

**Board of Fisheries Alaska Peninsula Finfish meeting of February 2-7, 2010 at the Egan  
Convention Center, Anchorage, AK**

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Northern Norton Sound Advisory Committee Meeting  
Monday, November 23, 2009, 2:00 p.m.  
Kawerak New Board Room, Nome

Approved minutes, 5 pages

Roy Ashenfelter, Charles Lean, Adem Boeckman, Robert Madden, Jr., Daniel Stang, Charlie Saccheus, Tom Gray, Jack Fagerstrom, William Jones by phone from Shishmaref.

DFG: Jim Menard, Scott Kent, Letty Hughes, Peter Bente, Susan Bucknell, Brendon Scanlon, Sports Fish—online from Fairbanks.

Members of the Public (MOP): Julie Raymond—Yakoubian, Tim Smith, Ken Hughes III from Teller, Laureli Kineen of KNOM Radio, Loretta Bullard (later).

Chairman Ashenfelter called the meeting to order about 2:00 p.m.

Two items were added to the agenda: Review of BOG actions, and BOF Proposal 116, Area M bycatch.

Letty Hughes reviewed actions of the Board of Game at the Nome meeting.

Tom Gray said the committee has to make sure their previous comments on edible meat and salvage requirements get to the statewide BOG.

Adem wondered why the board opened the brown bear season year round for Barrow but wouldn't extend 22C by a month. He said our AC represents about 100 years of game use in this area and some members are frustrated at not being heard. There was more discussion of BOG issues. Adem said that trophy destruction takes gas money away from subsistence users. He suggested if they're concerned with bears in 22C, why not set a quota based on harvest over the last ten years.

There was discussion that the statewide meeting is the right meeting for a letter to the board about the resident hunting license requirements.

#### Fisheries

Jim Menard presented information on the past season, and the proposed management plan. Charles Saccheus asked about monitoring around Elim. People discussed possible effects on a river of removing a lot of the returning pink salmon. Charlie Lean said in a strong pink year you couldn't notice the difference when commercial fishing stops. In an off year you can, and subsistence fishing can be noticeably affected by commercial fish harvest. Pinks compete with chums for spawning areas, so more pinks equal less chum. More pinks make more silvers; they feed on each other. Trout benefit from more pinks.

**Proposal 54**      *Open Nome river to catch and release of grayling* Moved by Lean /seconded by Saccheus.

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Brendan Scanlon reviewed sport fish data. Adem said that grayling are down and we shouldn't support 54. Add more stress on a limited grayling stock doesn't make sense. Plus subsistence fishers not able to catch grayling which would make the fishery very imbalanced. Brendan said recruitment seems to be low. He said there's not much rearing habitat.

Failed 1/8

**Proposal 55**      *Align sport fish with commercial/subsistence boundaries in Northwestern area*      No action; seen as a housekeeping proposal.

**Proposal 70**      *Allow snagging for non-salmon species in fresh water in Nome and Port Clarence*      Moved by Fagerstrom /seconded by Adem

There was discussion of current regulations which are not in sync with historical and traditional catching of fresh water fish. The Native people of the region enjoy eating fresh fish that are very abundant during the fall migration of white fish; other species such as suckers, saffron cod, Arctic cod, rainbow smelt and burbot are an excellent food source. Snagging will not increase the amount of fish taken from the rivers, however will improve management between ADF&G and subsistence fishers. Carried 9/0

**Proposal 71**      *Allow seining for salmon in Nome Subdistrict* Moved by Madden /seconded by Fagerstrom

People noted that seining do not kill the fish like gill nets, fish caught in a seine can be released unharmed, in fact much safer than catch and release. For example; you could seine for pinks, or reds on the Pilgrim, and let other species go. This coming year is an excellent example with the expected abundance of pinks; if proposal 71 is approved subsistence fishers will be able to catch all the pinks they want while releasing unharmed the chum caught in the seine. Seining in the rivers is done by all Fishery Biologist studying all fresh water fish, because it is the best method for catching fish without causing harm. A very important component of seining is that BOF or ADF&G control seine harvest; that could include timing and bag limits for all species caught. Charlie Lean was concerned that requiring seining would cause significantly later subsistence openings, thereby missing the prime part of the run. He does hope that the managers will hear the AC's wish that seining be allowed ASAP because we do have more faith in the subsistence public releasing unintended catches.

Carries 7/2

**Proposal 73**      *Open a week earlier for commercial catching of red salmon in the Port Clarence District* Moved by Fagerstrom /seconded by Saccheus

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Charlie Lean abstained because of his position with NSEDC.

Ken, Member of public (MOP) from Teller, said he's in favor, presuming they have enough fish; it would decrease bycatch of chum and allow for a more suitable product of red salmon for sale. Tim (MOP) agrees; there are enough protections in place.

Carries 6/2/1

**Proposal 74**      *Expand boundaries for Norton Sound Subdistrict 3*

Move by Fagerstrom /second by Madden      This proposal would move the western boundary further west and eastern boundary further east to allow more areas to target or avoid certain species. The local fishers understand where to go if given the opportunity in the expanded area.

Carries 9/0

**Proposal 75**      no action**Proposal 76**      *Allow purse seine to harvest pinks in Norton Sound*      Move by Lean/ Second by Madden

Adem local commercial fisherman said in even years millions of pinks could be taken without harming anything. Seining produces better quality fish than gill nets. Seining catches males and females equally. Gillnets let the small females slip out, resulting in a catch of lower value overall.

Charlie said he supports this to increase opportunity for Norton Sound gillnet permit holders. He's opposed if this makes it a separate permit.

Tim Smith (MOP) said large runs of pink salmon in small rivers is not good for the chum. Seining would be an effective way of reducing the pinks.

Tom Gray asked about marketability. Charlie Lean said pink prices are determined by roe per cent. The lower limit of gill net mesh size is not small enough in even years. 4" is about right in odd years. About 45% females is ideal. The gill nets are catching about 25% females, so the price is low. Our pinks are pretty small.

Running them through the pollock fillet machines you need about a million pounds to be economically feasible; seining would enable that.

Menard; This would still let people use gill nets. People discussed what allowable harvests could be. Menard said their biggest pink take was a little under one million. Adem said he's not trying to start a new fishery, just increase opportunity.

Tom Gray said if it impacts subsistence fishing, people will be screaming, because we are limited by lack of chum and another resource limitation to subsistence users should not be supported by the BOF. If BOF supports purse seining, please have tools in place to immediately shut down the fishery if subsistence users report they are not catching fish for their needs.

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Carries 9/0

**Proposal 77** *Allow purse and beach seine in Norton Sound–Port Clarence*  
 Moved by Stang/seconded by Fagerstrom, with an amendment for beach seines only.

Tim Smith (MOP) said purse seines might not work out, you need the vessels. But beach seines might. If you get red numbers up again in Port Clarence, you could prevent overharvest of chums while pursuing reds.

Kenny Hughes (MOP) said he doesn't want to trade in his gill net permit, but he'd love the opportunity to seine reds and not harm chums.

Carries 7/0/1

**Proposal 78** *Allow closed pounding for herring spawn–on–kelp in Norton Sound*  
 Moved by Fagerstrom /seconded by Stang

Discussion included; previous open pounding, how to make it more successful plus the added opportunity with closed pound herring spawn–on–kelp to be obtained from a healthy stock which is barely utilized. The market opportunity would expand if there was a closed and open pound for herring spawn on kelp.

Carries 8/0

**Proposal 79** *Allow closed pounding for herring spawn–on–kelp in Port Clarence* Carries with an amendment; To allow open pounding only in Port Clarence.  
 Moved by Fagerstrom /seconded by Gray

Charlie Lean said the NSEDC board is concerned over mixed species bycatch in the herring. Ken (MOP) said it didn't seem likely to benefit any residents of Brevig Mission or Teller area. Tim Smith (MOP) said it would have to be an NSEDC project.

Charlie Lean moved to amend Proposal 79 to just deal with Port Clarence area, and for open pound only.

Carries 8/0

**Proposal 80** *Amend sport fishing bag limits for chum in Norton Sound* Moved by Fagerstrom /seconded by Stang

Jim Menard said that hook and line is legal subsistence gear, so this only affects a non–resident or someone who doesn't want to get a subsistence fishing permit. Subsistence fishing is allowed where sport fishing is allowed. Scott Kent said this makes more opportunity, chum could be retained in more areas, with not much more take.

Jack said if it allows a guide to take clients after chum, he's opposed. The Nome Subdistrict is in a Tier II fishery for chum, which severely limits subsistence

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fishers in timing; we're allowed to catch chum generally two to three weeks after chum have arrived, and chum bag limits have been detrimental to subsistence practices.

Fails 0/8

**Proposal 116** *Reinstate the 8.3 percent allocation of the pre-season Bristol Bay sockeye salmon to Area M.* Lean moved and Gray seconded to amend 116 with a cap of 400,000 chum salmon in Area M fishery.

Lean said over 700,000 chum were taken in Area M in 2009. Fortyfive per cent of those were bound for western Alaska. Area M takes more chum than trawl bycatch does. Area M numbers are creeping up again. There should be effort to target fishing to avoid chum bycatch. We need more chums for escapement and commercial fishing in this area. Tim Smith (MOP) said we need a comprehensive approach on bycatch or this region will never have any fish. Jim Menard ADF&G Fish Biologist, reviewed the history of Area M chum caps.

Loretta (MOP) said that Mike Sloan is developing a position with a cap of 350,000–400,000. Loretta said we see our salmon going down, down, down and not much is being done about it. Saccheus remembered catching chum at Kwiniuk that were tagged at False Pass. The BOF instituted windows which did away with the cap. Then they did away with windows and there is no restrictions on the amount of chum Area M can catch.

Lean said it was a pretty poor chum year in Northern Norton Sound and well below average in the Y–K, yet we see above average harvest in Area M; we need to say something.

Roy said he will draft a statement to be circulated for AC comments, to be read into the record at the AYK BOF.

Carried as amended, 8/0

Tom Gray asked about sockeye in the Pilgrim. Jim Menard said they expect a crash next year. People discussed Pilgrim sockeye, fertilizing Pilgrim Lake. Loretta (MOP) pointed to extremely low returns of coho and kings also, said the whole river is crashing. There was discussion of research, how to address the crash on the Pilgrim River, why the whole river crashed. Jim Menard said there's funding issues, and there are many variables, in the lake, the river, the ocean. ADF&G does not have any plans, staff or resources to address a river that is nearly crashing in all its stocks. Our extremely limited hope is that the BOF and ADF&G change its plans to address the needs of the Northern Norton Sound by approving a plan with proper funding and resources to improve fish stocks in our area.

Adjourn, 6:05 p.m.



# STATE OF ALASKA

**Sean Parnell,  
Governor**

## **Northern Norton Sound Fish & Game Advisory Committee**

**Elim, White Mountain, Golovin, Nome,  
Teller, Brevig Mission, Wales, Shishmaref**

Roy Ashenfelter, Chair  
P.O. Box 1969,  
Nome, AK 99762

January 12, 2010

Vince Webster, Chairman,  
Alaska Board of Fisheries

The Northern Norton Sound Advisory Committee (NNSAC) met on November 23, 2009 to review Board of Fisheries proposals, including Proposal 116, South Unimak and Shumagin Islands June Salmon Management Plan or Area M fishery.

The NNSAC reviewed the fishery records for catching chum in Area M versus our fishery for chum. The Nome, Subdistrict 1, chum fishery has been designated a stock of concern since 1999. Our chum fishery here in Nome area rivers are managed under Tier II. The Tier II fishery has severely restricted our ability to catch chum for more than ten years. Even with the severe restrictions the chum stocks have not increased, in fact have decreased. Additional rivers in Northern Norton Sound such as Golovin - Subdistrict 2, Moses Point - Subdistrict 3, and Pilgrim River in the Teller Subdistrict have had very poor returns of chum salmon for the past several years. The ADF&G have not been doing their job in adding these rivers to stocks of concern listing. The ADF&G is more afraid of the political out fall of such a designation than the reality of consequences on the resource and the people living in the area. Please review the chum reports from ADF&G that verify the very poor chum returns. The BOF in return has not done its job having all fisheries that catch these chum stocks share the burden. In fact BOF has no restrictions for chum catches in the Area M fishery.

No one should be surprised that when BOF lifted all restrictions for catching chum in Area M, that chum stocks in Northern Norton Sound would begin to further decline in all its rivers. ADF&G and BOF have historically shown that they are not willing to do what is right by having only Northern Norton Sound carry the burden of conservation, while letting Area M fisheries go free in catching chum bound for Northern Norton Sound. We support and hope that Federal management takes over as soon as possible so that control and conservation will be shared by all fisheries that catch chum.

In the mean time NNSAC passed proposal 116 with an amendment that recommends the BOF implement immediately a 400,000 chum cap in the Area M fishery. The BOF needs to support our action to limit the amount of chum caught in the June fishery to help conserve the declining number of chum bound for Northern Norton Sound. When you support our recommendation you will assist in all fisheries sharing the burden of conserving chum stocks. The Area M fishery will need to reduce their catch of chum now, and likely be reduced more in the foreseeable future, to add more chum to Northern Norton Sound. The Area M fishery is the only fishery left that is catching chum bound for AYK that is currently unrestricted. The total of chum caught in all of Northern Norton Sound is about 13,000 by subsistence users versus 700,000 chum caught commercially in Area M, which is fifty times more than all the chum caught in Northern Norton Sound. There has not been a commercial fishery for chum in Nome Subdistrict for over 16 years. According to State law, subsistence is a priority with all other fishing activity such as commercial fishing to be reduced till the subsistence fishery is able to catch fish. The BOF has ignored its own policy on managing all fisheries equally when it allows Area M commercial fishing of chum while there is a Tier II fishery in Nome Subdistrict for the same chum.

Sincerely,

Roy Ashenfelter, Chair  
Northern Norton Sound Advisory Committee

Southern Northern Sound AC Meeting  
Thursday, November 19, 2009, by teleconference  
7:00 p.m.  
Approved minutes, three pages

Present by phone:

Koyuk: Frank Kavairlook and alternate Wally Otten  
Myron Savetilik, Shaktoolik  
Paul Johnson, Art Ivanoff, Jeff Erickson; Unalakleet  
Milton Cheemuk, St. Michael  
Peter Martin, Sr., Stebbins

Also attending in Unalakleet: Smitty Johnson, Wes Jones of NSEDC

Attending at the Gambell IRA: Eddie Ungott, Ivar Campbell, Michael James, Sheena Angi,  
Melvin Apassingok, Kim Antoghame  
DFG staff; Jim Menard, CF, Nome; Susan Bucknell, Boards Support, Kotzebue.

Chairman Myron Savetilik called the meeting to order sometime after 7:00 p.m.  
Agenda was approved, moving Proposal 69 to the top, for Gambell's participation.

Minutes were approved with the request to clarify that at the October 13th meeting the committee had take action to definately support the Unalakleet weir project.

BOF Proposals

Proposal 69, to expand hook and line use for subsistence in Norton Sound

Passed 7/0 Gambell wasn't ready to weigh in on this yet.

People pointed out that the proposal incorrectly listed Stebbins as "Stephans" and that it's 5 AAC 01.170 (h), not (b).

Wes introduced the proposal and said he'd worked on it with Frank in Koyuk.

Jim Menard said Subsistence Division is taking the lead on this proposal. Department comments aren't final yet, but he thinks Commfish and Subsistence will be neutral; he's not sure about Sport Fish.

He said that in Northern Norton Sound the department expanded out the subsistence salmon permit requirements to include rod and reel for subsistence.

Does SLI want to be included in this?

There was discussion and clarification of current regulation.

Wally Otten said that rod and reel lets people be more precise in their take than gill nets, so is a conservation measure. He said a lot of local people want this.

Paul agreed it's a good management tool to control subsistence catch. With a net you sometimes don't have that control.

People from Gambell weren't sure about the proposal yet. Paul invited Gambell to join the SNSAC. Frank and others also welcomed them.

There was more discussion about the proposal. Jim Menard said the regulation could be written either to include Saint Lawrence Island or leave it out.

Ivar Campbell questioned looking at Proposal 69 as a conservation measure; with the commercial salmon fishery and bottom trawlers cleaning up, why talk about restricting subsistence take? Why not restrict those other users instead?

There was some discussion and Wes Jones gave Ivar his number and invited him to call him any time for more about that.

Back to agenda;

Jim Menard presented information on the past season, and the proposed management plan.

Proposal 55 Approved 7/0

There was some discussion of boundaries. Moved by Jeff(?), seconded by Paul.

Proposal 72 Approved 7/0

Moved by Art, seconded by Paul. Menard said the department wants feedback from Shaktoolik and Unalakleet on the action plan for stocks of concern. Do people have or would they buy a 7" net? When we hold off on chums and pinks to protect king runs, should we put a date on that in regulation?

Art said it's good to increase management tools, but it seems subsistence is again bearing the brunt of conservation measures.

Jeff said it might give subsistence a bigger window, by limiting mesh size. He doubts there's a 7" mesh in town - typical king gear here is 8 1/4 to 7 3/4. A 7" net might let us get some of the smaller males.

Paul Johnson said he's leery of a set date with things changing the way they are, and the sea ice. There was more discussion of proposal 72 and the management plan

Proposals 76 and 77 Failed 0/7

There were questions about whether new permits would be created, or just allow gill net permit holders to use seines. Menard said that he doesn't see it as restructuring. He explained that the department sets time, area and gear, so the department could allow seine gear. People had questions about handling bycatch from pink seining. Jim Menard said other areas say 20" or smaller, sell it; 20-28", take it home. Bigger than that, back in the water. We could have a regulation or make a stipulation like we do for subsistence. A big fish will stand out, and you can't be in possession.

Paul pointed out that in southern Norton Sound it's not really accurate to say that pinks are largely underutilized.

Art asked if there's even a market for pinks. Wes said that while the department doesn't see this as a restructuring request, the BOF requested a Restructuring Proposal form from the proposer. That form asks for information about markets, how processors would be affected. If it went to restructuring that would be a different picture.

Proposal 78 Approved 7/0

Paul said he'd done open pounding. He supports this, there's potential, the herring are underused. There was discussion of methods, mortality.

*Proposal 78 was reconsidered at the January 15 AC meeting in Koyuk, at the request of Clarence Towarak and Paul Johnson. Discussion in January 15, 2010 SNSAC minutes.*

Proposal 79 No action  
SNSAC didn't want to act on Port Clarence district.

Proposal 116 Passed as amended 7/0

Committee discussed Area M chum data. Art moved amending Proposal 116 to limit the interception of chum salmon with a hard cap of 30 thousand, coho also at 30 thousand. He said there's a need to know how many of these salmon are destined to our river systems, and it's important to know the impact. It's important for escapement goals, and subsistence and commercial users here.

Paul said we have boundaries in southern Norton Sound set up to protect other stocks, like Yukon River kings. It's not consistent for the state to not have boundaries in other areas. Sixty per cent of the chum caught in Area M are bound for AYK, so this measure is needed. Paul mentioned a boundary at Cape Denbigh to protect Kotzebue chums.

Art said he'd like to go to the Alaska Peninsula/Aleutian Islands BOF meeting to present SNS concerns. February 2-6, 2010. Susan will request AC travel to that.

Paul said it appears that small money fisheries are held to a standard that doesn't apply to the big money fisheries. It doesn't make sense to hold one part of the state to certain standards and other areas to other standards when it comes to interception. We're not allowed to intercept Yukon River kings south of Unalakleet, or Kotzebue chums north of Denbigh.

Jeff asked how the Board of Fisheries responds to this kind of discussion.

Jim Menard reviewed the history of Area M chum caps and time frames.

