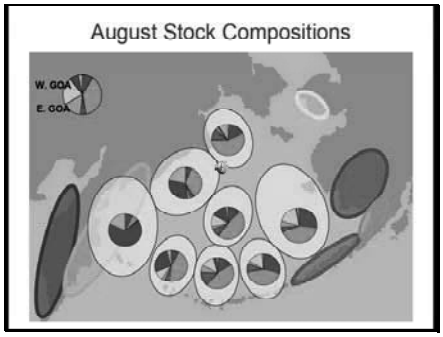


This slide depicts smolt leaving Bristol Bay, immature sockeye stay close to the North Peninsula were the salinity of the water is least.

Slide 5

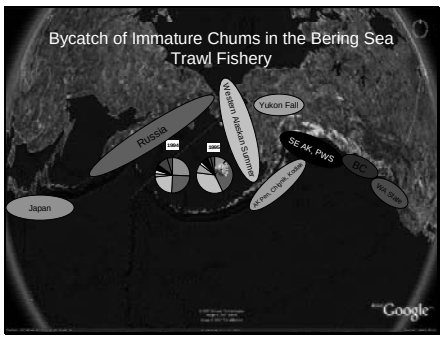
I examined four different genetic reports.

Slide 6



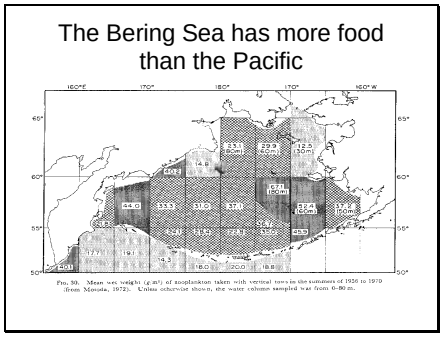
One of the reports was presented at the 2006 Bristol Bay Board of Fish meeting. The Slide shows the 2002 and 2003 distribution of immature Sockeye. As you can see North Peninsula, Eastside and Westside Bristol Bay, Eastern and Western Gulf of Alaska stocks are well represented throughout the Bering Sea.

Slide 7



I also looked at the bycatch of Immature chums in the 1994 and 1995 Bering Sea Trawl fishery. The different colors in the pie graph correspond to the different geographic areas. Like Sockeye, immature chums are mixed in the Bering Sea. While Western Alaska, Russia, and Japan make up most of the stocks, British Columbia and Washington immature chums are well represented.

Slide 8

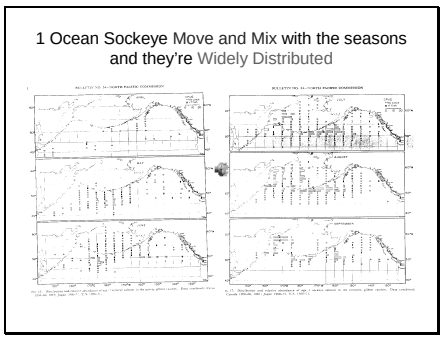


Zooplankton is in greater abundance in the Bering Sea than the Pacific. The graph shows the average weight of zooplankton per unit area for a 15 year period. You can see there's a reason for fish to move and mix.

Slide 9

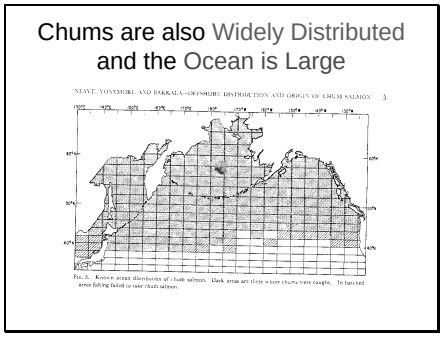
The food is more than likely the reason immature fish travel so far from their natal streams.

Slide 10



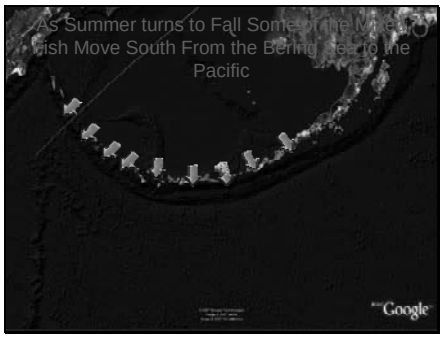
Immature Sockeye move North as Summer approaches. This graph, which is 15 years of combined data from Canadian, US, and Japanese research, shows a month by month distribution of immature sockeye in the North Pacific and Bering Sea. Basically look for the horizontal bars, the longer the bar the greater the number of immature sockeye present. The black bars represent smaller numbers of sockeye.

Slide 11



The known distribution of Chums covers the entire North Pacific from the Latitude of Northern California to Kotzebue.