Wes said that everybody focused on trawl bycatch; now that's gone down and Area M is up - it's important to look at both of them together. At the NPFMC bycatch meeting, Area M was never mentioned. It's important to look at the cumulative impact.

Menard commented that Area M is a huge area, with 250 rivers, a lot of fish, and some bycatch.

Art said he feels a conservative approach is necessary.

*Proposal 116 was reconsidered at the January 15 AC meeting in Koyuk, at the request of Art Ivanoff and Paul Johnson. Discussion in January 15, 2010 SNSAC minutes.*

End of BOF proposals.

Discussion of third party reimbursement funds for AC travel. Susan said we need to have good oversight and timely planning and approval.

Discussed the AYK BOF in Fairbanks January 26 to 31, 2010. Paul and Myron will go.

Myron suggested that the next meeting be in another village, during the day. Committee decided on Koyuk in mid-January.

Adjourn at 9:30

Southern Norton Sound  
Fish and Game Advisory Committee Meeting  
Friday, January 15, Koyuk IRA Building  
7:00 p.m.

Draft Minutes, two pages

Quorum confirmed with Myron Savetilik, Leo, Charles, Sr., Frank Kavairlook, Art Ivanoff and Allen Atchek in Koyuk, and Jeff Erickson by phone from Unalakleet.

Clarence and Paul excused, busy with dog races. Milton excused, he's recuperating.

Also present in Koyuk; Lola Hannon, Morris Nassuk.  
DFG staff: Susan Bucknell by phone from Kotzebue.

Meeting called to order shortly after 7:00 p.m.

Agenda approved, minutes of last meeting approved.

Reconsider committee actions on BOF proposals:

**Proposal 78**, Unanimous opposition to Proposal 78, herring pounding. Reconsideration requested by Clarence and Paul. Jeff said he's a herring pounder too, and he's talked to Clarence about this. Clarence has experience with pounding in Togiak as well as Norton Sound. Jeff described open and closed pounding. He said getting as many fish as possible into your pound, they can die from lack of oxygen and crowding, and they sink. Clarence has seen at Togiak. That's okay in open water, but in a spawning area there's a lot of oil, it makes a sheen on the wild kelp beds, and the kelp is not attractive to the next wave of herring, or the eggs won't stick to the kelp, or something. Jeff said we really want to conserve our wild kelp. People really like to eat the spawn on wild kelp for subsistence, and maybe there could be a commercial harvest sometime. Really don't want to harm the wild kelp. That's why Clarence wants the committee to withdraw support of Proposal 78, and Jeff agrees with that, and Paul told him he does also.

Moved by Frank, seconded by Jeff, to withdraw support of Proposal 78.  
Passed unanimously.

**Proposal 116**, amended with a chum cap of 400,000 chum

Reconsideration requested by Art and Paul.

Art reviewed that the committee amended this in November to add a hard cap on chum bycatch. He suggested changing the committee's cap to 400,000, to be in line with Kawerak and Northern Norton Sound AC recommendations. Supported unanimously.

Art brought up letters to Senators Murkowski and Begich about adding seats to NPFMC. Art said the Council has 15 seats/11 voting seats. The letter requests an Alaska Native representative who is not associated with the CDQ groups or the pollack industry. Art said the 2009 AFN convention endorsed a similar idea.

Art said the Native Village of Unalakleet has requested tribal consultations with NMFS regarding salmon bycatch and the Northern Bering Sea Research Area. They are planning a meeting in mid-February in Unalakleet with the agency. They have funds to bring in eight people from the other villages. Art hoped that the IRAs can help with per diem.

Travel to AYK BOF, Myron and Paul, Frank as alternate.

Travel to AP/AI BOF, Art and Frank.

Next meeting, mid-March, to rehash the BOF meetings, hold election of officers, and discuss Art's letters.

Adjourned around 8:00 p.m.

RC6  
to Board

**UNALASKA-DUTCH HARBOR AC**

FAX COVER SHEET

Frank Kelty, Chairman

PO Box 162

Unalaska, Alaska 99685

Phone (907) 581-7726

Fax (907) 581-4469

Unalaska Cell (907) 359-7753

Anchorage Cell (907) 903-8183

E-Mail: [fkelly@ci.unalaska.ak.us](mailto:fkelly@ci.unalaska.ak.us)

To: Commissioner Derby Lloyd, ADFG

Date: 1-15-2010

Fax: 1-907-465-2332

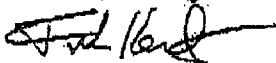
From: Frank Kelty, Chairman Unalaska - Dutch Harbor Advisory Committee

Subject: FYI, Proposal 111 which is going to be coming up at the 2-2-10 AK Peninsula-Aleutian Island Finfish meeting in Anchorage, AK.

Commissioner,

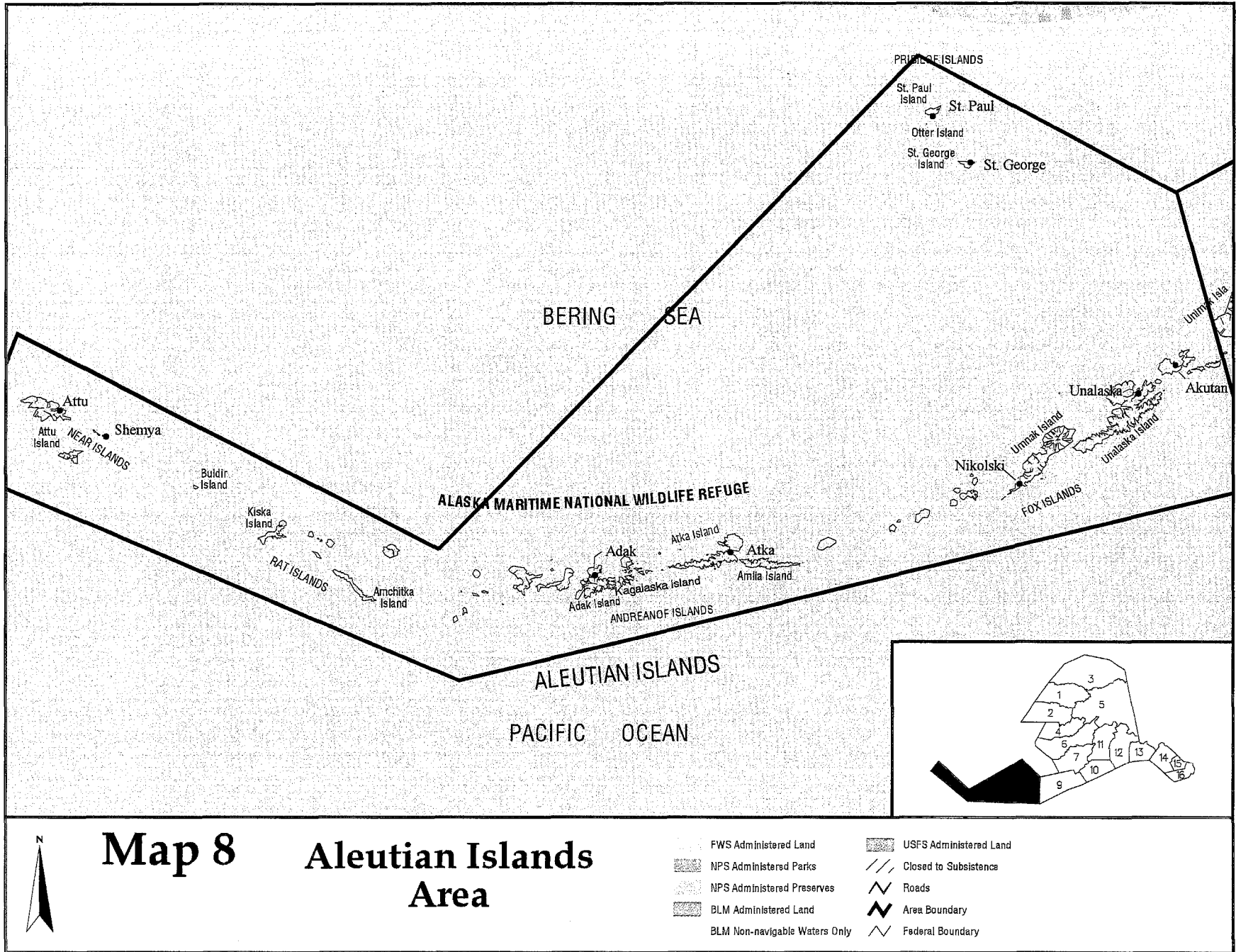
Just wanted to advise you of the importance of proposal 111 to the community of Unalaska and pass on the letters of support from various sectors of the community. The Unalaska City Council passed a resolution unanimously, Unalaska AC passed supported the proposal unanimously, a point of interest, three of the AC members is on the committee work for local Pollock processors and they support the proposal as well. We have letters of support from the local tribe as well as the local native corporation and the Unalaska Native Fisherman's Association as well. I also understand that many local residents are sending in letters of support as well. I hope you and your new bride had great holiday season.

Warmest Regards



Frank Kelty



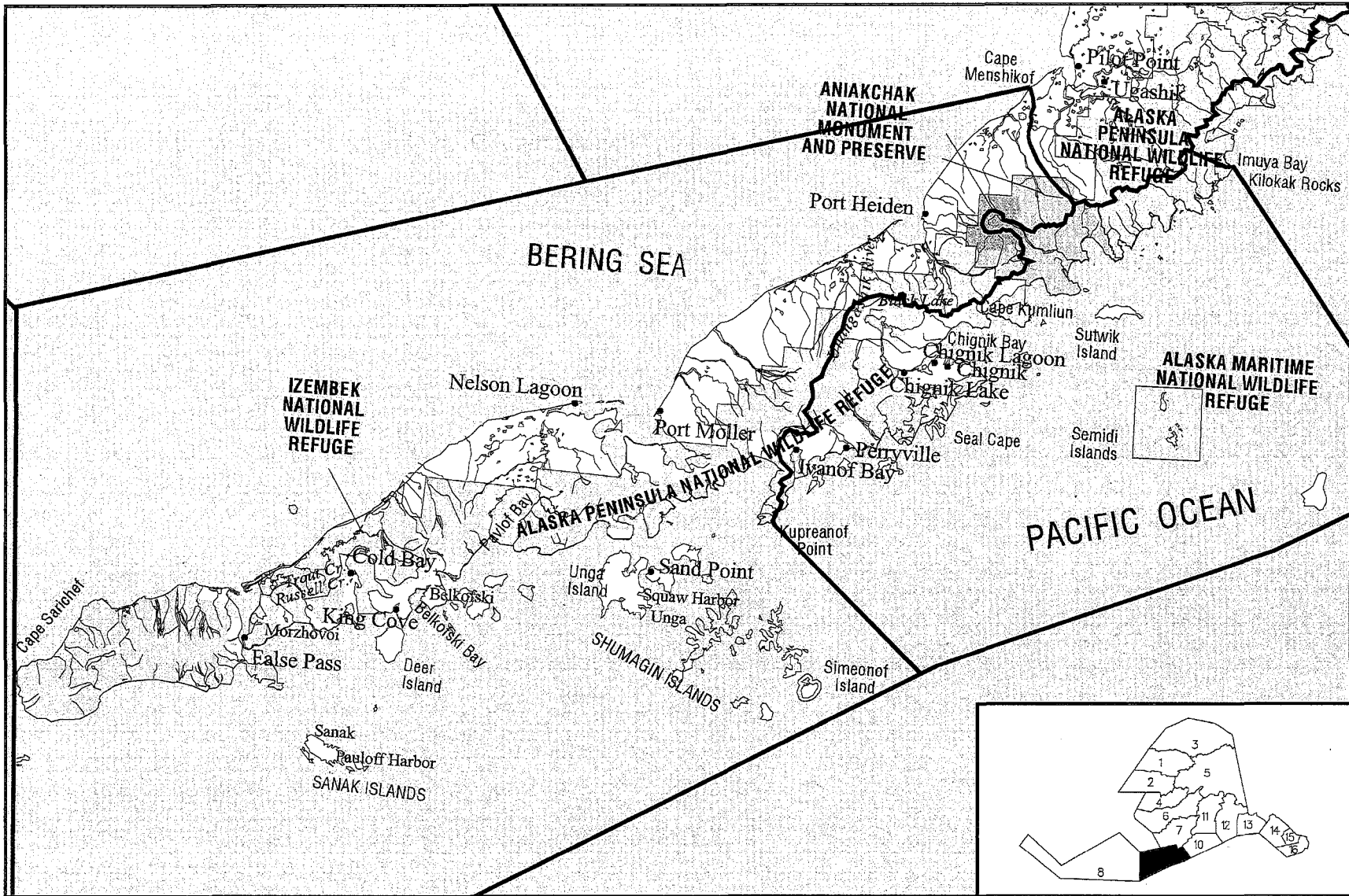


**Map 8 Aleutian Islands Area**

- FWS Administered Land
- NPS Administered Parks
- NPS Administered Preserves
- BLM Administered Land
- BLM Non-navigable Waters Only
- USFS Administered Land
- Closed to Subsistence
- Roads
- Area Boundary
- Federal Boundary

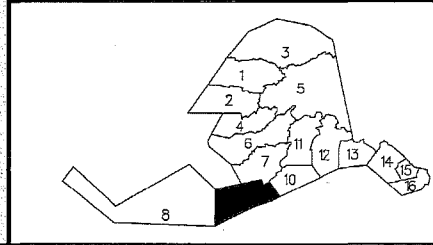
Aleutian Islands Area Subsistence Fishing

RC7



**Map 9** Alaska Peninsula and Chignik Areas

- |                               |                        |
|-------------------------------|------------------------|
| FWS Administered Land         | USFS Administered Land |
| NPS Administered Parks        | Closed to Subsistence  |
| NPS Administered Preserves    | Roads                  |
| BLM Administered Land         | Area Boundary          |
| BLM Non-navigable Waters Only | Federal Boundary       |



RC8



# City of Chignik

PO Box 110  
Chignik, AK 99564

Phone (907) 749-2280  
Fax (907) 749-2300  
cityoffice@chignik.org

## RESOLUTION NO. 10-02

### A Resolution Supporting a Regulation Change to the Alaska Board of Fisheries

**WHEREAS**, the City Council of the City of Chignik is the governing body; and

**WHEREAS**, the City of Chignik supports local alternate commercial fishing efforts such as Pacific Cod; and

**WHEREAS**, the existing proposal change as read would allow for the jigging quota to be allocated to the other gear types to allow for underutilized harvests to be maximized; and

**WHEREAS**, this change would prevent harvests based upon registration of boats and not actual fishing effort, limiting the opportunity to harvest the 10% jigging quota should boats register and choose not to fish; and

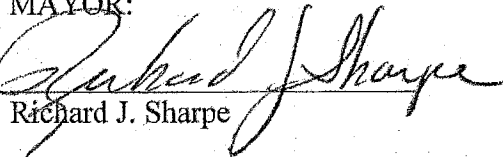
**WHEREAS**, the existing proposal to open the cod season on March 1<sup>st</sup> limits the local small boat fishery due to the severity of the weather at that time of year.

**NOW THEREFORE BE IT RESOLVED** that the City of Chignik supports the regulation change from "registered" jig gear cod fishing to "actual" fishing effort in order to allow for the 10% allocation to be utilized should no jigging effort take place for the season.

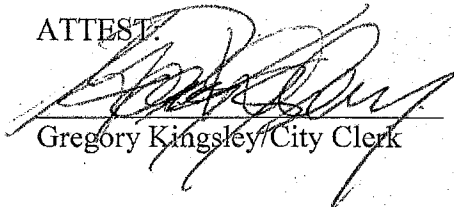
**BE IT FURTHER RESOLVED** that the City of Chignik supports opening the season March 15<sup>th</sup> instead of the March 1<sup>st</sup> to allow smaller vessels to participate and ensure an improved quality roe and weight size.

**PASSED AND APPROVED** by a duly constituted quorum of the city council on this 5th day of January, 2010.

MAYOR:

  
Richard J. Sharpe

ATTEST:

  
Gregory Kingsley/City Clerk

Proposal - 119

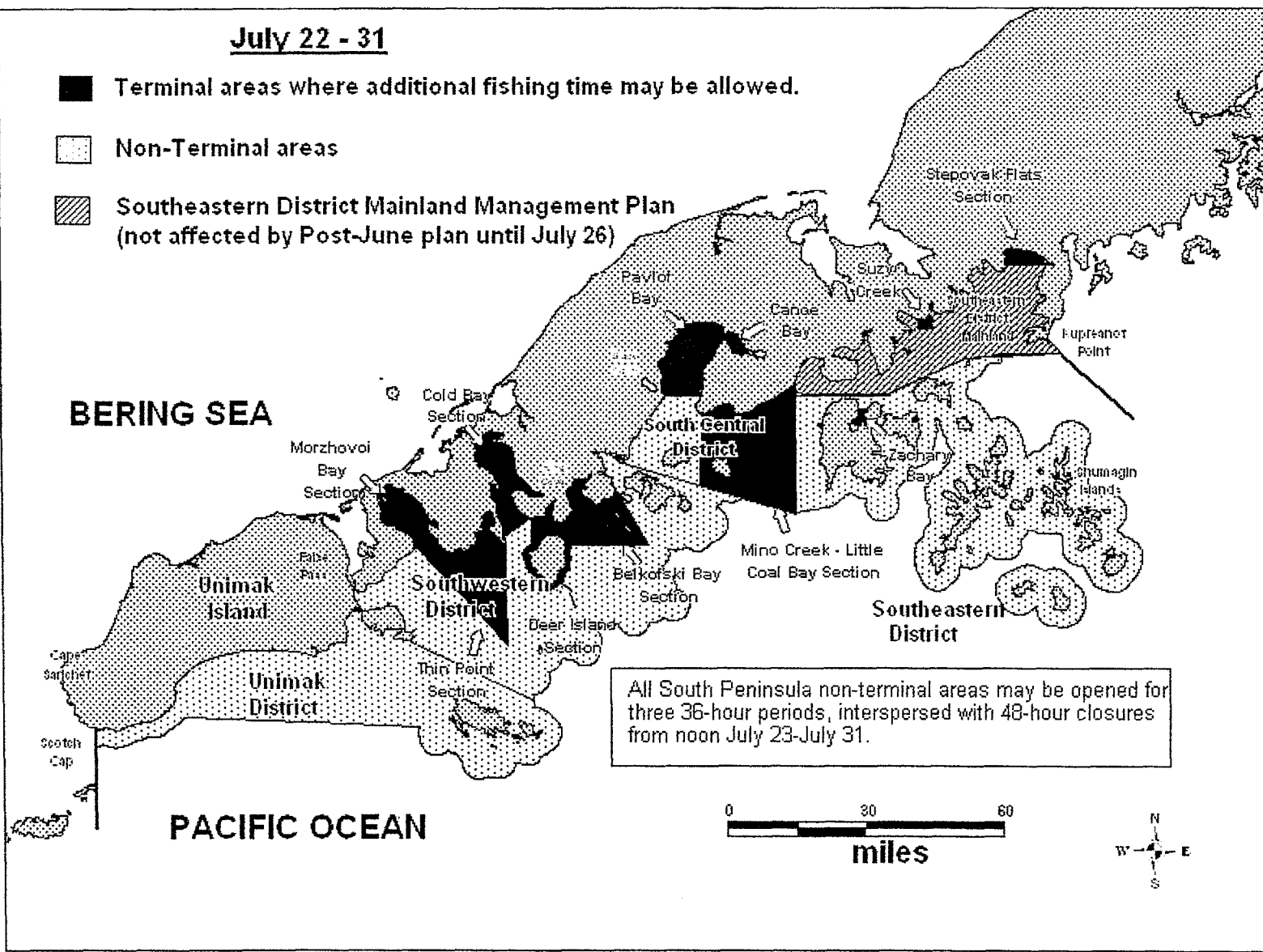
# JULY 2010

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6 12 hr opening 6AM-6PM	7 12 hr opening 6AM-6PM	8 36 hour closure	9 12 hr opening 6AM-6PM	10 12 hr opening 6AM-6PM
11 36 hour closure	12 12 hr opening 6AM-APM	13 12 hr opening 6AM-6PM	14 36 hour closure	15 12 hr opening 6AM-6PM	16 12 hr opening 6AM-APM	17 36 hour closure
18 12 hr opening 6AM-6PM	19 12 hr opening 6AM-6PM	20 36 hour closure	21 16 hr opening 6AM-10PM	22	23	24
25	26	27 12:01AM	28 12 PM	29	30 12 PM	31

RC9

**July 22 - 31**

- Terminal areas where additional fishing time may be allowed.
- ▨ Non-Terminal areas
- ▩ Southeastern District Mainland Management Plan (not affected by Post-June plan until July 26)



All South Peninsula non-terminal areas may be opened for three 36-hour periods, interspersed with 48-hour closures from noon July 23-July 31.