Slide 12

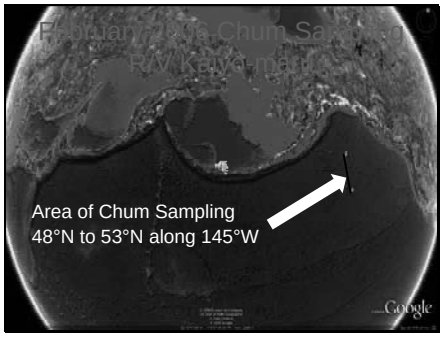


As Summer turns to Fall Some of the Mixed Fish Move South From the Bering Sea to the Pacific

Slide 13

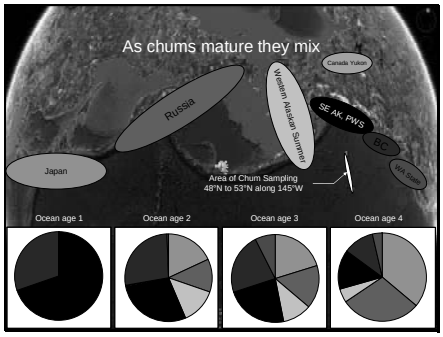
Chums and Sockeye Move When the Water Gets Colder.

Slide 14



I already showed that fish are mixed in the Bering Sea. A genetic study released in 2009 looked at Winter stock compositions of different age chums in the North Pacific.

Slide 15

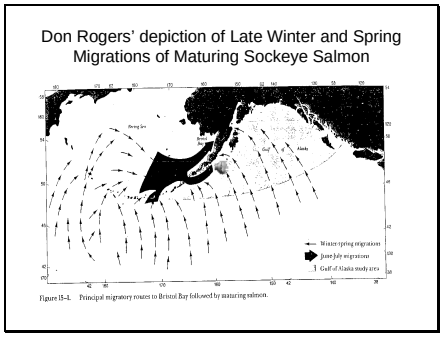


Feburary 2006 North Pacific sampling. The graphs illustrate the mixing, the vast majority of chums that are Ocean age 1 are from nearby Prince William Sound, SE Alaska, and British Columbia. As the chums mature, the stocks from greater distances mix with nearby stocks. Note: Canada Yukon stocks averaged 0.1% across all age classes, not visible on the pie charts.

Slide 16

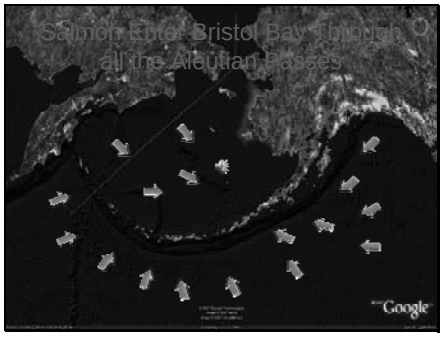
As Winter Ends and Spring approaches "Salmon move north using magnetic clues"

Slide 17



This is Dr. Rogers' depiction of sockeye migration. The widely dispersed Sockeye stocks that range from the Gulf of Alaska to the Western Aleutians make their way back to Bristol Bay.

Slide 18

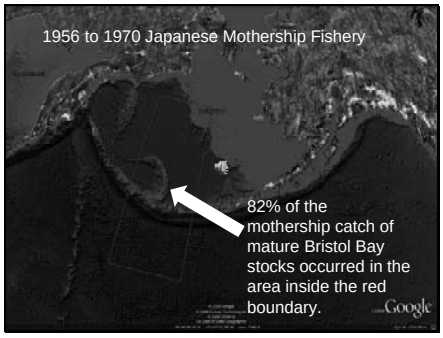


Salmon Enter Bristol Bay Through all the Aleutian Passes

Slide 19

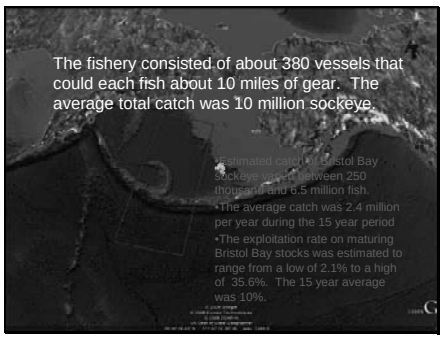
Not just Unimak Pass that's shown in Red. In fact if we look in the past we find that Bristol Bay stocks are present in great numbers much farter west than Unimak Pass.

Slide 20



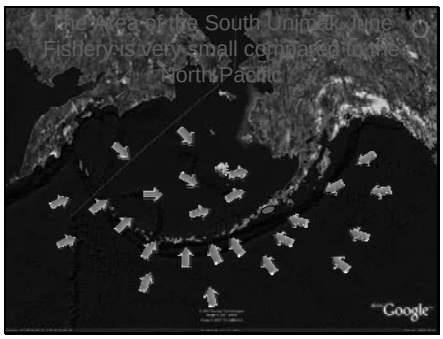
I examined the report "Bristol Bay Sockeye in Japanese Mothership Fishery, 1956-70" (Fredin and Worlund, Bulletin 30, North Pacific Commission) The fishery encompassed most of the Western Bering Sea. However, 82% of the mothership catch of Bristol Bay stocks occurred between 175 W and 175 E from 46 N to 60N.