141

Proposal-126

Appendix D3.—Map of the South Peninsula Post-June fishery with terminal areas defined during July 22-31.

# Proposal - 128

Table 1. Annual summary of the Shumagin Islands Section July salmon test fishery, 1992-2009.														
Year	Duration	Number of sets	Number of Adult Salmon						Number of Immature Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Chum	Total	
1992	July 10 - 29	44	134	2,413	3,695	10,167	4,388	20,797	892	13,449	5	2,087	16,433	
		Avg/Set	3.0	54.8	84.0	231.1	99.7	472.7	20.3	305.7	0.1	47.4	373.5	
1993	July 12 - 18	24	259	1,804	4,892	2,944	827	10,726	393	2,188	0	139	2,720	
		Avg/Set	10.8	75.2	203.8	122.7	34.5	446.9	16.4	91.2	0.0	5.8	113.3	
1994	July 14 - 27	31	99	1,171	4,221	8,530	2,657	16,678	135	3,685	2	11	3,833	
		Avg/Set	3.2	37.8	136.2	275.2	85.7	538.0	4.4	118.9	0.1	0.4	123.6	
1995	July 12 - 17	30	122	4,000	3,671	8,456	2,592	18,841	215	221	0	390	826	
		Avg/Set	4.1	133.3	122.4	281.9	86.4	628.0	7.2	7.4	0.0	13.0	27.5	
1996	July 12 - 18	35	188	2,093	15,187	7,010	7,391	31,869	211	520	4	234	969	
		Avg/Set	5.4	59.8	433.9	200.3	211.2	910.5	6.0	14.9	0.1	6.7	27.7	
1997	July 12 - 19	39	373	2,716	3,536	4,925	4,075	15,625	3,361	674	32	182	4,249	
		Avg/Set	9.6	69.6	90.7	126.3	104.5	400.6	86.2	17.3	0.8	4.7	108.9	
1998	July 02 - 03	10	6	711	33	1,200	499	2,449	5	24	0	0	29	
		Avg/Set	0.6	71.1	3.3	120.0	49.9	244.9	0.5	2.4	0.0	0.0	2.9	
1999	July 01 - 07	26	26	12,284	18	12,340	4,680	29,348	13	2,132	0	42	2,187	
		Avg/Set	1.0	472.5	0.7	474.6	180.0	1128.8	0.5	82.0	0.0	1.6	84.1	
2000	July 03 - 05	13	9	1,597	101	2,946	1,919	6,572	13	77	0	126	216	
		Avg/Set	0.7	122.8	7.8	226.6	147.6	505.5	1.0	5.9	0.0	9.7	16.6	
2001	July 02 - 16	50	318	6,258	3,353	9,382	10,772	30,083	1,265	3,241	17	1,382	5,905	
		Avg/Set	6.4	125.2	67.1	187.6	215.4	601.7	25.3	64.8	0.3	27.6	118.1	

-continued-

Table 1. Annual summary of the Shumagin Islands Section July salmon test fishery, 1992-2009.														
Year	Duration	Number of sets	Number of Adult Salmon						Number of Immature Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Chum	Total	
2002	July 02 - 04	15	29	1,020	11	443	1,227	2,730	325	911	1	280	1,517	
		Avg/Set	1.9	68.0	0.7	29.5	81.8	182.0	21.7	60.7	0.1	18.7	101.1	
2003	July 02 - 20	28	26	819	1,279	4,646	2,275	9,045	1,419	8,640	43	512	10,614	
		Avg/Set	0.9	29.3	45.7	165.9	81.3	323.0	50.7	308.6	1.5	18.3	379.1	
2004	July 07 - 08	10	81	507	542	1,131	1,827	4,088	42	111	0	279	432	
		Avg/Set	8.1	50.7	54.2	113.1	182.7	408.8	4.2	11.1	0.0	27.9	43.2	
2005	July 02 - 05	22	68	1,197	2,137	7,117	2,140	12,659	1,110	263	2	211	1,586	
		Avg/Set	3.1	54.4	97.1	323.5	97.3	575.4	50.5	12.0	0.1	9.6	72.1	
2006	July 02 - 05	15	21	1,211	440	2,254	7,855	11,781	69	356	0	66	491	
		Avg/Set	1.4	80.7	29.3	150.3	523.7	785.4	4.6	23.7	0.0	4.4	32.7	
2007	July 02 - 05	17	12	11,389	781	7,036	1,300	20,518	2	951	0	9	962	
		Avg/Set	0.7	669.9	45.9	413.9	76.5	1206.9	0.1	55.9	0.0	0.5	56.6	
2008	July 03 - 08	23	12	9,310	1,901	14,838	11,436	37,497	22	2,167	0	391	2,580	
		Avg/Set	0.5	404.8	82.7	645.1	497.2	1630.3	1.0	94.2	0.0	17.0	112.2	
2009	July 03 - 05	18	28	1,587	389	21,101	3,825	26,930	76	644	3	260	983	
		Avg/Set	1.6	88.2	21.6	1172.3	212.5	1496.1	4.2	35.8	0.2	14.4	54.6	
1992-2009		Number	101	3,449	2,566	7,026	3,983	17,124	532	2,236	8	367	3,141	
Average		Avg/Set	7.9	148.2	84.8	292.1	165.0	693.6	16.9	72.9	6.1	12.6	102.7	

<sup>a</sup> Test fishing is standardized to purse seine gear, conducting 20 minute sets at Popof Head, Middle Set, and Red Bluff located on Popof Island, additional sets are made if time allows.

PC10



RC 11

Sand Point Fish and Game Advisory Committee

Minutes

November 25, 2009

January 11, 2010

Proposal 116 Oppose 5-0

Proposal 117 Oppose 5-0

Proposal 118 Oppose 5-0

Proposal 119 No Action

Proposal 120 Support 4-0

Proposal 121 Support 4-0

Proposal 122 No Action

Proposal 123 No Action

Proposal 124 Support 4-0

Proposal 125 Support 4-0

Proposal 128 Support 4-0

Proposal 129 Support 4-0

Proposal 130 Oppose 4-0

Proposal 131 No Action

Proposal 132 Support 4-0 as amended ISSUE: "I would like to see 300,000 sockeye per run, first, Black Lake and second, Chignik Lake totaling 600,000 harvest allocation removed. ~~Given to the Chignik area fisherman, before the fisherman in the Southeast District Mainland are allowed to fish be taken out to the management plan.~~

Proposal 133 Support 4-0 as amended "Open the salmon season on June 6<sup>th</sup> at 12 midnight for 72 hours close season for 2 days and reopen 72 hours, ~~three days on and two days off continuously~~ for set gillnet until July 10, then seine and set gillnet gear until July 25<sup>th</sup>.

Proposal 134 Support 4-0



Proposal 135 No Action

Proposal 136 Support 5-0 as amended "SEDM setnetters have not fished in June and setnetters and seiners in July for 3 years".

Proposal 168 Oppose 4-0

Proposal 174 Oppose 4-0

Proposal 137 Support 5-0

Proposal 138 Recommend for committee consideration.

Proposal 140 Oppose 5-0

Proposal 141 Oppose 5-0

Proposal 142 Support 5-0

Proposal 143 Support 5-0

Proposal 144 Support 5-0

Proposal 153 Support 5-0

Proposal 160 Oppose 5-0

Proposal 161 Oppose 5-0

Proposal 162 Support 3-2

RC12

NOV 9 2009

Advisory meeting

SIGN-IN

Paul Clark

Justin Gundrum

Allene Nelson

Ray P. Johnson

Laura E. Johnson

John A. Miller Jr  
Lisa F. Johnson

Dale Gundrum

Theo Christy

Michael Johnson

teleconference

**Nelson Lagoon Advisory Committee**  
**PO Box 913**  
**Nelson Lagoon, Alaska, 99571**

The Nelson Lagoon Advisory Committee meeting minutes of November 9, 2009 at the community center:

I Call to Order: Paul Gundersen, Chair, call the meeting to order at 1:00pm.

II Roll Call/establish Quorum:

Present: Arlene Nelson, Ray Johnson, Leona Nelson, John Nelson, Jr., Justine Gundersen,

Teleconferencing: Theo Chesley, Dale Gundersen

Absent: Danny Johnson

**Quorum established**

III Approval of Agenda

Arlene Nelson moved to approve the agenda, Leona Nelson seconded the motion.  
Motion passed.

IV Approval of Minutes of October 8, 2008

A motion was made by John Nelson, Jr., to approve the minutes, a second was made by Ray Johnson. Motion passed.

V Election of Committee Members:

Paul opened the floor for nominations for three seats. The current members whose terms have expired are: Paul, Ray and Justine. A motion was made by Theo to nominate these members to committee, seconded by Dale. Motion passed.

Paul made a motion to elect/add Merle Brandell to the committee. Arlene seconded the motion. Passed unanimously.

VI New Business

The proposals for the Board of Fish meeting being held in February were discussed. Paul mentioned that there was to be a meeting of the neighboring advisory committees, i.e.: Sand Point, King Cove, and False Pass, on November 13<sup>th</sup>. It is important to support their proposals which will be discussed at that meeting.

Page two

VI continued:

Ray wanted to discuss proposals 147 and 148 and 154: There was discussion on the pressure of the north line and the effect it is having on the Lagoon. Ray wants the dialogue because some of the local residents are drifters and utilize that area. There was lengthy discussion concerning the proposals and support for the proposals. It was determined that language will be crafted in committee during the BOF meeting to be presented to the Board.

Since not all of the members had a chance to review all of the proposals for the north and south side, a motion was made by Theo to recess this meeting until December 21<sup>st</sup>, at 1:00pm. Dale seconded. Motion passed. Paul, Dale and Theo will be in Anchorage and will meet to review all proposals. Remaining members will review the proposals in the Lagoon.

In recess: 2:30pm

**Nelson Lagoon Advisory Committee**  
**PO Box 913**  
**Nelson Lagoon, Alaska, 99571**

I Call to Order: Paul Gundersen, Chair, called this meeting to order at 1:00pm on December 21, 2009, being held in the community building. Meeting was in recess:

Present: Ray Johnson, Arlene Nelson, Justine Gundersen, Leona Nelson, John Nelson, Jr.,  
Teleconferencing: Paul Gundersen, Theo Chesley, Dale Gundersen.

IV Order of Business

Proposals: the members are supporting, abstaining, and no support for the following proposals:

115: chum issue/okay  
116: no support  
117: no support/status quo  
118: abstain  
119: support  
120, 121, 122, 123: abstain  
124, 125: support  
126: abstain  
127: no support  
128: abstain  
129: support  
130: status quo  
131: abstain (w/? want to discuss in committee)  
132, 133, 134, 135: abstain  
136: support  
137, 138, 139: abstain  
140: Bd driven: support  
141, 142, 143: abstain  
144: abstain w/a ?  
145, 146: no support  
147, 148: support w/language  
149, 150, 151, 152, 153: no support

Page two

154: support w/language

155, 156: no support

157: support

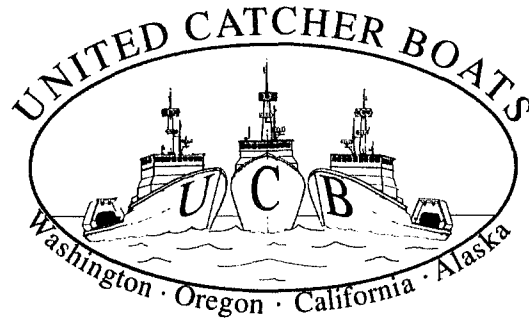
V This meeting was recessed until January 9<sup>th</sup>. 3:30PM

**NELSON LAGOON ADVISORY COMMITTEE MEMBERS:**

**TERMS:**

<b>Paul E. Gundersen, Chairman</b> PO Box 902, Nelson Lagoon, AK., 99571	<b>2013</b>
<b>Ray Johnson, Vice-Chair</b> PO Box 912	<b>2013</b>
<b>Justine Gundersen</b> PO Box 939	<b>2013</b>
<b>Arlene Nelson</b> PO Box 916	<b>2010</b>
<b>John Nelson, Jr.,</b> PO Box 921	<b>2010</b>
<b>Theo Chesley</b> PO Box 937	<b>2010</b>
<b>Dale Gundersen</b> PO Box 927	<b>2011</b>
<b>Leona Nelson</b> PO Box 932	<b>2011</b>
<b>Danny Johnson</b> PO Box 924	<b>2011</b>
<b>Merle Brandell</b> PO Box 916	<b>2013</b>

RC13



Alaska Department of Fish and Game  
Board Support  
P.O. Box 115526  
Juneau, Alaska 99811

February 2, 2010

RE: Proposal 111, Closure of Unalaska Bay

Dear Board of Fisheries Members,

Please consider these comments from the members of United Catcher Boats. We ask that you **do not vote in favor** of Proposal 111, the closure to Unalaska Bay to trawling for Pollock in the summer months.

United Catcher Boats is a trawl catcher vessel trade association made up of the owners of 62 vessels that participate in the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska trawl fisheries. Our members fish for Pollock and Pacific Cod in the BSAI trawl fishery. The closure of Unalaska Bay to trawling for Pollock would have a negative impact on our fishing opportunities. There are 110 trawl catcher vessels that are licensed to fish Pollock in the Bering Sea fishery of which a majority haul out of Dutch Harbor and deliver their catch to Unisea, Westward Seafoods and Alyeska Seafoods. We also deliver shore-side to Trident Seafoods in Akutan, Peter Pan Seafoods in King Cove, and Icicle Seafoods in Beaver Inlet and offshore to three mothership processors.

Total Ex-vessel value of Pollock delivered by the catcher vessel Pollock fleet to these Bering Sea shore-based processors and communities has averaged a bit over \$200 million per year for the past decade. The raw fish tax of 2% paid to the State of Alaska is roughly \$4 million, of which the City of Dutch Harbor receives approximately 25%, or \$1 million per year from the catcher vessel fleet that delivers their harvest to the Dutch Harbor seafood plants. Without the taxes generated by this fleet of vessels and their activity, the services and way of life now available in Dutch Harbor would be significantly reduced.



8109

The fleet of trawl vessels participating in the Bering Sea Pollock fishery have extensive history and a dedicated fleet of 30 or more members of the fleet has been delivering to the Dutch Harbor plants since the plants were built and have well over 30 years of dedicated deliveries, year after year, into Dutch Harbor. This city is the hub of our existence and has been for up to 40 years to the members of United Catcher Boats. The Bering Sea catcher vessel fleet has a lengthy history of fishing in the proposed closure area dating back to the early 1980's and have consistently fished this area.

We have looked at the concerns expressed by the Dutch Harbor Fish and Game Advisory Committee and fail to see any real or definable reason for the Board of Fisheries to enact a closure to Unalaska Bay at this time. What follows are our comments on the stated reasons.

1. **Salmon Bycatch Concerns.** Data from ADF&G staff indicate that this area has an above average rate of Chinook and chum salmon bycatch relative to the entire Bering Sea Pollock fishery. The Bering Sea Pollock fleet has worked very hard at addressing the issue of salmon bycatch as evidenced by our presentation to you last week in Fairbanks that provided a summary of our newly developed Salmon Savings Incentive Plan (SSIP) in partnership with the NPFMC's newly recommended Chinook salmon hard cap management program for the BSAI Pollock fleet. Upon enactment of this salmon hard cap bycatch management measure, the Bering Sea catcher vessel fleet will divide up the hard cap limit down to the individual vessel, and each vessel will be limited to their share of the hard cap. What this means is that a captain of a vessel will not squander the vessel's limited salmon bycatch allocation. If he reaches his bycatch limit without harvesting his Pollock allocation, he could leave his Pollock allocation unharvested.

In addition, based on federal observer program data, the Pollock fleet encounters only Chinook and chum salmon, not sockeye, pink or silver salmon. The two anadromous rivers that flow into Unalaska Bay are sockeye, silver and pink producing rivers. The Pollock trawl fleet does not encounter any of these species of salmon. Rather, salmon bycatch is a Chinook and Chum salmon issue. Stream of origin genetics analysis conducted over the past decade on bycaught Chum and Chinook clearly shows that these two species of salmon taken as bycatch are from all over Alaska. In fact, in some years up to 50% of the Chum bycatch has been determined to be from Asia (mostly Northern Japan hatchery production).

Four years ago, the NPFMC recommended and the NMFS approved, additional regulations to manage Chum and Chinook salmon bycatch in the Pollock fleet that provides for the industry-based Rolling Hot Spot Closure program. This federal regulation allow the Pollock co-op managers to close, on a weekly basis, discrete areas of known high bycatch rates ("hotspots"). Over the past couple of years this bycatch management tool has become quite effective in reducing salmon bycatch occurrence and rates in the Bering Sea Pollock fishery. If salmon bycatch rates experienced in the Unalaska Bay fishery are shown to be above average, then the co-op managers will designate this area as a 'Hotspot' and close it to vessels that have high bycatch rates on a weekly basis.

As part of the NPFMC's new Chinook bycatch hardcap/incentive management program, every vessel in the BSAI catcher vessel trawl fleet will be required to carry a federal observer 100% of the time. Therefore, bycatch data taken from the fleet is quite accurate.

2. **Habitat Impacts.** Due to the rough and high relief bottom substrate, the Pollock fishery in Unalaska Bay is a true pelagic fishery. There is a lot of disincentive to have a net come in contact with the seafloor where there are many rough hazards that can damage and destroy the nets, particularly in the area in question. The average price of a Pollock midwater net is over \$100,000 (midwater net and codend).
3. **Loss of Local Halibut Catch.** Statements have been made that the reduction in the catch of halibut by the local charter boat fleet, sport and subsistence users has been a result of the trawl activity by the Pollock fleet. There is no documented evidence or proof that the vessels fishing for Pollock in Unalaska Bay have had any impact on the halibut population in Unalaska Bay. ADF&G data show little to no halibut taken as bycatch in the Pollock fishery. On the other hand, there was a large ramp up of sport and commercial line fishing for halibut over the past decade. If halibut harvest is such a concern perhaps a better proposal would be to close Unalaska Bay to all gear types for commercial fishing.
4. **Gear Conflicts.** In their proposal, the Dutch Harbor/Unalaska Advisory Committee state that there has been gear conflicts on the fishing grounds between the Pollock trawl fleet and the set line halibut and P. cod longline vessels fishing in Unalaska Bay. This statement is not substantiated with data or any documented report of gear loss due to the Pollock fishing occurring in Unalaska Bay. Usually when there is a situation when a trawl vessel comes in contact with a crab or P. cod pot or buoy line, or a halibut or P. cod setline, there is a complaint filed with ADF&G or NMFS offices in Dutch Harbor. Over the past decade, the Pollock fleet and the crab fleet working out of Dutch Harbor and Akutan have developed a protocol agreement and this agreement has worked to minimize grounds conflict and provides for resolution. We have the ability to enter into this agreement due to the co-operative structure of the Pollock fishery. Given the thousands of vessel trips that enter and exist Dutch Harbor by the groundfish trawl, pot and longline vessels (Catcher Processors, Catcher Vessels, Processors) and the crab fleet throughout the year, it is hard to believe that any loss of setline gear is due to the few Pollock vessels fishing in the Bay in the late summer months.
5. **Continued Influx of Large Trawlers.** Over the past decade, the vessels fishing in Unalaska Bay for Pollock have been by the smaller sized vessels relative to the entire Bering Sea Pollock catcher vessel fleet. The very large vessels will not fish in this area and will agree through the co-operative management structure to not fish in this area. Rather, the size and shape of the fishing area in Unalaska Bay is more suited for the smaller-size Pollock vessels (105' to 125' in length). These smaller vessels pack less fish than the larger vessels.

One concern we have with this closure is the accumulative loss of fishing grounds over time. Over the past twenty years, the BSAI trawl fleet has seen a continuum of time and area closures to fishing in the form of Steller Sea Lion Critical Habitat, Essential Fish Habitat (EFH), Habitat Areas of Particular Concern (HAPC), and ecosystem management measures. The members of UCB have supported closure areas provided there is a measurable negative impact on the resource and marine environment. In this proposal however, we see no actual negative impacts due to pelagic trawling in Unalaska Bay.

We cannot simply make up for this loss of area by fishing somewhere else. Unalaska Bay provides fishermen and processing plants the size and quality of fish that are optimal for fillet product forms rather than surimi product forms. The vessels also burn significantly less diesel fuel when fishing in Unalaska Bay relative to fishing 100 to 300 miles out onto the Eastern Bering Sea Shelf. They also have a significantly less run time back to the processing plant thereby increasing product quality.

In addition, the waters of Unalaska Bay provide a safe area to operate for the smaller Bering Sea Pollock fleet. At times of very severe weather conditions the smaller vessels cannot venture out onto the Eastern Bering Sea Shelf.

We made mention of the benefits of the Pollock fleet operating under a co-operative management structure due to the enactment of the American Fisheries Act (for example, our Salmon Savings Incentive Program). One benefit of this 'rationalized' style of fleet and quota harvest management is that the vessel owners can enter into agreements that control where and when any of the co-op member vessels fish. We are willing to engage in discussion with the City of Dutch Harbor.

Thank you very much for consideration of our comments on this proposal.

Sincerely,



Brent Paine  
Executive Director

RC14

To the State of Alaska Board of Fisheries Board Members,

I am Captain Charles Bronson of the F/V Great Pacific a 124 foot Pollock trawler  
I am writing about the proposed closer of Unalaska Bay to trawling  
I have been fishing out of Dutch Harbor and Unalaska since 1975  
I started trawling in Unalaska bay in 1989 with the American Eagle  
It has always been a place that we watch going in and out of town as a place to grind a  
Trip from time to time when things were a long way out of town

I am trying to figure out what the Biological reason behind this proposal is.  
I think it is more of an emotional reason than biological reason.  
Which I do not think you can govern on emotion alone.  
I have never had gear conflicts as I hear one of the reasons for this closer. The fact is  
there is more gear conflict from transiting vessels than the trawlers in the bay.

I have heard that there is also concern of the Halibut fisheries and subsistence fisheries.  
And I will be the first to tell you if your gear gets on the bottom in the bay you will be on  
the beach with your net. The amount of junk in front of town is endless I know of one  
boat that put his net down in there hung up and brought up a steering column of a Jeep  
So claiming we are hurting the Halibut fishing weather commercial or subsistence would  
probably be false as we are strictly pelagic fishing.

I can understand the concerns of locals not liking boats down in the whole in front of  
Nateekin worrying about inception of fish to the creeks but a NO FISHING FOR  
COMMERCIAL FISHING line from the reef to hog Island could cure that.

What I don't understand is why the discrimination of a trawler is being sought after.  
If it is local charter, sport and subsistence fishers that have this problem then I would  
think you would close it to commercial fishing period. We carry observers so our activity  
is recorded but how many cod, Pollock various Rockfish, Halibut, Salmon and misc. flat  
fish are taken by small boats in the Halibut, Salmon, Cod, Crab and Herring fisheries that  
carry no observers and goes unrecorded. It seem to me that the if the focus of this  
proposal is to preserve the sport, subsistence and charter fishing then close the bay to all  
commercial fishing you can not discriminate against one specific gear type. I would  
question the legality of that .Trawlers have already been given a salmon cap that can not  
be excided or we are done fishing so I think that Salmon in the argument holds no  
bearing as we are not going to put ourselves out of business with that.

If localized depletion is any reasoning (I do not think it plays into this argument) then  
again all boats in the bay should carry observers regardless of size or activity so an honest  
number of bycatch and mortality can be accessed I know I have seen more than one fish  
released live or dead because it wasn't big enough and they didn't want to get the bag  
limit with small fish. Remember that we only fish in the bay during the B season so we  
are not affecting the spawn of Pollock.

41091

You would think the local community would be glad we are keeping the Pollock under control in the bay. Do they realize that not only do they benefit from the fish tax on the product from the bay but the competition for food is reduced as we take Pollock out of the bay allowing for more food and growth for other species?

Again I feel as though we are being discriminated against because we are a larger boat and no other reason truly plays in to this request.

So I ask of you to look at what the real request the local community is making to you the Board of fish.

Please allow these trawlers to transit the bay so we can collect the taxes but don't let them fish a species we do not utilize because we do not like seeing a boat larger than ours using a gear type that we do not fishing in the bay.

This is not a biological reason to govern by.

Thank you for your time,

Captain Charles Bronson  
F/V Great Pacific  
January 29, 2010

RCIS

February 1, 2010

Alaska Board of Fisheries  
Egan Center  
Anchorage, Alaska

South Peninsula June Fishery Harvests (Unimak and Shumigan Islands)

Mr. Chairman and Board members:

My name is Nicholas C. Tucker, Sr., from Emmonak, Alaska, subsistence/commercial fisherman in District 1 of the Yukon River.

The 2009 intercept 706,850 chums in June fishery alone is an alert. This intercept is the fourth highest on record:<sup>1</sup> **1982-** 1,095,044 chums; **1983-** 785,631 chums; **1991-** 772, 705 chums; **2009-** 706,850 chums

The 1993 and 1994 Genetic Stock Identification study clearly demonstrated that approximately 60% of the chum salmon harvest in Area M originated from spawning streams in the Arctic-Yukon-Kuskokwim Rivers.<sup>2</sup>

I recommend that fishing in Area M starts when the sockeye to chum ratio is 2 to 1 or greater in conjunction with windows. These actions are justified as the board has, since 1984<sup>3</sup>, placed limits on fishing time to allow "escapement windows", chum salmon catch ceilings, started fishing later in June, limited seine leads, depth restrictions, had directed the department to manage the fishery so that the cap would not be exceeded, and in 2001, a 3-16 hours per week fishing schedule was used.

I request that this recommendation is placed on the subsequent agenda out of cycle as soon as the Western Alaska Salmon Stock Identification Project Report is released.

I refer, in part or whole, to **5 AAC 39.222**. Policy for the Management of Sustainable Salmon Fisheries, to what I believe is applicable for protection of our Western Alaska chum stocks, specifically:

(a)(2), (a)(3), (b), (c)(1)(A), (c)(1)(A)(iv), (c)(1)(B), (c)(1)(E), (c)(2)(E), (c)(2)(F), (c)(3)(A), (c)(3)(B), (3)(3)(D)(i), (c)(3)(E)(i), (c)(3)(L), (c)(3)(M), (c)(3)(N), **(c)(4)(D)**, (c)(5)(A), (d)(1)(D)(ii), and (d)(4)(D).

Thank you for this opportunity to testify.

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<sup>1</sup> Appendix B4, Page 87, ADF&G Fishery Management Report No. 09-57, South Alaska Peninsula Salmon Annual Management Report, December 2009

<sup>2</sup> Alaska Board of Fisheries Findings, South Peninsula June Fishery, April 15, 1996, SCIENTIFIC AND FACTUAL DATA

<sup>3</sup> Appendix B2, Pages 77-85, ADF&G Management Report No. 09-57, South Alaska Peninsula Salmon Annual Management Report, December 2009

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(Previously  
[Finding # 96-08 - FB])

**ALASKA BOARD OF FISHERIES**

**Findings**

**South Peninsula June Fishery**

**April 15, 1996**

**BACKGROUND**

The Alaska Board of Fisheries took action on the South Unimak and Shumagin Islands June Fisheries (combined known as the South Peninsula June fishery) at a special meeting held on April 13, 14, & 15, 1996 in Anchorage. The special meeting was preceded by a meeting in Anchorage which started on March 10, 1996. On March 16, 1996, the Board took staff reports and Advisory Committee oral reports which continued through March 19, 1996. In addition, written comments from the public were received through April 14, 1996.

The Alaska Department of Fish and Game (ADF&G) staff presented a series of written area management reports, technical reports, and scientific analyses as well as a number of oral reports. These provided the Board with comprehensive information relating to the historical and current commercial and subsistence fisheries, stock composition of the respective fisheries, the status of salmon stocks not only in the Alaska Peninsula/Aleutian Islands area, but also in Bristol Bay, the Kuskokwim, Yukon, Norton Sound and Kotzebue areas and, finally, the most recent scientific information and analysis of that information by the staff. After receiving, reviewing and questioning this wealth of information, deliberations began on this matter on April 13, 1996.

These meetings were publicly noticed as required by AS 44.62.190-210. This meeting, as other recent and historic meetings on the same topic, drew considerable public attendance and written and oral testimony. Because of the volume of previous information, oral testimony was taken from the Advisory Committee representatives and written comments were received from the public. Nevertheless, the volume of materials presented to the Board was very considerable.

The Board's deliberations were delayed from the initial meeting, not only to conform to the notice requirements of the Administrative Procedures Act, but also to permit members of the public to provide additional written materials to the Board, to permit the two (2) new Board members to review and digest the

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volumes of information relative to this matter and to permit the staff of the Department to respond in a comprehensive manner to requests by various Board members for information on this matter.

#### ADOPTION OF GUIDING PRINCIPLES

Initially, in an effort to develop a consistent set of guiding principles, the Board reviewed and discussed the adoption of the Guiding Principles from the Upper Cook Inlet Salmon Management Plan. These principles were modified for application to this fishery and were unanimously adopted by the Board as part of the Management Plan. The Board was cautioned that these principles cannot be applied at this meeting as if they were already in regulation, but that individual Board members may use these principles to guide their decision-making process. The principles are stated as follows:

The Board will, to the extent practicable, consider the following guiding principles when taking actions associated with the adoption of regulations regarding the South Unimak and Shumagin Islands June Salmon Management Plan:

1. The conservation and sustained yield of healthy salmon resources and maintenance of the habitat and ecosystem which salmon and allied species depend for survival throughout their life-cycle.
2. The maintenance of viable and diverse fish species and stocks.
3. The maintenance of the genetic diversity of fish species and stocks.
4. The best available information presented to the Board.
5. The capability of being implemented and evaluated, including factors such as flexible and adaptive management, conflict with other law, and mixed stock management.
6. The capability of providing tangible benefits to user groups, or conservation, with the least risk to existing fishers and to conservation.
7. The stability and viability of subsistence, recreational, commercial and personal use fisheries.



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#### ORDER OF ASPECTS OF REVIEW

The Board next discussed how it would review this fishery. Judge Erlich's decision was examined and discussed. The Board then established seven (7) critical aspects of his decision to be used to guide its deliberations as follows:

1. The history of the South Peninsula and the Norton Sound fisheries.
2. The scientific/rational data available for the concerned fisheries.
3. Principles of sustained yield.
4. Mixed stock policy.
5. Subsistence.
6. Sockeye to Chum Salmon Ratios.
7. The Allocative Issues.

#### HISTORY

Following establishment of this format, the Board began its deliberations with a discussion of the history of each fishery. Both fisheries have been the subject of state regulatory actions commencing in 1962 and continuing through the present day. These actions were taken to regulate both the commercial and subsistence harvest as well as to address conservation issues (see RC 19, colored tab 2 and colored tab 6).

The Aleut and Eskimo people of both areas have a cultural and traditional history of utilization of chum salmon which predates recorded history. The commercial exploitation of chum salmon in the June fishery is at least as old as 1908 when the first recorded catches were made. The commercial fishery for export in Norton Sound, is of much more recent development, beginning in the 1960's (see RC 27), although the Nome commercial fishery for barter and trade existed at least as early as the 1890's.

This historical data demonstrates that the greater the abundance of the chum salmon, the greater the number of salmon which are harvested in both fisheries. In the commercial fishery, this abundance/harvest factor is also affected by market demand for the salmon. In the subsistence fishery, the abundance/harvest factor is also affected by subsistence needs.

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SCIENTIFIC AND FACTUAL DATA

The Board next reviewed and discussed the scientific and factual data. This data consisted of the 1987 tagging studies as revised and analyzed by staff (RC 19, colored tab 3), the Genetic Stock Identification studies (RC 19, colored tab 3 and white tab 7), the reported commercial and subsistence harvest data, the spawning escapement surveys and the subsistence harvest assessment in Norton Sound (RC 2). Run timing data was also presented and considered by the Board. Because of staff concerns about total return estimates and measurements of accuracy and precision of the Harvest Rate Analysis Report previously provided to the Board, the Department advised that it was not prepared to present the Harvest Rate Analysis Report to the Board (RC 19, colored tab 5).

The GSI study clearly demonstrated that approximately 60% of the chum salmon harvest in the South Unimak June fishery in Area M in 1993 and 1994 originated from spawning streams in an area called "Northwest Alaska" which includes Norton Sound, the Yukon River (summer chum), the Kuskokwim area, Bristol Bay and populations of the North Peninsula extending as far west as the Meshik River. Thus, the GSI study was not, by itself, sufficiently area or origin specific enough to enable the Board to decide issues relative to Norton Sound and the June fishery. This GSI study, while helpful in the aggregate, does not permit the Board to discriminate as to individual stocks or as to stocks which have been identified as having a conservation concern.

The tagging study is helpful to the Board's decision-making process because it provides evidence relative to the stock composition of chum salmon in the June Area M fishery, a mixed stock fishery. This study provided the earliest data to the staff and the Board. The tagging study assumed that, in a mixed stock fishery, the relative rate of harvest in the fishery is directly related to the size of the stock in the fishery. The data, the number of tags recovered from various areas, supported this assumption. With the subsequent review and analysis by the staff and the Board, this data has been refined and qualified to the point where it can, when coupled with the other data available to the Board, be reasonably relied upon to make rational decisions relative to these fisheries. The 1987 tagging study demonstrated that some chum salmon are caught in Area M which are bound for spawning streams in Norton Sound.

From all of the scientific data and related data, the Board concludes that the composition of chum salmon in the Area M June fishery contains a relatively small number of Norton Sound chum salmon.

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### SUSTAINED YIELD

The Sustained Yield discussion by the Board began with a discussion of the Alaska Constitution. Reference was made to the proceedings of the Constitutional Convention and the glossary of terms found in the Convention Papers, folder 210. This definition is as follows:

When so used it [sustained yield] denotes conscious application insofar as practicable of principles of management intended to sustain the yield of the resource being managed. That broad meaning is the meaning of the term as used in the Article.

It was also noted by the Board that in the Convention proceedings that, as to fisheries, the term sustained yield principle was not intended to apply in the strict sense in which it is applied to forestry practices. The drafters realized, full well, that it would be impossible to determine the exact sustained yield in the fisheries and that sustained yield would be left to the state legislature and probably, by the legislature, to the fisheries agency.

The general conclusion reached by the Board is that the Constitution contemplates very wide discretion in the Board of Fisheries in making sustained yield determinations.

With regard to the Norton Sound area, there are some rivers in Nome and Moses Point subdistricts (RC 19, colored tab 6, page 98) for which the department has conservation concerns. The Fish River was removed from this classification after the 1995 season. The escapements for four (4) of the remaining rivers have been met in the last two (2) years. The escapements for the other four (4) rivers have not been met based upon the aerial surveys; however, the escapements, even as measured by the aerial surveys, have improved each of the last two years.

The other staff reports and data demonstrate that all other Norton Sound chum salmon stocks are in good abundance. Based on these improvements and its prior conclusions as to the Norton Sound component of the June area M fishery, the Board concludes that further reductions in the June Area M fishery would not alleviate the remaining conservation concerns for these rivers.

### MIXED STOCK POLICY

The Board next discussed the Mixed Stock Policy. The Board recognized that the Area M June fishery has, under the existing Management Plan, already shouldered a substantial burden

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related to the conservation concerns for Western Alaska Chum salmon stock. These measures include a delayed opening date, the chum cap, the reduction in gear size, the pre-season closures of various areas, the in-season closures of "hot spots," the sockeye to chum salmon ratios and the July 1 to July 19th closure of the South Peninsula fishery (5 AAC 09.366). These measures have all resulted in substantial burdens of conservation being imposed on the Area M fishery by removing the opportunity of these fishers to harvest hundreds of thousands of sockeye salmon. Further, the way in which the Department has implemented the Management Plan has resulted in an additional savings of chum salmon substantially below the cap (see RC 19, colored tab 1 and white tab 1).

The Board recognized that a burden of conservation has also been imposed on the Nome and Moses Point/Elim subdistricts. The commercial chum salmon fisheries in the Nome and Moses Point/Elim subdistricts has been closed for a number of years. The subsistence chum salmon fishery in the Moses Point/Elim subdistrict was closed for one year (1994). The chum salmon subsistence fishery has been reduced, restricted, or closed in the Nome subdistrict for over a decade.

Based on the foregoing and its prior conclusions based upon the information set forth above, the Board concludes that both areas have had a burden of conservation imposed upon them which is fair and proportional to their respective harvest of the chum salmon stock.

#### SUBSISTENCE

Dealing with subsistence, the Board assumed, for the purpose of this special meeting and this actions on the June M fishery, that the Norton Sound chum salmon is a separate fish stock under the subsistence law. In its earlier finding of "customary and traditional" uses of salmon in Norton Sound, the Board determined that a total of 85,300 salmon (all species) were necessary to provide a reasonable opportunity for subsistence uses of salmon in Norton Sound. The chum salmon component of the 85,300 determination was 22,491 chum salmon. At this meeting, the Board discussed and found that 22, 491 chum salmon would be necessary to provide a reasonable opportunity for subsistence use of chum salmon in Norton Sound.

Information presented to the Board demonstrated that in 1994, 24,776 chum salmon were harvested in Norton Sound subsistence fisheries. For 1995, the data showed that 43,015 chum salmon were harvested in the Norton Sound subsistence fisheries. The harvest in both years exceeded the 22,491 level necessary to provide a reasonable opportunity for subsistence use (RC 2).

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Testimony from the staff relative to the 1996 anticipated return was that an average return for Norton Sound chum salmon was expected with abundance levels similar to 1995. There was no testimony before the Board that the 1996 run would not provide at least 22,491 chum salmon for subsistence harvest. While certain restrictions, including restrictions which change the fishery practices from the traditional in-river fishery, have been imposed on the subsistence fishery in the Nome subdistrict of Norton Sound, it appears that, in recent years and for 1996, a reasonable opportunity for chum salmon has been and will be provided under the existing regulatory scheme. In this regard, it should be noted that a subsistence fishery was allowed for chum salmon in the Nome subdistrict on three of the rivers for which the department has expressed conservation concerns (Eldorado, Flambeau and Bonanza).