Slide 21



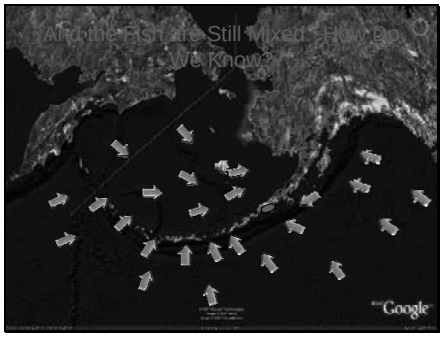
This fleet had a lot of catching power, estimated to be between 3000 and 3800 miles of gear. The fishery average about 10 million sockeye during the period about a quarter of which were Bristol Bay stocks. The exploitation rate was much higher on Bristol Bay sockeye stocks than the current Area M June fishery. I think its fair to assume that the exploitation rate on Western Alaskan Chums was greater also.

Slide 22



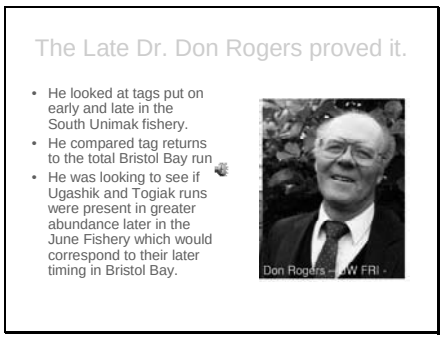
The Area of the South Unimak June Fishery is Very small compared to the North Pacific and Bering Sea.

Slide 23



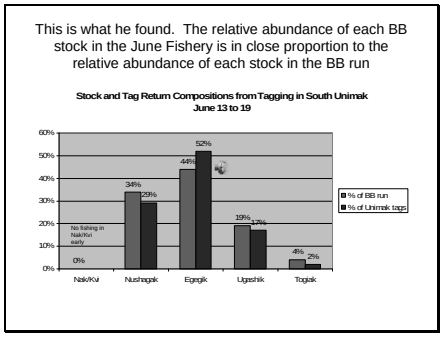
And the Fish are Still Mixed.

Slide 24



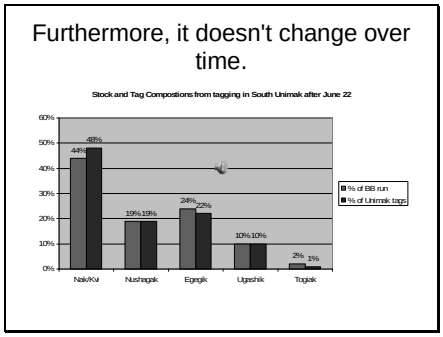
He looked at tags put on early and late in the South Unimak fishery.
He compared tag returns to the total Bristol Bay run
He was looking to see if Ugashik and Togiak runs were present in greater abundance later in the June Fishery which would correspond to their later timing in Bristol Bay.

Slide 25



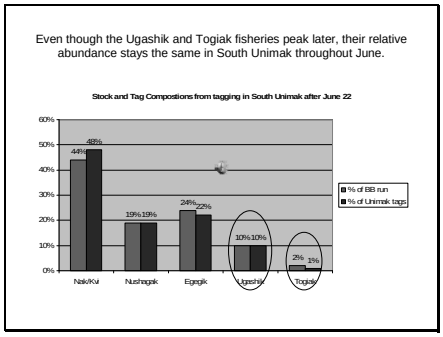
Here are the results of early tagging in South Unimak. The red bar represents the relative abundance of each stock in the Bristol Bay run. The Blue bar represents Sockeye tagged in Unimak that were recaptured in the district listed on the x axis.

Slide 26



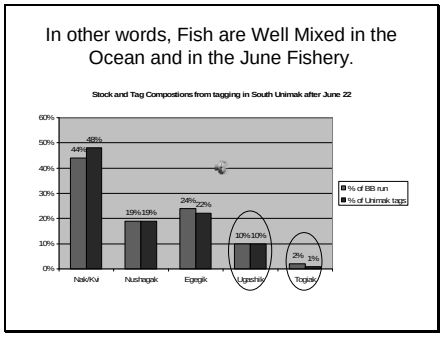
Here's the results for late tagging.

Slide 27



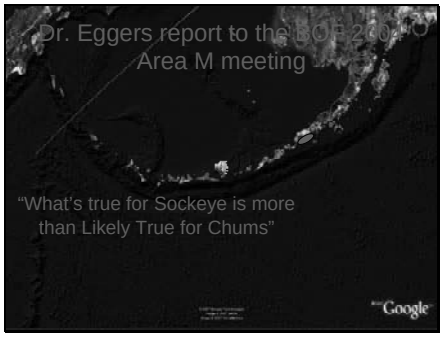
You can see if the fish were not mixed you expect to see a greater number of Ugashik and Togiak stocks late in June due to run timing, but you don't. 10 percent of the run in 1987 were Ugashik stocks and 10 percent of the sockeye tagged late in South Unimak were recovered in the Ugashik District.

Slide 28



In other words, Fish are Well Mixed in the Ocean and in the June Fishery.

Slide 29



What's true for Sockeye is more than likely true for Chums.

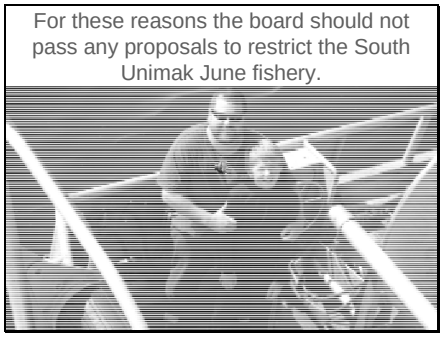
Slide 30

That is, Fish Caught in the South Unimak June Fishery are in close proportion to their abundance throughout Western Alaska and Asia. Consequently, the fishery does not have the ability to select out one particular stock.

Slide 31

Let's Review What We Know.
The Ocean is Large
The South Unimak June Fishery takes place in a very small part of it
The Fish are Mixed

Slide 32

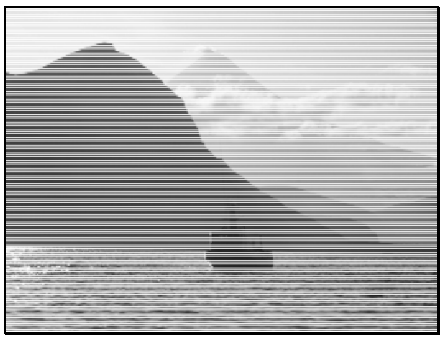


For these reasons the board should not pass any proposals to restrict the South Unimak June fishery.

Slide 33

Reject proposal 116, which would be a detriment to the State of Alaska and the people that fish its waters.
The June fishery is a Ocean fishery this proposal was written by a person with a River background. I'd like to Thank you for your time because I know its valueable It seems like yesterday when this picture was taken now my son is a couple of inches taller that me.

Slide 34



BLUE NORTH FISHERIES

2930 Westlake Ave. N. • Suite 300 • Seattle, WA 98109 • (206) 352-9252 • Fax (206) 352-9380
Tollfree 1-877-TRUECOD • email: bluenorth@bluenorthfisheries.com

January 19, 2010

Alaska Board of Fisheries c/o Alaska Department of Fish and Game
PO Box 115526
Juneau, Alaska 99811

Re: Comments on Proposal # 114, Aleutian Islands Pacific Cod Fishery

Chairman Webster and members of the Board:

My name is Patrick Burns. I am the co owner of Blue North Fisheries. We own two vessels that fish exclusively in the Alaska parallel, and state water fisheries. I strongly urge the Board to reinstate the 125 foot limit on pot vessels for the Aleutian Islands Pacific Cod B season. We have participated in the fishery since its inception and would like to continue to do so. As a result of the length change in B season last year, our vessels were not able to participate. Another direct result of the length change was that over six million pounds of the quota was not caught. Changing the length limit was allocative in nature creating an exclusive market for one shore side plant based on Adak Island. This Plant is now mired in Bankruptcy. At the present time there is no place to deliver fish in Adak. In Fact the North Pacific Fishery Management Council voted 10-1 to petition the Secretary of Commerce to adopt an emergency regulation to suspend the regional delivery requirement for Golden King Crab to this same plant.

There are numerous opportunities for vessels under 60 feet in length already in both the State water fisheries and the Parallel fisheries in the Bering Sea and the Gulf of Alaska. ADFG records show that only seven vessels registered for the 2009 state water B season. Vessels under 60 feet without Federal LLPs can fish State waters any time the Federal season is open in the parallel fishery. As of January 15, 2010 there were only eight Vessels under 60 feet registered to take advantage of this in the Bering Sea, Aleutian Island fishery.

I have enclosed three additional letters that are pertinent to this issue. One is a letter from Dan Gunn (the author of proposal 114) petitioning the board to change the length limit back to 125 feet. The second is from Coastal Transportation, illustrating the impact this decision had on the local communities of Adak and Atka, and the third from the Aleut Corporation. The decision to change the length limit to 60 feet not only affected fishing, but resulted in a foregone harvest of 6 million pounds, and adversely affected the very communities it was supposed to help. Our vessels pay fish tax, buy fuel and support the local businesses of Adak. Once again I urge the Board to change the length limit for the B season back to the original length set by the State to 125 feet.