In accordance with the Superior Court's summary judgment order, the Board will, after proper legal notice, address the status of chum salmon as a separate subsistence stock at a future meeting.

#### RATIOS

The Board next considered the question of the ratios. The department gave an extensive explanation of its use of sockeye to chum ratios in opening the fishery, managing the fishery and closure of the fishery. The department has regularly and consistently delayed the start of the June fishery beyond June 10 to achieve a satisfactory sockeye to chum ratio that would best meet the twin goals of the Management Plan. Those goals are to catch sockeye salmon to the guideline harvest level while, at the same time, minimizing the incidental catch of chum salmon.

The opening ratio is determined annually by the department based upon the projected Bristol Bay forecast and the 8.3% harvest allocation. The department stated that fixing a set ratio or a definite, inflexible opening date which would always apply to the fishery would interfere with its ability to best meet the plan's two goals.

The Department explained that the June 24th 2:1 sockeye to chum ratio is based on the run timing considerations of both sockeye and chum, historic ratios of chum and sockeye during late June, concern for chum salmon conservation in locations outside of Area M and to prevent an accelerated "catch up" action in the later part of the season to harvest up to the full amount of the chum cap.

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#### ALLOCATION ISSUES

The Board then reviewed and discussed the allocation criteria found in 5 AAC 39.205. Each of the seven (7) criteria was considered. The history of both fisheries was reviewed and discussed in great detail early in the deliberations as were the characteristic and the participants in the fisheries. The Board acknowledged that personal and family consumption of fish was more important to the subsistence fishers in Norton Sound than to the commercial fishers in Area M. From a commercial fishery point of view, the alternative fisheries resources available to both fishers are limited. From a subsistence point of view, the reduction in opportunity relative to chum salmon can be substituted with other salmon species. The Board found that both fisheries are important to the economy of their respective regions, but that, due to its size and composition, the dollar value of the Area M fishery is more important to the economy of the state. The issue of recreational for residents and non-residents was not viewed as a relevant consideration.

#### BOARD ACTIONS

Next, the Board considered amendments to the existing Management Plan 5 AAC 09.365. Board Member Umphenour moved to reduce gear size. After discussion, this motion failed, two in favor and four opposed.

Board Member White then moved to reduce the chum cap from 700,000 to 500,000 with a float of 50,000 depending upon the conservation concerns or the lack thereof relative to river systems in Western Alaska including Bristol Bay. The intent of the motion was to reduce the cap by ten percent if more than 15 AYK-Bristol Bay summer chum stocks had conservation concerns (as delineated by the Department of Fish and Game in its Run Outlook definitions). Likewise, if AYK-Bristol Bay summer chum stocks experience a two-year 20 percent increase in run abundances, the cap would be adjusted upwards by ten percent to 550,000 fish. After discussion, this motion failed, two in favor and four opposed.

Board Member Umphenour moved to require the retention and recording on fish tickets of all salmon caught in the June fishery. After discussion, the motion passed, seven in favor and none opposed. It should be noted that Board Member Angansan was declared not to have a conflict relative to this issue and participated in the vote.

Finally, White moved to adopt the sustained yield principles contained in RC 9 and RC 12 into the June Management Plan. After discussion, the motion failed, one in favor and six

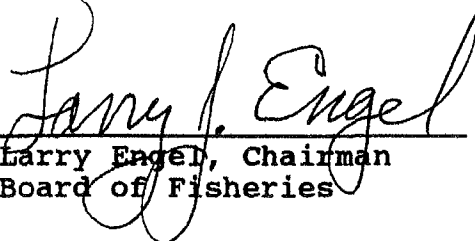
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opposed. Again, Board Member Angansan was declared to have no conflict and participated in the vote.

This and other issues best described as principles to be applied to mixed stock fishery decisions were then scheduled for the October work session by unanimous vote.

Upon the adoption of these findings, the Board incorporates by reference all prior findings relative to the Area M June fishery, to the extent that these prior findings are unmodified by this Finding.

  
Larry Engel, Chairman  
Board of Fisheries

Approved: Carried (5/1/1) (Yes/No/Abstain)  
Date: April 15, 1996  
Location: Anchorage, Alaska

-Original-

RC 16

Carol Foster

Board of Fisheries Testimony

February 2010

Good Morning Mr. Chairman and Board of Fisheries Members:

My name is Carol Foster I've lived in Sand Point most of my life. My husband, my four children, and my six grandchildren all depend on the salmon, halibut, crab and groundfish fisheries in our area.

We own the 58' foot vessel the Heather Margene and our setnet boat, the Aleut Warrior.

We support Proposal 104 the 58' limit for state waters year round for cod and pollock. The quotas in the Western Gulf are relatively small and the local fleet depends on them. During the state waters fishery there is a 58' limit, but during the federal fishery there is no vessel size limit.

All it takes is one or two big boats coming in and our boats are crowded out. This month our vessels tried to bring some order to the Pollock fishery by sending out a test boat to check for size composition and roe maturity. All was going well until one of the over 58' boats decided to start fishing. As a result, not only were the Pollock less valuable than it would have been a week or so later. The larger vessels have history in other areas, and are not locked into the Western Gulf like we are.



As the Board saw during staff reports, trawl catches in the P. cod fishery have significantly declined. One of the biggest reasons for this is the 2001 regulation changes that were caused by the Endangered Species designation for Steller sea lions. There is nothing we or you can do about that. However, another reason that the trawl percentage has declined is that trawlers rely on aggregated fish. In the Western Gulf, cod aggregate later in the season. By the time the fish are aggregating, the season is coming to a close.

We also support Proposal 105 eliminating cod longline gear inside state waters year round. In the recent years we have seen an influx of cod longliners. These boats are pre-empting fishing grounds used by our cod pot fleet. These vessels are not long term participants in the area.

Proposals addressing the Southeast District Mainland: We purse seine and set net in the Southeast District Mainland. We support changes in the current regulations that allow more fishing opportunity for the set nets in the mainland.

The current regulations we designed when both South Peninsula seiners and Chignik seiners were fishing at Kupreanof Point. We were all fishing for fish heading west. Many things have changed since that time.

Since the Chignik coop, very few vessels fish in Chignik now, and those no longer fish the cape. We have also seen a major reduction in the number of seiners participating in salmon.

The chances of Chignik catching 600,000 reds have gone way down, and our set netters can't fish until that happens. We are hostages to an outdated plan. Please change these regulations so our fleet can be managed on our runs.

RC # 17



Submitted By: ADF&G Commercial Fisheries-  
Westward Region Staff  
February 2, 2010

**Proposals 101 & 113 - Substitute language, and  
Clarification of sablefish logbook requirements**

**PROPOSAL 101:** 5 AAC 28.550. Description of South Alaska Peninsula Area; and  
5 AAC 28.600. Description of Bering Sea-Aleutian Islands Area.

**SUBSTITUTE REGULATORY LANGUAGE:**

5 AAC 28.550 Description of South Alaska Peninsula Area would be amended to:  
The South Alaska Peninsula Area consists of all waters of Alaska in the Pacific Ocean between a line extending 135° southeast from Kupreanof Point (55° 33.98' N. lat., 159° 35.88' W. long.) and 170° W. long., including those waters south of the latitude of Nichols Point (54° 51.5' N. lat.) near False Pass, and south from lines extending from Unimak Island (54° 23.74' N. lat., 164° 44.73' W long.) to Akun Island (54° 11.71' N. lat., 165° 23.09' W. long.), and from Akun Island (54° 08.40' N. lat., 165° 38.29' W. long.) to Akutan Island (54° 07.69' N. lat., 165° 39.74' W. long.), and from Akutan Island (54° 02.69' N. lat., 166° 02.93' W. long.) to Unalaska Island (53° 58.97' N. lat., 166° 16.50' W. long.), and from Unalaska Island ( 53° 18.95' N. lat., 167° 51.06' W. long.) to Unmak Island (53° 23.13' N. lat., 167° 50.50' W. long.), and from Umnak Island (52° 49.24' N. lat., 169° 07.10' W. long.) to Chuginakak Island (52° 49.18' N. lat., 169° 40.47' W. long.).

5 AAC 28.600 Description of Bering Sea-Aleutian Islands Area would be amended to: The Bering Sea-Aleutian Islands Area consists of all territorial waters of Alaska in the Bering Sea, and in that portion of the North Pacific Ocean adjacent to the Aleutian Islands and west of 170° W. long., including those waters north of the latitude of Nichols Point (54° 51.5' N. lat) near False Pass, and north from lines extending from Unimak Island (54° 23.74' N. lat., 164° 44.73' W long.) to Akun Island (54° 11.71' N. lat., 165° 23.09' W. long.), and from Akun Island (54° 08.40' N. lat., 165° 38.29' W. long.) to Akutan Island (54° 07.69' N. lat., 165° 39.74' W. long.), and from Akutan Island (54° 02.69' N. lat., 166° 02.93' W. long.) to Unalaska Island (53° 58.97' N. lat., 166° 16.50' W. long.), and from Unalaska Island ( 53° 18.95' N. lat., 167° 51.06' W. long.) to Unmak Island (53° 23.13' N. lat., 167° 50.50' W. long.), and from Umnak Island (52° 49.24' N. lat., 169° 07.10' W. long.) to Chuginakak Island (52° 49.18' N. lat., 169° 40.47' W. long.).

**PROPOSAL 113: 5 AAC 28.647. Aleutian Islands District Pacific Cod Management Plan.**

**SUBSTITUTE REGULATORY LANGUAGE:**

5 AAC28.647 Aleutian Islands District Pacific Cod Management Plan.

(d)(2) would be amended to:

Pacific cod may be taken only with groundfish pots, mechanical jigging machines, longline, non-pelagic trawl, and hand troll gear. **Pot gear may be longlined. For the purposes of this subsection longlined pot gear is a stationary, buoyed, and anchored line with at least 10 groundfish pots attached. Each end of a groundfish pot longline must be marked with a buoy bearing the ADF&G number of the vessel operating that groundfish longline pot gear as well as the letters "GFL" to designate the gear as a groundfish pot longline;**

**NO PROPOSAL: 5 AAC 28.640. Aleutian Islands District and Western District of the South Alaska Peninsula Area Sablefish Management Plan.**

**REQUEST FOR CLARIFICATION OF SABLEFISH LOGBOOK REQUIREMENTS:**

5 AAC 28.640 (g) would be amended to:

Each vessel operator shall obtain and complete a logbook provided by the department for all fishing activity in the waters of Alaska under this section. **The logbook must be on board the vessel at all times and copies of each logbook page corresponding with an ADF&G fish ticket for sablefish must be submitted to the department within seven days of landing.**

RC18

## **Nushagak Advisory Committee Comments Area M Finfish Proposals Feb. 2010**

### **Arranged according to BOF Roadmap**

Following are the actions and justifications for them taken by the Nushagak Fish and Game Advisory Committee during their January 6 meeting in Dillingham.

We only took actions on the proposals listed here. We tried to concentrate on proposals that were anticipated would have impacts on Bristol Bay fisheries.

The Nushagak AC strongly supports allowing Area M salmon fishers full opportunities to harvest their local salmon stocks in the best possible quality and quantity as long as those harvests do not impact salmon bound for terminal spawning areas outside of Area M.

As the Board knows, most salmon fisheries in Bristol Bay are conducted under finely balanced management plans designed to assure biological escapement goals while meeting subsistence needs, providing allocations among commercial districts and gear types and to meet sport angling demands.

Therefore we oppose adoption of any regulations that would expand Area M intercept harvests of mixed stocks and juvenile fish whether by area, fishing time, or gear type or gear size. Particular points of concern for us are: Sockeye and chum interceptions in the south side June fisheries, juvenile interceptions in the south side post June fisheries, coho and pink salmon interceptions in the July fisheries of the Shumagin islands, and potential interceptions of Bristol Bay sockeye in the northwestern sections of the Northern District.

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**120. unanimous to oppose.**

- Same issues as 118 and 119.
- This is a mixed stock fishery. The Board should consider the mixed stock, sustainable fishery policy.

**121. unanimous to oppose.**

- Committee references earlier discussion and action 118-120.

**122. 4 support, 4 oppose, 1 abstain.**

- This proposal comes up every cycle.
- This is a mixed stock fishery, they don't need more time. Will harvest more Bristol Bay fish.
- This is a fight between gear types.
- Need to keep July fishery status quo because of coho harvest.
- Set netters are being unfairly penalized.
- Don't mind if set netters go first if they are not harvesting Western Alaska coho stocks.

**123. unanimous to oppose.**

- Should take a look at the post-June harvest in comparison to total harvest.  
Post June S. Pen. Harvest: 179,000 coho  
8 million pinks  
366,000 sockeye

**124. unanimous to oppose.**

- Committee is opposed because this would authorize a wide-open post-June fishery.
- There is a documented presence of Bristol Bay pinks/chums in the area.
- Proposal is unclear on area. Can get tricky to harvest own stocks. Could support if targeting own local stocks, in terminal areas.

**\*125 unanimous to support as amended**

unanimous to support the amendment

- Nushagak AC requests to amend to allow fishing in terminal areas for Area M, local fish stocks. No interception of Bristol Bay or Chignik fish to occur with the adoption of this regulation. Will not support if there is evidence that would indicate a presence of Bristol Bay or Chignik stocks.
- Effect of original proposal would allow targeting of Chignik stocks.

**\*126 unanimous to support as amended**

unanimous to support the amendment

- Same concerns as in 125.
- Nushagak AC requests to amend 126 with the same caveat and criteria as in 125. The department will demonstrate that terminal stocks are in the area.

## **Committee D**

### **North Peninsula**

#### **29, 30. Unanimous to support AS AMENDED By Nushagak AC.**

- **Opposed as originally written.**
- From the Fall 2009 Area M Proposal Book and Nushagak AC minutes (10-30-09).
- Nushagak AC requests to **amend 29 , 30 to close the area mentioned in the proposal to both Area T and M fishing and to be used as a buffer zone.**
- at the last Area M meeting a Bristol Bay proposal was rewritten to allow area M permits to fish what had been part of area T Bristol Bay.
- Area T permits can now fish north of Port Heiden.
- The effect of the proposals will allow Area T into Area M.

#### **145 unanimous to support.**

- Lower Bristol Bay proposal. Would give BB fishermen additional opportunity to fish.
- Just changes the weekly fishing schedule to fish through the weekend.

#### **147 unanimous to support.**

- Discussion on fishermen outside terminal areas choking off escapement.
- Mixed stock fishery.

#### **148 unanimous to support.**

- Discussion about windows prior to 2003. Committee favors that concept to reinitiate windows to allow fish to pass through.

#### **149 unanimous to support.**

- Committee discussed salmon cap prior to 2003.
- Genetic work should have been completed by this cycle, but was not.
- Catch records indicate that harvest has gone up especially when the Outer Port Heiden section was added.
- Effect of the proposal would reduce harvest.

### **Nushagak AC preferred to take up 151 before 150.**

#### **\*151 unanimous support as amended**

unanimous to support the amendment

- Nushagak AC requests to amend with a first preference to close the Outer Port Heiden section and a second option to allow Area T fishermen in.
- This is a mixed stock fishery.
- In the early 1990's, Johnny Christen from Port Heiden came to the board requesting that the Outer Port Heiden section be closed because of the presence of mixed stocks. Johnny indicated that with his fishing experience, fish are going in both directions.
- During the last board cycle, the BOF rewrote one of Roland Brigg's proposals and opened up Outer Port Heiden to Area M fishermen.

#### **150 unanimous support as amended.**

- Nushagak AC requests to amend language with preference for the amended proposal 151.

#### **152 unanimous to support.**

- Committee discussion supports the concept and desired effect of the proposal.

RC19

Dear Chairman Webster and Board Members,

My name is Emil Christensen. I'm lifelong resident of Port Heiden, a subsistence user and a commercial drift net fisherman. I'm speaking to you as a member of the Native Village Council of Port Heiden.

I would like to speak to Proposal 151, proposed by the Lower Bristol Bay Advisory Committee, composed of the villages of Port Heiden, Ugashik, Pilot Point and Egegik.

Proposal 151 would close the Outer Port Heiden Section of the Northern District.

The people of Port Heiden urge you to modify Proposal 151 and create a new terminal fishing area *open to both Area M and Area T permit holders*.

The [southern] boundary would extend [one mile offshore] from a point two miles southwest of Strogonof Point [. The outer line would extend northeast] 10 miles to a point [one mile off the beach] near the mouth of Reindeer Creek.

This change would provide several benefits in keeping with the Board's sustainable fisheries policies.

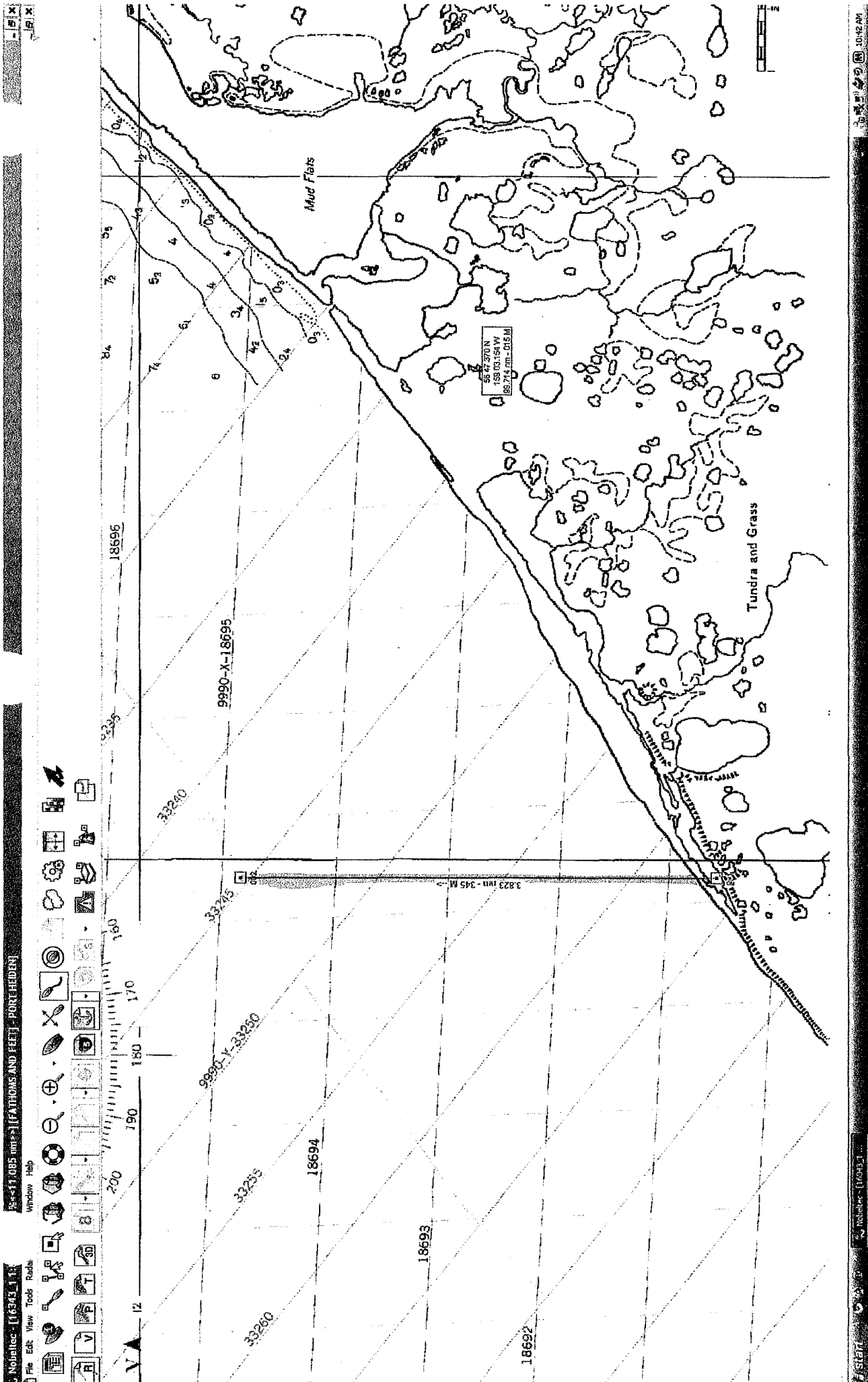
The Village of Port Heiden, known traditionally as Meshik, has been in existence for more than 10,000 years, during which time our people have made their living on the fisheries resources of the coastline from the Ilnik River to Ugashik. With the coming of limited entry, we were provided Area T permits, and for many years we fished both Port Heiden and Ugashik Bays.