Thank you,

Patrick Burns
Blue North Fisheries

Gunn Sea Venture LLC
1445 NW 56 St.
Seattle, Washington 98107
206 499 0831/206 281 7145
catchcrab@aol.com

June 5, 2009

John Jensen, Chairman
Alaska Board of Fisheries
Juneau, Alaska

Re: Petition for teleconference emergency action to reinstate the 125 foot limit for pot vessels in the Aleutian Islands B season Pacific cod fishery

Dear Mr. Jensen:

I am petitioning the Board of Fisheries to reinstate the 125 foot vessel length limit, vessels using pot gear, in the State waters, Aleutian Islands B season Pacific cod fishery west of 170 degrees West longitude. This request is based on the Board's action at its November 2008 meeting that reduced the minimum length of pot vessels participating in the fishery to under 60 feet in length. At the time the action was taken the Board was uncertain there would be sufficient effort in this vessel size class to harvest the allowable catch in the B season.

The 2009 Aleutian Islands A season GHL is 8.4 million pounds and the B season GHL is 3.6 million pounds.

As of June 5th, about 3.2 million pounds of cod still remains to be caught in the A season. It is very likely that there will be more than 3 million pounds rolled over to the B season, resulting in a combined total of approximately 6.6 million pounds being available after June 10th.

The State waters A season will close on June 9th, and then the State waters B season Pacific cod fishery opens on June 10th and closes on September first. Realistically, there are about eleven weeks remaining to harvest the 6.6 million pounds of cod. The State waters parallel fishery opens simultaneous to the closure of the State waters season on September first. Given current poor market conditions it is highly likely that effort in the BSAI Pacific cod State waters and parallel fisheries will be significantly reduced. These seasons will likely extend until the end of the year since the major B season producers, the over 60 foot pot vessels, will be barred from the fishery under the new length limit regulations. Most of the under 60 foot vessels, of which there are six registered, will likely shift to the salmon fisheries during the B season State waters cod fishery. Even if the parallel season does close, and the State waters fishery reopens, it is highly unlikely that the under 60 foot fleet would have any meaningful production late in the year when the weather is severe.

New unforeseen circumstances:
A steep drop in exvessel Pacific cod prices has occurred since last October, discouraging both fishermen and normal buyers in the remote Aleutian Islands area from participating in the fishery. Exvessel prices in Unalaska are reported to be as low as $.09 per pound.

In closing, I believe the circumstances described above will result in a foregone harvest of several million pounds.

Sincerely,

Dan Gunn, Manager
GSV LLC

Gunn Sea Venture LLC
1445 NW 56 St.
Seattle, Washington 98107
206 499 0831/206 281 7145
catchcrab@aol.com

January 19, 2010
Vince Webster, Chair
Alaska Board of Fisheries
PO Box 115526
Juneau, Alaska 99811-5526
Fax #: 907 465 6094

Re: Proposal #114, Aleutian Islands District Pacific Cod Fishery

I own the F/V Sea Venture, a pot boat that fishes almost exclusively west of 170 for P Cod and some Black Cod.

Since the start of the state water P Cod, pot fishery about eighty (80) % of our income has come from P Cod with 20% of our catch has been taken in the A Season and 80) % has been taken in the B Season.

I have spent over $1.6 million on the boat, specifically to make it efficient and effective in the Adak area. My captain, crew and I have also spent a great deal of time and energy to develop this fishery. This fishery and especially B season is critical to us

On June 5, 2009 I sent a letter petitioning the Board of Fisheries to reinstate the 125 foot vessel length limit for vessels using pot gear, in the State waters, Aleutian Islands B season Pacific cod fishery west of 170 degrees West longitude. This request was based on the Board's action at its November 2008 meeting that reduced the maximum length of pot vessels participating in the fishery to under 60 feet in length. At the time the action was taken the Board was uncertain there would be sufficient effort in this vessel size class to harvest the allowable catch in the B season.

ADFG records show that seven vessels under 60 feet registered for the B season. The total catch for the B season was less than 500,000 pounds.

In our petition we predicted that there would be several million pounds of cod left unharvested in the Adak area in the 2009 B season. The actual figure ended up being more than a 6 million pound foregone harvest. We believe that something very similar will happen in 2010 if the 60 foot size limit is not increased.

We ask you to increase the size limit for vessels in this fishery to 100 foot for boats using pot gear. This will allow vessels that are capable of working in this remote and dangerous area to participate in this season and hopefully avoid leaving millions of pounds quota unharvested.