By its actions the Board of Fisheries in 2006 created an Outer Port Heiden Section, from which we are excluded from fishing. This new area has impacted our subsistence and commercial king and coho catches. And the fact that we are excluded from fishing the new area at all prevents us from making a living in our traditional fishing areas.

The Village of Port Heiden is in the process of developing a local commercial fish processing plant. We have icing equipment, a 40x60 building and a 6000 foot airstrip. Developing the fisheries on our doorstep is the key to a sustainable economic future for our community.

Our amendment would open the inner Port Heiden area for the whole season including July for both Area M and Area T permits. It's important to remember that until the Board's action in 2007, there was no "Outer Port Heiden" Section and no one could fish in that area legally. Eliminating the Outer Port Heiden area and creating this new terminal fishery will correct a situation created in 2006 that we believe is inconsistent with the Board's policies on not allowing the expansion of intercept fisheries. A new terminal district would help management better achieve their escapement goals as recommended by ADFG. And it would provide allowing Port Heiden's local permit holders to build a modern economy on the fisheries resources on our doorstep.

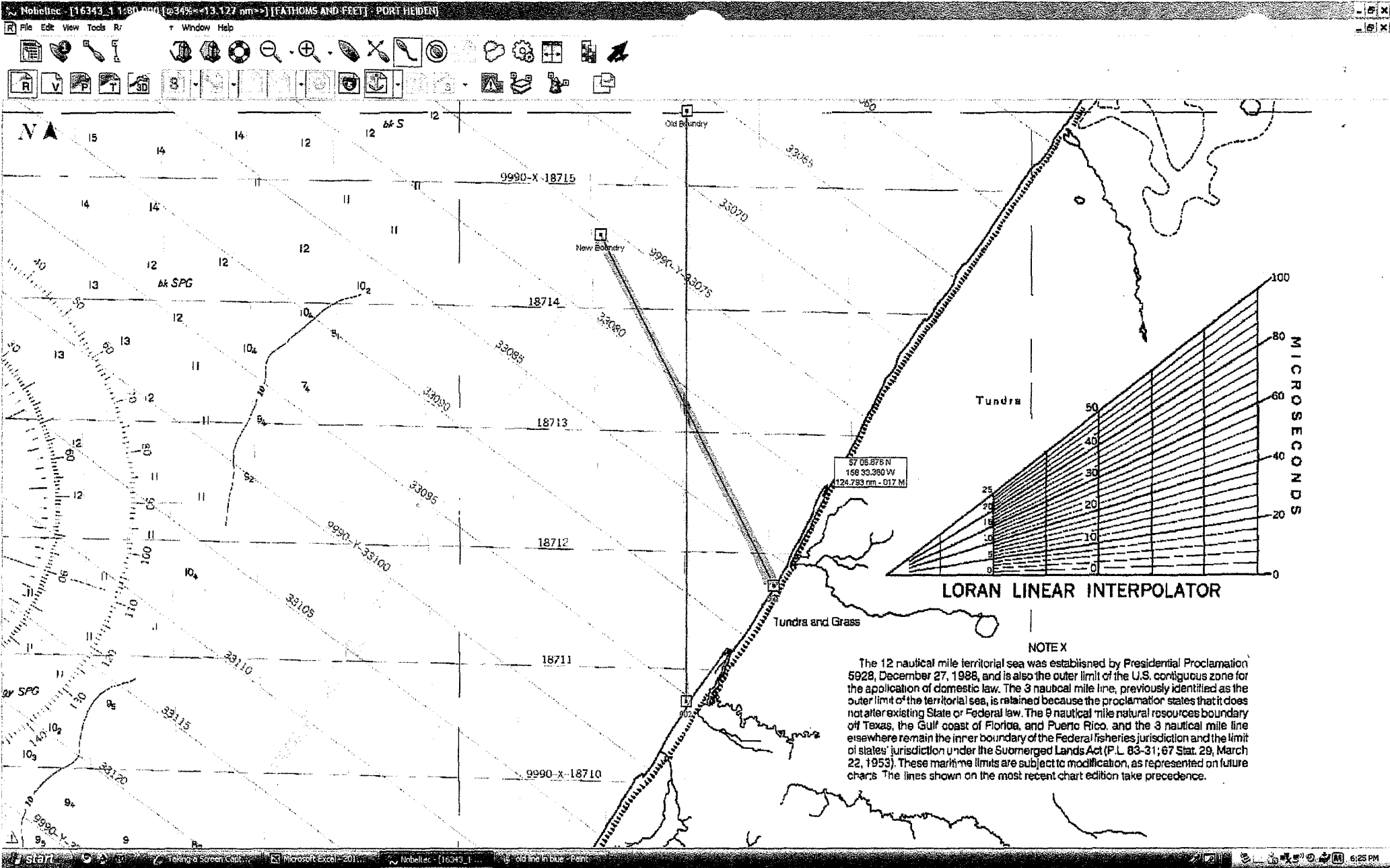




RC20

# Unangashak Line

Noellec: [6543\_11]  
 File Edit View Tools Radar  
 85x11.085 mm -> [FATHOMS AND FEET] - PORT-HEIDEN  
 Window Help  
 Start [Inches] [Feet] [Meters] [Nautical Miles]



Existing Line: Blue

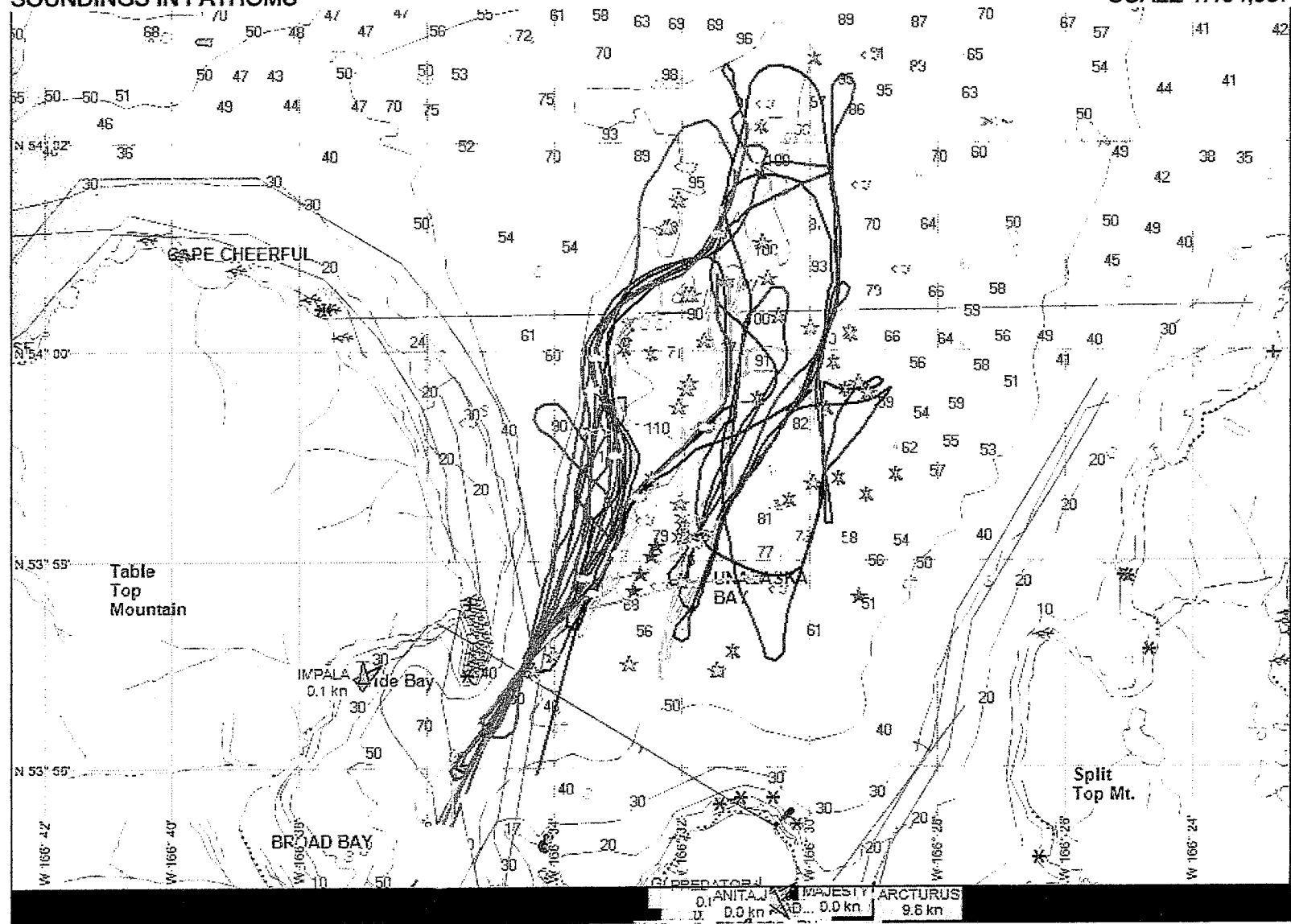
Proposed Line: Red

Outer Port Heiden North Line

2222

SOUNDINGS IN FATHOMS

SCALE 1:104,957



Mr. Chairman and Board Members,

RC23

My name is Ralph Zimin. I'm a lifelong resident of South Naknek and third generation Bristol Bay fisherman.

I want to speak on Proposal 150, which I could support with possible modifications.

Many Bristol Bay fishermen believe the Outer Port Heiden section should never have been allowed. It was opened in 2007, and was intended to harvest Meshik River sockeye. My concern, like many of my fellow Bristol Bay fishermen, is that creation of the Outer Port Heiden section expands a mixed stock area, contrary to Board policy.

Today we see the effects of mixed stock fishing on Kvichak River sockeye, and on other species – kings and silvers -- in the Bristol Bay districts, problems we are struggling to repair. Many believe closing the Outer Port Heiden section would be a great help.

But there is a compromise I'd like to endorse, a compromise (soon to be) proposed by the Village of Port Heiden, which protects the interests of both Area T and Area M fishers and eliminates the concern about the expanded mixed stock fishery created by the Outer Port Heiden section.

Make the Meshik River a terminal fishing area, similar to Egegik and Ugashik, but open to both Area T and Area M permits. The outer boundary would run from no more than a mile offshore from Strogonof Point on the west to a mile offshore of Reindeer Creek on the eastern shore. By operating south of that boundary within the Bay, boats could more effectively harvest Meshik River stocks while minimizing fears of taking non-Meshik salmon.

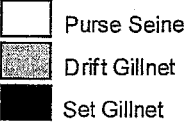
My suspicion is that once the genetic studies of Area M catches are available, we could surely revisit the plan. But to allow fishing in the Outer Port Heiden section to continue without that data is not good fisheries policy.

Since the Outer P. H. Section was created, catches jumped from 387,786 in 2007 to 762,643 in 2009.

Proposed South Penn 1a July Solution  
Amended from 19-1 Staff Reports

RC24

JULY 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
Notes: Fishing periods from 6AM - 6PM from July 6 through July 20. Beginning July 21 36-hour fishing periods with 48-hour closures. Set gillnet fishing will remain open during 12 hour closures from July 6 through July 20.						
4	5	6	7	8	9	10
		6:00 AM 12 Hours 12 Hours 6:00 PM 36 Hours	6:00 AM 12 Hours 12 Hours 6:00 PM		6:00 AM 12 Hours 12 Hours 6:00 PM 36 Hours	6:00 AM 12 Hours 12 Hours 6:00 PM
11	12	13	14	15	16	17
	6:00 AM 12 Hours 12 Hours 6:00 PM 36 Hours	6:00 AM 12 Hours 12 Hours 6:00 PM		6:00 AM 12 Hours 12 Hours 6:00 PM 36 Hours	6:00 AM 12 Hours 12 Hours 6:00 PM	
18	19	20	21	22	23	24
6:00 AM 12 Hours 12 Hours 6:00 PM 36 Hours	6:00 AM 12 Hours 12 Hours 6:00 PM		12:01 AM 36 Hours 36 Hours 36 Hours	12:00 NOON		12:00 NOON
25	26	27	28	29	30	31
36 Hours 36 Hours 36 Hours	12:00 MIDNIGHT	12:00 NOON		12:00 MIDNIGHT	12:00 NOON	12:00 MIDNIGHT

RC24

Francis Thompson  
P.O. Box 111  
St. Mary's, Alaska 99658  
amaar\_culi@yahoo.com

RC25

February 2, 2010

Board of Fisheries  
ADF&G  
P.O. Box 25526  
Juneau, Alaska 99802

Mr. Chairman, Honorable Board of Fisheries Members:

My name is Francis Thompson, I am subsistence and commercial fisherman from the Lower Yukon River community of St. Mary's located in the Andreafski River. I also serve as a Panel Member on the U.S/Canada Yukon River Panel since 2001 to present.

Proposals to the Board of Fisheries regarding South Unimak and Shumagin Island June Fishery, 2010

**I: SUPPORT:** Proposal 115, 116, 87, 98, 194, 199

**OPPOSE:** Proposals: 117,118, 88,119, 89,120, 121,124, 127, 128, 130, 140, 141, 145, 146

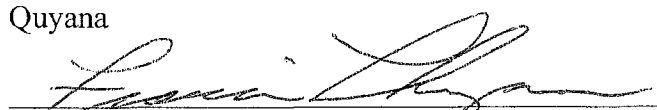
For 30 years (since 1979) the chum fishery in the Yukon River and many of the terminal fisheries in the AYK region have been managed just to meet escapement goals by implementing fishing windows, creating tier 1 and 2 fisheries and imposing gear restrictions. We the in river fishers in the AYK Region have been carrying the burden of conservation and we have yet to see the benefits of our sacrifices. It is time for change in the way we manage our fisheries resources by recognizing that everyone including intercept fisheries need to share in the conservation efforts of our salmon.

**WE need to revert what is called "normal" in the intercept fisheries (in the past 30 years) back to the river systems in the AYK Region.**

Suggestions:

1. Re-establish the South Unimak and Shumagin Island June Fishery as a Sockeye Directed Fishery and granting them an annual guideline harvest level relative to the projected Bristol Bay inshore sockeye salmon harvest 6.8% to the South Uminak June Fishery and 1.5% to the Shumagin Island June Fishery.
2. Implement windows fishing of no more than 3 twenty four (24) hr openers per week starting sometime between June 11 -14th for the Seinners and Drift gillnetters. The fishery will only start when the Department of Fish and Game determines that the sockeye to chum ratio is 2:1 or greater in there test fishery. The Department shall have the authority to close the Seinners and Gillnet fishery when the ratio falls lower than 2:1 during there test fishery.
3. Mandatory Chum pool participation by the Seinners and Drift Gillnetters portion of proceeds to pay for stock identification program for the chums.
4. Heavy penalties for those charged with wanton waste of salmon resources such as seizer of boat and gear and no participation in the fishery for 5 years.
5. Fast track the Western Alaska Salmon Stock Identification Project.

Quyana



Francis Thompson

## Public Testimony

Michael L. Sloan, Fisheries Biologist  
Kawerak, Inc.  
P.O. Box 948  
Nome, Alaska 99762

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**Kawerak is a non-profit Native consortium which represents the 20 federally-recognized tribes of the Bering Strait/Norton Sound region. The Kawerak Board is comprised of the Presidents of each tribal council in our region. We are a subsistence people who depend upon salmon and other naturally occurring resources to feed our families, to provide traditional and cultural activities for elders and youth alike, and to share with those residents who are not able to participate in these activities.**

---

The Norton Sound rivers that supply the Area M June sockeye fishery with bycatch do not regularly meet escapement goals. Norton Sound has forgone commercial fisheries in many rivers in an attempt to meet escapement goals and support subsistence needs. The Nome Subdistrict has the most restrictive subsistence management in the state, and subsistence users in these rivers bear the weight of subsistence restrictions which limit their ability to put food on the table.

For almost 100 years, Area M has siphoned off chum salmon from Norton Sound rivers. Since 1969, they have intercepted 16.5 million chum salmon which use this migratory pathway. According to available genetic studies, fifty-four percent (Seeb study) or nearly 9 million of these chum salmon were bound for Western Alaska rivers, and undoubtedly many of these were bound for Norton Sound.

This is a war of attrition that our subsistence users are losing. The thousands of Native subsistence users in northern Norton Sound have seen their resource diminished to the point that their fish racks are empty and an entire generation of young has missed this aspect of their traditional culture. Instead, they have a future of diabetes and other health problems from a western diet and a loss of cultural identity resulting in social problems for families and communities that used to participate together in subsistence fishing activities.

Area M fishermen have other commercial fishing opportunities, and our subsistence users have none. It is difficult to be compassionate for Area M's commercial concerns while our region faces real hardship. Area M's June chum fishery is not managed in line with sustainable fisheries policy, and neither is Norton Sound's chum fishery which is dependent on Area M to leave us enough fish to survive, and they don't.

We ask the Board of Fish to restrict the chum catch during the June fishery in the Shumagin Islands and South Peninsula sockeye fishery. We included a recommendation for a 400,000 chum cap and other conservation measures in recent board resolution, and we would support a delayed start, shorter openings, and other measures as necessary to lower interception of our chum salmon. Please give our people justice on this vital issue.



**KAWERAK, INC.** • P.O. Box 948 • Nome, AK 99762

TEL: (907) 443-5231 • FAX: (907) 443-4452

ERVING THE  
LLAGES OF:  
REVIG MISSION  
UNCIL  
OMEDE  
IM  
AMBELL  
OLOVIN  
NG ISLAND  
YUK  
ARY'S IGLOO  
ME  
WOONGA  
AKTOOLIK  
ISHMAREF  
LOMON  
EBBI  
MICHAEL  
LLER  
ALAKLEET  
ALES  
HITE MOUNTAIN

**RESOLUTION 2009-16**

**A RESOLUTION REQUESTING THE ALASKA BOARD OF FISHERIES  
TO REDUCE CHUM SALMON BYCATCH IN SOUTH ALASKA PENINSULA  
SOCKEYE SALMON FISHERY**

**WHEREAS**, the Alaska Board of Fisheries, in association with the Alaska Department of Fish and Game, is charged with responsible management of salmon resources in Alaska: and

**WHEREAS**, Kawerak, Inc. is a tribally authorized non-profit consortium whose mission is to assist, promote and provide programs and services to improve the social, economic, educational, and cultural well being of the people within the Bering Strait region; and

**WHEREAS**, the communities of the Bering Strait region include: Brevig Mission, Council, Diomedea, Elim, Gambell, Golovin, Koyuk, Mary's Igloo, Nome, Savoonga, Shaktoolik, Shishmaref, Solomon, Stebbins, St. Michael, Teller, Unalakleet, Wales and White Mountain; and

**WHEREAS**, subsistence fishing activities are a priority for the residents of the Bering Strait region and constitute a vital role in our culture and tradition, and these activities have been negatively impacted by the loss of chum salmon from our region's rivers; and

**WHEREAS**, the Nome River has not achieved its minimum chum salmon escapement goal 7 out of the last 12 years; and

**WHEREAS**, the Niukluk River has not achieved its minimum chum salmon escapement goal 7 out of the last 10 years; and

**WHEREAS**, the Kwiniuk River has not achieved its minimum chum salmon escapement goal 3 out of the last 6 years; and

**WHEREAS**, the North River has not achieved its minimum chum salmon escapement goal 8 out of the last 14 years; and

**WHEREAS**, in 2009, the Pilgrim River had the lowest chum salmon escapement since weir-based enumeration projects have been in operation 8 years ago; and

**WHEREAS**, chum salmon incidental bycatch taken in association with the South Alaska Peninsula commercial sockeye fishery has risen in recent years while chum salmon stocks in our region's rivers have dropped precipitously to record low numbers; and



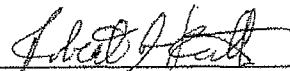
**WHEREAS**, many chum salmon bound for our region's rivers are intercepted as bycatch in the South Alaska Peninsula commercial sockeye salmon fishery; and

**WHEREAS**, the South Alaska Peninsula commercial sockeye salmon fishery operates without significant restrictions to reduce chum salmon bycatch; and

**WHEREAS**, Kawerak, Inc. believes that chum salmon bycatch in the South Alaska Peninsula commercial sockeye fishery must be reduced to conserve migrating chum salmon bound for our region's rivers; and

**NOW THEREFORE BE IT RESOLVED**, that Kawerak, Inc. requests that the Alaska Board of Fisheries take action to reduce chum salmon bycatch in the South Alaska Peninsula commercial sockeye fishery by imposing an immediate hard cap on this fishery of 400,000 or less chum salmon; and

**NOW THEREFORE BE IT RESOLVED**, that Kawerak, Inc. requests that the Alaska Board of Fisheries take additional action to further reduce chum salmon bycatch in this and other state-managed fisheries to conserve chum salmon bound for our region's rivers.

By:   
Robert Keith, Chairman

#### **CERTIFICATION**

I, the undersigned Secretary of the Kawerak, Inc. Board of Directors, hereby certify that the foregoing resolution was adopted by majority vote of the Board of Directors of Kawerak, Inc. during a duly called meeting on this 10<sup>th</sup> day of December, 2009,

By:   
Kawerak Board Secretary

RC 27

**ALASKA BIOLOGICAL CONSULTING**

PO BOX 322,  
LAKESIDE, MONTANA 59922  
406-844-3453  
alaskabiol@yahoo.com



*To: Alaska Board of Fisheries*

*February 2, 2010*

**Subject: Proposal 116 South Unimak and Shumagin June Fishery**

The subject proposal calls to reinstate the 8.3% allocation of the projected inshore Bristol Bay sockeye harvest to the South Unimak and Shumagin June salmon fishery. The question is whether the 8.3% allocation, if re-sanctioned, would be applied in accordance with the 1975-2000 standards which set the GHL for the Shumagin Islands at 1.5% of the latest inshore Bristol Bay projected sockeye harvest and correspondingly, the South Unimak fishery at 6.8%. This assignment was founded on average historic catches between Bristol Bay and South Alaska Peninsula fisheries from the 1960's and early 1970's (Shaul 2000).

There is concern that the Board of Fisheries may not fully appreciate the value of maintaining the historic GHL assignments. Chignik and other non-Area M fishers believe that the June South Unimak-Shumagin fishery should target Bristol-Bay-bound sockeye salmon. In recent years the June fishery has been expanding to the east, away from Bristol Bay, with more and more sockeye salmon being harvested in the Shumagin fishery than at South Unimak. Instead of the South Unimak area accounting for 78% and the Shumagin island supporting 22% of the historic harvest (1960-2000), recent harvest levels are about equal between the two areas (Poetter et al. 2009).

The 1987 sockeye tagging study illustrates that Bristol Bay (BB) sockeye salmon abundance increases on the south side of the Alaska Peninsula from east to west (Eggers et al. 1991). The findings showed that about 85% of the South Unimak sockeye catch was BB fish compared to 55% in the Shumagin Islands (Table 1). Further defined was that Chignik stocks were much more abundant in the Shumagins than in South Unimak waters (18.4% vs. 2.5%) relative to other contributing sockeye stocks .

In 2001, the Board of Fisheries action dropped the 8.3% allocation. As a consequence, more sockeye salmon are being caught in the Shumagins than historically. Poetter et al. (2009) reports that the 1990-2009 catches average 442,000 while the 2007-09 catches average 691,000 for the Shumagin Island for June. The harvest shift away from South Unimak to the Shumagin Islands is likely substantially increasing the catch of non-BB bound sockeye salmon. Based on the 1987 stock composition estimates, there is evidence that Chignik-bound sockeye salmon now comprise a much larger catch component in numbers and by percent (Tables 2-3). Nearly five times the number of Chignik sockeye salmon were

caught annually in the Shumagins during the 2006-09 fisheries as compared to 1987 (400% increase, Table 2).

Based on the history and well defined intent of the June SP fishery as addressed in numerous ADF&G reports, the Board of Fisheries may wish to seriously consider the negative implications of adopting proposal 116 if it is not amended to include the 1.5% Shumagin and 6.8% South Unimak assignments.

The information offered within this report is intended for constructive use only. Questions pertaining to this document should be directed to Bruce Barrett at Alaska Biological Consulting.

Sincerely,



Bruce M. Barrett

Attachment: 1 (Tables 1-3)

References Cited:

- Eggers, D. M., K. Rowell, and B. Barrett. 1991. Stock Composition of Sockeye and Chum Salmon catches in the Southern Alaska Peninsula Fisheries, in June. Alaska Department of Fish and Game, Fishery Research Bulletin 91-01, Juneau.
- Poetter, A. R., M. D. Keyse, and A. C. Bernad. 2009. South Alaska Peninsula Salmon Annual Management Report, 2009. Alaska Department of Fish and Game, Fishery Management Report 09-57, Anchorage.
- Shaul, A. R. 2000. South Unimak and Shumagin islands June Salmon Fishery Report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Fishery Research Regional information Report 4K00-67, Kodiak.

Table 1. Estimated composition of the sockeye salmon catch, by stock group, for the June 1987 South Unimak and Shumagin fisheries (Eggers et al. 1991).

Year	SOUTH UNIMAK					SHUMAGIN				
	Bristol Bay	N. Ak Pen.	Chignik	other	Total	Bristol Bay	N. Ak Pen.	Chignik	other	Total
1987	84.5%	7.1%	2.5%	5.9%	100.0%	54.6%	8.8%	18.4%	18.2%	100.0%

Table 2. Estimated number of sockeye salmon harvested, by stock group, for the June 1987 South Unimak and Shumagin fisheries and the 2007-09 average catch for the same fishery, based on Eggers et al. (1991). Also, the percent increase between the 2007-09 average catch and the 1987 harvest, by area and stock, is cited.

Year	SOUTH UNIMAK					SHUMAGIN				
	Bristol Bay	N. Ak Pen.	Chignik	other	Total	Bristol Bay	N. Ak Pen.	Chignik	other	Total
1987	551,275	46,320	16,310	38,491	652,397	76,750	12,370	25,864	25,583	140,567
2007-09 Avg.	675,277	56,739	19,979	47,149	799,144	377,450	60,834	127,199	125,817	691,300
% Increase	22%	22%	22%	22%	22%	392%	392%	392%	392%	392%

Table 3. Number of sockeye salmon harvested in the June South Unimak and Shumagin 1987 and 2007-09 fisheries and percent distribution of these catches. Also presented, the average percent increase in catch between the 1987 harvest and the 2007-09 average catch by area.

Year	South Unimak	Shumagin	Total	Year	South Unimak	Shumagin	Total
1987	652,397	140,567	792,964	1987	82%	18%	100%
2007	737,642	852,198	1,589,840	2007	46%	54%	100%
2008	1,064,570	649,005	1,713,575	2008	62%	38%	100%
2009	595,221	572,697	1,167,918	2009	51%	49%	100%
2007-09 Avg.	799,144	691,300	1,490,444	2007-09 Avg.	54%	46%	100%
% Increase	22%	392%	88%	% Increase	-35%	162%	

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## Interactions with LLP Recency Actions

In refining the alternatives and options for analysis, the Council may wish to consider interactions between the proposed GOA Pacific cod sector allocations and the trawl and fixed gear recency actions. In April 2008, the Council took final action on trawl recency. In general, that action will remove Western GOA and Central GOA area endorsements from trawl CV and trawl CP licenses that did not have at least 2 trawl groundfish landings during 2000 through 2006 in the respective management area. At its April 2009 meeting, the Council took final action on fixed gear recency. The Council's preferred alternative will add gear-specific Pacific cod endorsements to fixed gear licenses, which limit entry into the directed Pacific cod fisheries in the Western and Central GOA. Licenses may qualify for gear-specific Pacific cod endorsements based on directed Pacific cod landings during 2002 through 2008. The minimum thresholds are 1 landing for jig gear; and for pot and hook-and-line gear, 10 mt for CV licenses with an MLOA designation of <60 ft, and 50 mt for CP licenses and CV licenses with an MLOA designation of ≥60 ft. The Pacific cod endorsements will restrict licenses to using the gear type(s) (pot, hook-and-line, and/or jig) specified on the license. The action also included an exemption from the LLP requirement for jig vessels that use less than 5 jig machines, 1 line per machine, and 30 hooks per line. Licenses that qualify for a jig gear endorsement are not subject to these gear limits. Table E-5 shows the estimated number of trawl licenses that qualify in each area and the number of fixed gear licenses that will qualify for gear-specific Pacific cod endorsements.

**Table E-5 Number of LLPs eligible to access the GOA Pacific cod fisheries following the LLP recency actions, by operation type and gear endorsement**

	Western GOA	Western GOA Sideboarded	Central GOA	Central GOA Sideboarded
<b><u>Catcher Vessel Licenses</u></b>				
Trawl CV	76	11 AFA SB	93	15 AFA SB
Hook-and-line CV <60 ft	7		123	
Hook-and-line CV ≥60 ft	3		7	
Hook-and-line CV <50 ft	3		68	
Hook-and-line CV ≥50 ft	7		62	
Pot CV <60 ft	59		51	
Pot CV ≥60 ft	21	10 crab SB	27	10 crab SB
Jig CV	11		19	
Total Fixed Gear CV**	94		215	
<b><u>Additional licenses available to CQEs</u></b>				
CQE Pot CV <60 ft	21		26	
CQE Hook-and-line CV <60 ft	0		24	
<b><u>Catcher Processor Licenses</u></b>				
Trawl CP	20	18 Am80 SB/ * AFA SB	21	16 Am80 SB/ 4 AFA SB
Hook-and-line CP <125 ft	9	* crab SB	5	* crab SB
Hook-and-line CP ≥125 ft	7	* crab SB	7	* crab SB
Hook-and-line CP <125 ft Offshore Limited***	0	0	5	* crab SB
Hook-and-line CP ≥125 ft Offshore Limited***	3	* crab SB	7	0
Pot CP	4	* crab SB	3	* crab SB
Total Fixed Gear CP*	21	4 crab SB	27	4 crab SB

\*\*Total number of licenses that will receive at least one gear-specific Pacific cod endorsement. Some licenses qualify for more than one endorsement. \*\*\*Licenses that qualify for a hook-and-line CP endorsement under the exemption for participants in the voluntary PSC co-op are limited to participating in the offshore sector.

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Component 4: Sector allocations with jig allocation taken off the top of the TAC

Western GOA	Annual Alloc	Compare to 60/40		A season allocation	B season allocation	A season allocation	B season allocation
		A season	B season	Percent of annual allocation	Percent of annual allocation	Percent of seasonal allocation	Percent of seasonal allocation
HAL CP	19.8%	55.2%	44.8%	10.9%	8.9%	18.2%	22.2%
HAL CV	1.4%	47.2%	52.8%	0.7%	0.7%	1.1%	1.8%
Pot CV/CP	38.0%	52.0%	48.0%	19.8%	18.2%	32.9%	45.6%
Trawl CP	2.4%	37.9%	62.1%	0.9%	1.5%	1.5%	3.7%
Trawl CV	38.4%	72.3%	27.7%	27.7%	10.7%	46.2%	26.6%
<b>Total</b>	<b>100.0%</b>			<b>60.0%</b>	<b>40.0%</b>	<b>100.0%</b>	<b>100.0%</b>

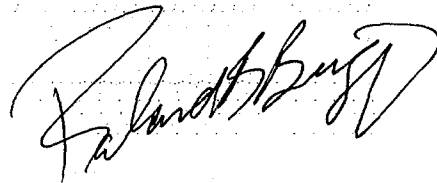
Central GOA	Annual Alloc	Compare to 60/40		A season allocation	B season allocation	A season allocation	B season allocation
		A season	B season	Percent of annual allocation	Percent of annual allocation	Percent of seasonal allocation	Percent of seasonal allocation
HAL CP	5.2%	80.3%	19.7%	4.2%	1.0%	6.9%	2.5%
HAL CV <50	14.6%	63.9%	36.1%	9.3%	5.3%	15.5%	13.2%
HAL CV >=50	6.7%	84.0%	16.0%	5.6%	1.1%	9.4%	2.7%
Pot CV/CP	27.8%	63.9%	36.1%	17.8%	10.0%	29.7%	25.1%
Trawl CP	4.1%	48.8%	51.2%	2.0%	2.1%	3.4%	5.3%
Trawl CV	41.6%	50.8%	49.2%	21.1%	20.5%	35.2%	51.2%
<b>Total</b>	<b>100.0%</b>			<b>60.0%</b>	<b>40.0%</b>	<b>100.0%</b>	<b>100.0%</b>

1400

RC30

Supporting data for Proposal 152  
Openings in N.Pen Three Hills to Outer Port  
Hieden Fishery form 2004 to 2009

By  
Roland Briggs

A handwritten signature in black ink, appearing to read 'Roland Briggs', written in a cursive style.





13	Mon	EO-15						
14	Tue		6:00 AM					6:00 AM
15	Wed							
16	Thu							6:00 PM
17	Fri							
18	Sat		6:00 PM					
19	Sun	EO-18						
20	Mon		6:00 AM					6:00 AM
21	Tue							
22	Wed	EO-19	6:00 PM					6:00 PM
23	Thu							
24	Fri	EO-22						
25	Sat		6:00 PM					6:00 PM
26	Sun							
27	Mon							6:00 AM
28	Tue	EO-23						6:00 PM
29	Wed							
30	Thu				Ilnik			
31	Fri	August	Three		Unangashak	Unangashak Bluff		
1	Sat		Hills	Inter Ilnik	Bluff	to Strogonof Point	Inter Port Heiden	Outer Port Heide
2	Sun							
3	Mon							
4	Tue							
5	Wed							
6	Thu	EO-24	6:00 AM					
7	Fri							
8	Sat							
9	Sun							
10	Mon	EO26						
11	Tue	EO-27						
12	Wed	EO-28						
13	Thu	EO-30						
14	Fri	EO-31						
15	Sat							
16	Sun	EO-32						
17	Mon							
18	Tue	EO-33						
19	Wed							
20	Thu	EO-36						
21	Fri		6:00 PM					
22	Sat							
23	Sun							
24	Mon							
25	Tue							
26	Wed							
27	Thu							
28	Fri	EO-37						
29	Sat							
30	Sun							
31	Mon							
1	Tue	Sept						



N Pen Openings for 2008								
			Key					
			Weekly closur					
			Normal Weekly Open					
			E.O. Open					
		2008						
		EO			link to Unangashak	Unangashak Bluff		
Date		JUNE	Three hills	Inter link	Bluff	to Strogonof Point	Inter Port Heiden	Outer Port Heide
1	Sun							
2	Mon							
3	Tue							
4	Wed							
5	Thu							
6	Fri							
7	Sat							
8	Sun							
9	Mon							
10	Tue							
11	Wed							
12	Thu							
13	Fri							
14	Sat							
15	Sun							
16	Mon	PM-01						
17	Tue							
18	Wed							
19	Thu							
20	Fri							
21	Sat							
22	Sun	PM-02						
23	Mon							
24	Tue							
25	Wed							
26	Thu							
27	Fri							
28	Sat							
29	Sun	PM-04						
30	Mon							
1	Tue	JULY						
2	Wed	PM-05						
3	Thu							
4	Fri							
5	Sat							
6	Sun	PM-07						
7	Mon							
8	Tue							
9	Wed	PM-08						
10	Thu							
11	Fri							
12	Sat							
13	Sun	PM-10						
14	Mon							

15	Tue								
16	Wed								
17	Thu				link to Unangashak	Unangashak Bluff			
18	Fri		Three hills	Inter Ilnik	Bluff	to Strogonof Point	Inter Port Heiden	Outer Port Heide	
19	Sat								
20	Sun								
21	Mon								
22	Tue								
23	Wed								
24	Thu								
25	Fri								
26	Sat								
27	Sun								
28	Mon								
29	Tue								
30	Wed								
31	Thu								
1	Fri	August							
2	Sat								
3	Sun								
4	Mon								
5	Tue								
6	Wed								
7	Thu								
8	Fri								
9	Sat	PM-16							
10	Sun								
11	Mon								
12	Tue								
13	Wed								
14	Thu	PM-18							
15	Fri								
16	Sat								
17	Sun								
18	Mon								
19	Tue								
20	Wed	PM-20							
21	Thu								
22	Fri				link to Unangashak	Unangashak Bluff			
23	Sat		Three hills	Inter Ilnik	Bluff	to Strogonof Point	Inter Port Heiden	Outer Port Heide	
24	Sun								
25	Mon								
26	Tue								
27	Wed	PM-22							
28	Thu								
29	Fri								
30	Sat								
31	Sun								
1	Mon	Sept							
2	Tue								
3	Wed	PM-23							
4	Thu								
5	Fri								

6	Sat								
7	Sun								
8	Mon								
9	Tue	PM-25							
10	Wed								
11	Thu								
12	Fri								
13	Sat								
14	Sun								
15	Mon								
16	Tue								
17	Wed								
18	Thu								
19	Fri								
20	Sat								
21	Sun								
22	Mon								
23	Tue								
24	Wed								
25	Thu								
26	Fri								
27	Sat								
28	Sun								
29	Mon								
30	Tue								

		2007 Opening summary						
		Starting on June 25 either the Three Hills , Ilnik or Outer Port Heiden						
		Section was open continuous until July 7 Then reopens on July 9						
		until July 31. There were no windows to allow fish from other districts						
		to go by.						
		the Three Hills						
		EO openings						
		Weekly Openings						
		2007						
		Ilnik to Unangashak						
		Unangashak Bluff to Inter Port Outer Port						
		EO JUNE Three hills Inter Ilnik Bluff Strogonof Pt Heiden Heiden						
Date		JUNE	Three hills	Inter Ilnik	Bluff	Strogonof Pt	Heiden	Outer Port Heiden
1	Fri	PM 01						
2	Sat							
3	Sun							
4	Mon							
5	Tue							
6	Wed							
7	Thu							
8	Fri							
9	Sat							
10	Sun							
11	Mon							
12	Tue							
13	Wed	PM 02						
14	Thu							
15	Fri							
16	Sat							
17	Sun							
18	Mon							
19	Tue							
20	Wed	PM 04						
21	Thu							
22	Fri							
23	Sat	PM 06						
24	Sun							
25	Mon							
26	Tue							
27	Wed	PM 07						
28	Thu							
29	Fri							
30	Sat	PM-09						
1	Sun	July						
2	Mon							
3	Tue							
4	Wed	PM10						
5	Thu							

6	Fri						
7	Sat	PM 12					
8	Sun						
9	Mon						
10	Tue						
11	Wed	PM 13					
12	Thu						
13	Fri	PM 15					
14	Sat						
15	Sun						
16	Mon						
17	Tue						
18	Wed	PM 17					
19	Thu						
20	Fri						
21	Sat	PM 19					
22	Sun						
23	Mon						
24	Tue						
25	Wed	PM 20					
26	Thu						
27	Fri						
28	Sat	PM 22					
29	Sun						
30	Mon						
31	Tue						
1	Wed	August		Ilnik to	Unangashak		
2	Thu			Unangashak	Bluff to	Inter Port	Outer Port
3	Fri		Three hills	Inter Ilnik	Bluff	Strogonof Pt	Heiden
4	Sat						
5	Sun	PM-25					
6	Mon						
7	Tue						
8	Wed						
9	Thu	PM-28					
10	Fri						
11	Sat						
12	Sun						
13	Mon						
14	Tue						
15	Wed						
16	Thu	PM-30					
17	Fri						
18	Sat						
19	Sun						
20	Mon						
21	Tue						
22	Wed	PM-32					
23	Thu						
24	Fri	PM-34					
25	Sat						

26	Sun							
27	Mon							
28	Tue							
29	Wed							
30	Thu							
31	Fri							
1	Sat	sept						
2	Sun							
3	Mon							
4	Tue							
5	Wed							
6	Thu							
7	Fri				Ilnik to	Unangashak		
8	Sat				Unangashak	Bluff to	Inter Port	Outer Port
9	Sun		Three hills	Inter Ilnik	Bluff	Strogonof Pt	Heiden	Heiden
10	Mon							
11	Tue							
12	Wed							
13	Thu							
14	Fri							
15	Sat							
16	Sun							
17	Mon							
18	Tue							
19	Wed							
20	Thu							
21	Fri							
22	Sat							
23	Sun							
24	Mon							
25	Tue							
26	Wed							
27	Thu							
28	Fri							
29	Sat							
30	Sun							
31	Mon							



## YUKON DELTA FISHERIES DEVELOPMENT ASSOCIATION

Mr. Chairman, members of the Board. Good morning. My name is Gene Sandone and I represent the Yukon Delta Fisheries Development Association.