Thank you,

Dan Gunn
Owner F/V Sea Venture

Coastal
Transportation

January 6, 2010

To: Chairman Webster and the Alaska Board of Fish

Re: Proposal 114 Aleutian Islands District Cod Management Plan

Coastal Transportation, Inc., a U.S.-owned and U.S.-flagged Jones Act carrier, has been servicing Western Alaska and the Aleutian Islands for 25 years. We provide palletized weekly service along the Alaskan Peninsula, as well as inducement service to St. Paul, Atka and Adak. In order to provide northbound service to the Aleutian Islands, it is necessary to back load enough southbound cargo, i.e., frozen seafood, to offset the additional vessel costs of the voyage. Fish processing plants on the Islands provide southbound cargo on a very limited seasonal basis. Prior to B season 2009 the state-water cod fishery provided enough southbound cargo to warrant additional sailings to the Islands communities. The board's decision to limit the size of vessels directly impacted the frequency of service provided by Coastal Transportation. Providing a regularly scheduled service to the Aleutian Islands is a challenging task. Anything the state can do with respect to the fisheries to increase southbound cargo volumes provides a direct benefit to the Islands communities.

Thank you for your consideration in this matter.

Sincerely,

Tim Shaffer
General Manager

ctitcsmiscod

ALEUT
Enterprise, LLC

January 6, 2010

Re: Blue North Fisheries

To Whom It May Concern:

Adak Petroleum, LLC is a subsidiary of Aleut Enterprise, LLC. Adak Petroleum sells fuel in Adak, Alaska. We have done business with Blue North Fisheries for many years, and they are one of our valued customer. Since 2006, they have spent in excess of $600,000 in fuel sales and port services. We have not had any issues with collection of payments. We appreciate the business and support of the vessels that fish in our area and patronize our business. We look forward to continuing our relationship with Blue North Fisheries.

Sincerely,

Ji Kim
Controller

4000 Old Seward Highway, Suite 301 Anchorage, Alaska 99503
(907) 562-5444 Phone (907) 562-8208 Fax
www.adakisland.com

Alaska Independent Fishermen's Marketing Association
P.O. Box 60131
Seattle, WA 98160
Phone/Fax (206) 542-3930

January 19, 2010

ATTN: BOF COMMENTS
Alaska Department of Fish and Game
PO Box 25526
Juneau, AK 99802-5526

Dear Board of Fisheries Members,

AIFMA has reviewed the proposed regulatory changes relating to Area M salmon fisheries. We have positions and comments on proposals including the following:

Proposal #116: AIFMA supports a sustainable management policy where interceptions of Bristol Bay-bound salmon are quantified and incorporated into that policy. Kvichak River sockeye have been identified within the catch of Area M fisheries during several salmon identification studies.

Bristol Bay fishermen have shouldered the burden of conservation under current management policies. Since 1997 Bristol Bay fishermen have been squeezed into small conservation fishing areas during the majority of the past thirteen seasons.

We believe that this proposal serves to proportionately share the burden of conservation throughout both fleets that participate in the harvest of salmon stocks bound for Bristol Bay.

Proposal #117: AIFMA opposes increasing the depth of gear and harvest capacities in Area M. These changes would result in higher interception rates of Bristol Bay-bound salmon stocks, increase in total harvests and contribute nothing to the conservation and propagation of those stocks of salmon.

Thank you for the opportunity to provide comments on these proposals.

Sincerely,

David Harsila
President

Freezer Longline COALITION

ph: 206.284.2522
fax: 206.284.2902
2303 West Commodore Way, Suite 202, Seattle, WA 98199

January 19, 2010

Mr. Vince Webster, Chairman
Alaska Board of Fisheries
P.O. Box 115526
Juneau, AK 99811-5526

RE: Alaska Peninsula/Aleutian Island Finfish: Groundfish Proposals
COMMITTEE A: SOUTH ALASKA PENINSULA GROUNDFISH
Public Comments on Proposals 103, 104, 105, 106, 107, 108, 109.

Alaska Board of Fisheries

AK Peninsula/Aleutian Islands Finfish

February 2-6, 2010

Anchorage Alaska

Chairperson Webster, Board of Fisheries members.

Thank you very much for your service to the state of Alaska fisheries and your time spent on the various issues during this cycle. I especially want to thank you for the consideration of the various groundfish proposals under your consideration at the Anchorage meeting. I plan to be in attendance and look forward to the opportunity to discuss any of the issues in our comments in detail, to the degree that it will be helpful to you in the decision making process. These are issues that have great impact on our members. Your thoughtful consideration is greatly appreciated.

I am submitting these written comments representing the Freezer Longline Coalition. The Freezer Longline Coalition represents thirty-four hook-and-line catcher processors operating in the Bering Sea and Aleutian Islands area with LLP's and cod endorsements for the Federal fishery. Twenty eight of these vessels also have federal licenses to participate in the Pacific cod fishery in the Gulf of Alaska. This is a Washington and Alaska based and owned fleet varying in size from 110' – 180'

While several of the groundfish proposals deal with multiple gear-types it is our intention to have our comments apply to only longline gear. we claim no conflict or expertise with other gear types within the context of the above captioned proposals. Please accept our comments

herein, whether in opposition or in support of the proposals, to reflect on the longline portion of the proposals only. The following comments are broken down by proposal.

103 and 104 Restrict vessel size greater than 58 feet in length from participating in South Alaska Peninsula Area parallel Pacific cod fishery

The FLC supports these proposals with the following comments / clarifications.

These two proposals are near mirror image proposals so we will comment on them as a one-in-the-same. The FLC supports a 58' limit in the parallel fishery for longline vessels. As this proposal seeks to limit all gear types we are speaking for the limit on longline vessels only. It would be our request that if conflicts arise with other gear types that cannot be resolved that action be taken to move to limit longline vessels. This would be similar to the action the Board took in 2009 to limit the size of longline vessels in the BSAI parallel fishery.

The time to act on this issue is now. The NPFMC has just taken action that will create sector allocations in the federal fishery in the WGOA and CGOA. This will be similar to the sector allocation created in the Bering Sea and Aleutian Islands under NMFMC A 85 and currently in regulations. In the BSAI the BOF took action to prevent an influx of large longliners into parallel waters by creating the 58' limit in the Bering Sea/ Aleutian Island management area parallel fishery, this action was completed with implementation in June of 2009. Our group is asking that the BOF take similar action in this instance.

Without action on this proposal a huge loophole will remain that encourages anyone with a larger vessel, who did not make the historical landings necessary to receive a GOA Pacific cod endorsement for the Federal waters, to simply shed federal licenses and move into the parallel fishery. The implementation of federal GOA sector splits calls for complimentary action by the Board of Fish to close the door on future would be loopholers.

Without action by the BOF on these proposals the participants in the federal sector suffer as their hard fought for allocations are simply eroded with large vessels able to enter the parallel fishery and fish off of the sectors federal allocation. Also suffering without action would be long-term small boat fisherman delivering shore side who rely on the parallel fishery as they see increased competition from larger vessels with freezer equipment erode their shore-side deliveries, shorten their season, and contribute to large catch volumes within state waters.

Without the ability of the BOF to allocate within a gear group, and with present parallel fishery regulations, if no action is taken unlicensed larger vessels could even continue to fish once the longline CP sector closes so long as the small vessel longline CV sector was open. This

is surely a loophole that will be exposed without action. This harms the longline CP's and the longline CV's and is a problem that should be addressed at this meeting.

For our group these proposals are simple where longline gear is concerned. We feel this is an issue the small shoreside delivery vessels and the larger federal fisheries vessels can agree. This action should offer equal protection in all directions and we hope will see widespread support. In addition *the board may want to consider amending this proposal to include all AK state parallel waters* as to prevent unintended consequence of the problem simply moving to a different AK state management area.

105 Exclude longline gear from parallel groundfish fisheries in South Alaska Peninsula Management Area
106 Establish pot and jig gear as the only legal gear types in South Alaska Peninsula Management Area parallel groundfish fisheries, and limit legal gear to 60 pots or 5 mechanical jig machines
107 Implement gear and vessel size restrictions, and a separate Pacific cod harvest quota for the parallel Pacific cod fishery in South Alaska Peninsula Area, and modify existing regulations in the state –waters Pacific cod fishery

The FLC supports these proposals with the following comments / clarifications

Again, as the net effect for the Freezer Longline Coalition Member vessels is the same in these three actions we seek to comment together. These actions as proposed do address our groups concern that vessels participating in the parallel fishery will erode the hard fought for federal sector allocation to our sector and erode other sectors as well once our sector closes. Eliminating longline gear as legal gear for the parallel fishery, which is one of the net effects of proposals 105-106 and 107 does address our main concern.

For the reasons stated in our comments on proposals 103 and 104 we would support the exclusion of longline gear from the parallel groundfish fisheries in South Alaska Peninsula Management Area as it is more palatable to our group than a no action alternative. However we caution that there may be small longline vessels that would be disadvantaged by this action and therefore we would only wish to support this action if a limit of 58' for longliners in all AK state parallel waters was unworkable.

This is a fix to the problem but needs to be looked at in the larger context to make sure it is the *best available solution* before taking action.

108 Increase South Alaska Peninsula Area annual Pacific cod guideline harvest level
109 Increase South Alaska Peninsula Area annual Pacific cod guideline harvest level

The FLC opposes these proposals with the following comments / clarifications

The current GHL for the state-water state managed p-cod fishery in the South Alaska Peninsula Area is 25% of the federal ABC for the WGOA (NMFS reporting area). These proposals seek to double the percentage for the state-water GHL to 50%. The reason stated seems to be "we want more". Pacific cod, like all of Alaska's fisheries is a finite resource. To propose a doubling of catch in any one area without proper scientific analysis is the opposite of being good stewards of the resource.

The FLC members anticipate that these proposals will have serious negative impacts on the stability of the fishery and on the resource itself. We urge the BOF to take no action on these proposals that will re-allocate away from federal fishery participants who have long term historic dependence on the resource; undermine recent NPFMC actions to provide stability in the GOA p-cod fishery and further concentrate harvest inside of three miles.

The FLC works closely each year with NMFS management in the Pacific cod assessment process, attends all of the NPFMC Plan Team and SSC meetings covering the Pacific cod resource and annual assessment. This includes public comments at these meetings each year addressing concerns we have with the resource. The FLC each year hires an outside PhD stock assessment and modeling expert to oversee the process and to work side-by-side with the P.cod stock assessment authors. In this light one of the things that is abundantly clear is that the Pacific cod in the GOA is widely dispersed. Concentrating effort further within three miles would have unknown consequences.

According to Council documents used in the December 2009 GOA P cod Sector Split analysis currently 40-45% of all of the cod caught in the GOA is caught within three miles when you combine state waters and parallel waters. Any proposed increase in catch in such a limited area should be well analyzed through the consultation and approval of the scientists who work year-round in the process of estimating the future of the biomass.

According to the state of Alaska's own records of all areas in the GOA, the WGOA already has by far the highest proportion of p-cod harvest inside of 3 miles in recent years. For example, in 2006, 71% of the entire p-cod harvest in the WGOA (NMFS reporting area) occurred inside of 3 miles (p. 18, Table 3 from ADF&G staff report 09-55, *Annual Management Report for Groundfish Fisheries in Kodiak, Chignik, SAP Management Areas, 2008*).

These proposals could potentially result in 96% of the WGOA ABC being harvested inside 3 miles. For comparison, the highest proportion of harvest inside of 3 miles in the CGOA is 38% in 2005.

This proposed reallocation is simply not justified. Proposals 108 and 109 will harm participants in the federal fishery with long term historical dependency on WGOA p-cod as well as undermine the intent of recent NPFMC actions to stabilize the GOA p-cod federal fisheries (fixed gear recency and GOA p-cod sector allocations

IN CLOSING: We are asking that the BOF take action at this meeting to eliminate larger vessel activity in the longline sector of the parallel fishery. Furthermore, before any additional allocation to the state GHL allow recent NPFMC actions be implemented and allow the fishery to be stabilized. At such a time in the future when these programs have been fully implemented, and armed with the facts about the effects on disproportional catches on the biomass's ability to replenish itself, then and only then should the BOF take another look at the increase in state waters GHL.

Thank you for your hard work and for the consideration of these comments. Looking forward to speaking with you and to testifying on these issues at the February meeting in Anchorage.

Best Regards,

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Freezer Longline Coalition

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CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION NO. 2010-02

A RESOLUTION OF THE UNALASKA CITY COUNCIL SUPPORTING THE ADOPTION BOARD OF FISHERIES PROPOSAL 111 TO CLOSE THE WATERS OF UNALASKA BAY TO GROUNDFISH FISHING WITH TRAWL GEAR YEAR ROUND.

WHEREAS, the Unalaska/ Dutch Harbor Fish and Game advisory committee has submitted Proposal Number 111 to the Alaska Board of Fisheries, the advisory committee supported this proposal unanimously; and

WHEREAS, this proposal would close year round Unalaska Bay to groundfish trawling with trawl gear year round from a point at (54° 00.314' N lat., 166° 37.674 W long.) to Cape Kalekta (54° 00.50' N lat., 166° 22.50 W long.) ; and

WHEREAS, trawling inside of Unalaska Bay has been an issue of concern for local residents in this community for many years, and this area is not traditionally used or depended on by the Pollock trawl fleet: and

WHEREAS, the concern for the local residents is that the influx of trawlers into this very small area during the summer time has negatively impacted local residents who are engaged in commercial, subsistence, and sport fishing activities in the Unalaska Bay area ; and

WHEREAS, trawling adjacent to some of Unalaska Island's most productive and largest river systems is a major concern to local residents that fish in this area; and

WHEREAS, local residents have long voiced concerns regarding bycatch of salmon and halibut as well as gear conflicts, habitat impacts and lost gear in the Unalaska Bay area during this time of year ; and

WHEREAS, proposal 111 is intended to reduce habitat impacts, gear conflicts, bycatch of salmon, halibut, herring, and other species in Unalaska Bay and is expected to have a positive impact on habitat, subsistence, sport, and commercial fishing activities in this area.

NOW THEREFORE BE IT RESOLVED THAT, the Unalaska City Council strongly urges the Alaska Board of Fisheries to adopt Proposal 111 for the positive impacts it will have on bycatch reduction, gear conflicts, habitat, subsistence, sport, and commercial fishing activities in the Unalaska Bay area.

PASSED AND ADOPTED BY A DULY CONSTITUTED QUORUM OF THE UNALASKA CITY COUNCIL THIS 12th DAY OF January, 2010.

MAYOR

ATTEST:

CITY CLERK