I recently retired from ADF&G after serving the state for 26 years. Most of my service was in the AYK Region, particularly within the Yukon Area. Most recently I was the AYK/CF Regional Supervisor, overseeing all the research and management activities within the AYK Region

I am here today to testify about the June Fishery in the South Unimak and Shumagin Islands.

As Mr. Art Nelson in his early testimony indicated, this is the only fishery in the state where there is no accountability for fishery performance, escapement levels, or allocation. I've had extensive experience in developing management plans for AYK salmon stocks and I am baffled at this plan. There is no mention of harvest commensurate with run size, and no concern about subsistence in the areas where these fish originate. Area M fishers do not participate in sharing the burden of conservation. As it appeared to Mr. Nelson, I also believe that this fishery management plan does not conform to the Sustainable Salmon Fisheries Policy.

It also appears that this fishery is no longer a directed sockeye salmon fishery. There is nothing in the plan limiting the catch of chum salmon. With rising market value of all fish, this concerns me. Instead of fishers avoiding chum, they may fish without any regard for the species composition of the catch.

Note that 26 purse seine fishers in the Shumagin Islands caught approximately 500,000 chum salmon this year. There is no incentive not to catch chum. It is time to return this fishery to a directed-sockeye salmon fishery and initiate deterrents for excessive chum salmon harvests.

Under the June Management plan, fishers in the South Unimak and Shumagin Islands are allowed to fish over 76% of the available time between the start of the fishery on June 7 till its end on June 29. Contrast that with the fishing time allowed in the Yukon Area District y-1. Fishers there were allowed to fish a total of 43 hours for summer chum salmon during the entire month and a half summer season.

Few salmon were commercially harvested in the Yukon this year because of relatively low runs of summer and fall chum salmon along with the concern for the Chinook salmon stock. Total Area commercial harvests of summer chum salmon was approximately 170,000 summer chum and approximately 25,000 fall chum salmon. Yukon Areas fisher made less than an average of \$2,000 for the entire year. Fish harvested in the Area M June fishery would have substantially contributed to the earnings of these fishers.

The insignificant harvest rate was a significant blow to the commercial fishers of the Yukon River and commercial and subsistence fishers of other AYK areas. Although the actual harvest rate of chum salmon caught in the June fishery may be low, I believe that the actual commercial

harvest rate is high because of the relatively large escapement requirements and subsistence needs in the AYK

The commercial salmon fishery in the Yukon is the only commercial fishery that Yukon fishers can participate in.

There are no ground fish fishery, no halibut fishery no crab fishery, no herring fishery. Area M fishers can participate in all these other fisheries.

1. LATER START DATE: JUNE 13
  - a. Early sockeye:chum ratios tend to be low.
  - b. Tags recovered in the streams of Norton Sound were applied early in the season in Area M
2. GEAR SPECIFIC AND AREA-SPECIFIC DETERRENTS.
  - a. Set netters are not the problem with catching migrating chums. Last year the major problem was with the purse seine fleet the Shumagin.
3. REINSTITUTION OF THE 6.8% AND 1.5% CAP OF THE PRESEASON BB HARVEST ESTIMATE.
  - a. This may limit time in the Shumagin where the problem occurred in 2009.
4. CONSIDER 'ESCAPEMENT WINDOWS'
  - a. Limit hours per week and allow no more than 48 hours of consecutive fishing.
5. AT LEAST, INSTITUTE A BACKSTOP CHUM SALMON CAP SO THAT CHUM SALMON HARVEST DOES NOT REACH EXCESSIVE HARVEST.

RC 32

## PUBLIC TESTIMONY

### **Jack Fagerstrom, Golovin (Northern Norton Sound)**

For years the subsistence fishermen have had closures, and now our commercial fisheries are nonexistent. Formerly we've had, through our limited fishery, the financial ability to purchase equipment to further our subsistence way of life.

Since 1988, when the first notable decline occurred, we have seen changes in our lifestyle. We have experienced subsistence closures. In Nome, there is a generation of our youth that have not had the experience of harvesting, cutting and drying fish. Traditionally, we do this not only for themselves, but for their extended families.

Over the years when the question is asked, "Where have our fish gone?", there has been no good answer. 1988 was the last decent year. Our local fish plant employed people not only from Golovin, but also from surrounding villages. The fish plant is now in ruins.

We in the Northern Norton Sound have borne the heaviest burden of conservation for far too long. When 26 boats can take nearly 500,000 chum salmon in the purse seine fishery during June, there is, to me, a serious flaw in the system. The feeling by some in our district is that the fisheries are managed for commercial needs and not the subsistence user. A point brought up by an elder in my community was that when commercial fisheries experience a disaster, they have some avenue to be compensated for their loss. The subsistence person loses not only the ability to put food away, which is better than money in the bank, they also lose the ability to teach and experience our cultural way of life.

Again the experiences we have are reoccurring. Our rivers are again rivers of concern. To see your fisheries decline and your people hurting over the years may be likened to a slow and agonizing death. Every year gets worse and worse.

Thank you for considering my testimony on this important issue.

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The attached page is page 22 from the ADF&G Staff Report "GENETIC STOCK COMPOSITION OF THE COMMERCIAL HARVEST OF THE SOCKEYE SALMON IN BRISTOL BAY, Alaska, 2006-2008."

2,001,883), Nushagak (3.8%; 1,047,198), Togiak (1.8%; 502,426), Igushik (1.0%; 277,366), Kuskokwim (0.8%; 225,133), and North Peninsula (0.1%; 16,771) (Table 13).

## **Inshore Run Size**

### *North Peninsula Stock*

In 2006, 11,018 North Peninsula stock sockeye salmon were incidentally harvested in Bristol Bay (Table 14). Very small harvests occurred in Ugashik (2,959), Egegik (2,270), Naknek-Kvichak (2,415), Nushagak (3,289), and Togiak (86) districts.

In 2007, 19,423 North Peninsula stock sockeye salmon were incidentally harvested in Bristol Bay (Table 15). Very small harvests occurred in Ugashik (1,724); Egegik (1,170), Naknek-Kvichak (4,058), Nushagak (12,278), and Togiak (192) districts.

In 2008, 16,771 North Peninsula stock sockeye salmon were incidentally harvested in Bristol Bay (Table 16). Very small harvests occurred in Ugashik (2,609); Egegik (7,854), Naknek-Kvichak (4,551), Nushagak (1,566), and Togiak (191) districts.

North Peninsula drainages were outside the scope of this program, therefore total run and harvest rates were not estimated.

### *Ugashik Stock*

Inshore run of the Ugashik stock was 3,758,287 sockeye salmon in 2006 (Table 14). Harvest was 2,755,129 and escapement was 1,003,158 in Ugashik River. The overall harvest rate was 73.3% with district-specific harvest rates as follows: Ugashik (57.9%), Egegik (14.9%), Naknek-Kvichak (0.1%), Nushagak (0.3%), and Togiak (~0.0%). The traditional inshore run estimate (based on age composition) was 9% less than the inshore run estimate based on genetics (Table 14).

Inshore run of the Ugashik stock was 7,050,858 sockeye salmon in 2007 (Table 15). Harvest was 4,451,672 and escapement was 2,599,186 in Ugashik River. The overall harvest rate was 63.1% with district-specific harvest rates as follows: Ugashik (54.9%), Egegik (7.5%), Naknek-Kvichak (0.2%), Nushagak (0.5%), and Togiak (~0.0%). The traditional inshore run estimate (based on age composition) was 8% greater than the inshore run estimate based on genetics (Table 15).

Inshore run of the Ugashik stock was 2,621,395 sockeye salmon in 2008 (Table 16). Harvest was 2,025,063 and escapement was 596,332 in Ugashik River. The overall harvest rate was 77.3% with district-specific harvest rates as follows: Ugashik (72.5%), Egegik (3.6%), Naknek-Kvichak (1.1%), Nushagak (0.5%), and Togiak (~0.0%). The traditional inshore run estimate (based on age composition) was 9% less than the inshore run estimate based on genetics (Table 16).

### *Egegik Stock*

Inshore run of the Egegik stock was 8,282,565 sockeye salmon in 2006 (Table 14). Harvest was 6,817,407 and escapement was 1,465,158 in Egegik River. The overall harvest rate was 82.3% with district-specific harvest rates as follows: Ugashik (1.9%), Egegik (76.8%), Naknek-Kvichak (3.6%), Nushagak (~0.0%), and Togiak (~0.0%). The traditional inshore run estimate (based on age composition) was 7% greater than the inshore run estimate based on genetics (Table 14).

RC # 34



Submitted By: ADF&G Commercial Fisheries-  
Westward Region Staff

February 3, 2010

**Proposals 103 & 104 – South Alaska Peninsula Area Parallel  
Groundfish Fishery**

**Table 1.** Harvest of walleye pollock by vessels 58 feet and under and vessels over 58 feet in overall length during South Alaska Peninsula Area parallel groundfish fisheries by year, 2001 – 2009.

<b>South Alaska Peninsula Area Parallel Walleye Pollock Fishery</b>							
<b>Year</b>	<b>Vessels 58 Feet and Under</b>			<b>Vessels Over 58 Feet</b>			<b>Total Harvest</b>
	<b>Harvest (lbs)</b>	<b>% Harvest</b>	<b>Number of Vessels</b>	<b>Harvest (lbs)</b>	<b>% Harvest</b>	<b>Number of Vessels</b>	
2001	42,278,591	85%	27	7,719,908	15%	12	49,998,499
2002	16,126,089	86%	23	2,560,193	14%	5	18,686,282
2003	16,266,429	81%	22	3,912,872	19%	9	20,179,302
2004	26,916,458	87%	20	4,048,716	13%	5	30,965,175
2005	27,978,273	84%	22	5,419,721	16%	5	33,397,994
2006	28,314,408	85%	27	4,925,486	15%	7	33,239,894
2007	19,706,724	98%	26	411,758	2%	4	20,118,482
2008	11,124,746	99%	19	Confidential Information			
2009	20,075,853	96%	20	857,861	4%	3	20,933,713
<b>Avg</b>	<b>23,198,619</b>	<b>89%</b>	<b>23</b>	<b>3,325,838</b>	<b>11%</b>	<b>6</b>	<b>26,524,457</b>

**Table 2.** Harvest of walleye pollock from state and federal waters during South Alaska Peninsula Area federal/parallel walleye pollock fisheries by year, 2001 – 2009.

<b>South Alaska Peninsula Area Federal/Parallel Walleye Pollock Fishery</b>							
<b>Year</b>	<b>Federal Waters (3-200 nm)</b>			<b>State Waters (0-3 nm)</b>			<b>Total Harvest</b>
	<b>Harvest (lbs)</b>	<b>% Harvest</b>	<b>Number of Vessels</b>	<b>Harvest (lbs)</b>	<b>% Harvest</b>	<b>Number of Vessels</b>	
<b>2001</b>	17,530,022	26%	28	49,998,499	74%	39	67,528,521
<b>2002</b>	19,732,815	51%	38	18,686,282	49%	28	38,419,098
<b>2003</b>	16,593,703	45%	27	20,179,302	55%	31	36,773,005
<b>2004</b>	19,891,028	39%	21	30,965,175	61%	25	50,856,203
<b>2005</b>	34,357,179	51%	33	33,397,994	49%	27	67,755,173
<b>2006</b>	20,544,831	38%	28	33,239,894	62%	34	53,784,725
<b>2007</b>	18,033,905	47%	30	20,118,482	53%	30	38,152,387
<b>2008</b>	21,555,795	66%	26	11,200,773	34%	20	32,756,569
<b>2009</b>	9,740,037	32%	34	20,933,713	68%	23	30,673,751
<b>Avg</b>	<b>19,775,480</b>	<b>44%</b>	<b>29</b>	<b>26,524,457</b>	<b>56%</b>	<b>29</b>	<b>46,299,937</b>



South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2004.

Date	Permits	Landings	Number of Salmon				
			Chinook	Sockeye	Coho	Pink	Chum
6/7/2004	106	110	152	27,199	0	4,992	8,692
6/8/2004	94	103	156	35,846	0	4,914	7,201
6/9/2004	121	126	353	70,732	8	13,687	29,555
6/10/2004	140	174	494	78,501	0	13,186	53,241
6/12/2004	145	154	238	56,155	0	16,757	26,400
6/13/2004	135	153	267	94,031	0	27,570	40,516
6/14/2004	148	175	209	91,308	2	17,062	26,122
6/15/2004	137	167	504	156,694	0	39,093	47,093
6/17/2004	121	133	282	73,409	3	23,470	16,140
6/18/2004	114	152	71	69,992	1	8,339	14,780
6/19/2004	125	140	168	105,669	7	33,906	26,905
6/20/2004	115	132	192	108,263	4	43,466	41,441
6/22/2004	73	81	68	46,489	1	20,761	23,763
6/23/2004	87	107	287	82,093	144	30,012	38,729
6/24/2004	72	91	559	89,515	137	32,180	50,695
6/25/2004	55	67	126	49,075	18	14,461	11,459
6/27/2004	54	64	126	27,213	43	6,401	8,401
6/28/2004	48	60	98	39,379	105	4,340	6,178
6/29/2004	51	71	73	46,310	148	5,319	4,999
<b>Total</b>	<b>190</b>	<b>2,260</b>	<b>4,423</b>	<b>1,347,873</b>	<b>621</b>	<b>359,916</b>	<b>482,310</b>

- Data compiled from ADF&G fish ticket information system.

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South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2005.

Date	Permits	Landings	Number of Salmon				
			Chinook	Sockeye	Coho	Pink	Chum
6/7/2005	136	152	468	49,000	2	55,157	80,239
6/8/2005	126	159	106	44,858	2	23,855	20,476
6/9/2005	105	126	57	31,130	0	8,962	12,162
6/10/2005	120	163	66	31,859	0	7,676	18,656
6/12/2005	112	138	85	34,662	8	39,632	19,141
6/13/2005	161	195	250	64,129	6	85,139	40,156
6/14/2005	150	187	375	66,723	10	188,106	55,688
6/15/2005	118	129	344	66,154	2	163,620	66,600
6/17/2005	102	117	116	56,089	4	157,934	38,382
6/18/2005	91	114	71	39,702	0	105,999	13,288
6/19/2005	86	103	109	39,336	66	75,826	10,720
6/20/2005	83	109	96	52,168	23	112,568	11,026
6/22/2005	84	108	110	52,173	57	77,004	7,114
6/23/2005	79	110	204	88,264	72	124,854	6,635
6/24/2005	55	80	49	44,372	73	31,609	3,283
6/25/2005	73	106	96	81,811	224	137,032	6,327
6/27/2005	59	82	99	48,658	146	83,174	5,337
6/28/2005	62	87	109	61,396	291	103,533	6,228
6/29/2005	58	79	245	51,911	933	73,279	6,372
<b>Total</b>	<b>190</b>	<b>2,344</b>	<b>3,055</b>	<b>1,004,395</b>	<b>1,919</b>	<b>1,654,959</b>	<b>427,830</b>

- Data compiled from ADF&G fish ticket information system.

A. Department of Fish and Game, Commercial Fisheries Division, O. 010.

South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2006.

Date	Permits	Landings	Number of Salmon				
			Chinook	Sockeye	Coho	Pink	Chum
6/7/2006	95	105	253	28,131	1	18,552	6,278
6/8/2006	106	113	223	32,887	3	14,860	9,183
6/9/2006	68	80	58	16,767	0	16,376	3,828
6/10/2006	78	87	80	28,003	0	19,955	6,430
6/12/2006	109	154	430	37,201	15	73,104	15,584
6/13/2006	127	172	564	72,045	31	133,371	31,048
6/14/2006	125	154	293	53,557	5	56,890	22,064
6/15/2006	84	104	139	40,226	2	33,030	17,545
6/17/2006	126	143	304	52,800	23	100,561	30,855
6/18/2006	133	169	410	82,906	33	206,507	37,766
6/19/2006	148	189	572	87,199	97	133,083	27,105
6/20/2006	148	187	327	96,571	111	155,791	35,684
6/22/2006	126	152	211	51,068	102	71,939	9,348
6/23/2006	90	109	218	38,286	156	58,126	9,115
6/24/2006	66	98	67	40,068	114	32,835	5,384
6/25/2006	72	98	60	42,565	126	38,732	4,610
6/27/2006	77	103	175	62,065	602	101,045	14,189
6/28/2006	66	93	63	37,958	418	41,695	6,408
6/29/2006	69	102	50	31,988	790	25,867	7,403
<b>Total</b>	<b>188</b>	<b>2,412</b>	<b>4,497</b>	<b>932,291</b>	<b>2,629</b>	<b>1,332,319</b>	<b>299,827</b>

- Data compiled from ADF&G fish ticket information system.

A. Department of Fish and Game, Commercial Fisheries Division, O. 010.

South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2007.

Date	Permits	Landings	Number of Salmon				
			Chinook	Sockeye	Coho	Pink	Chum
6/7/2007	104	116	282	18,803	1	1,135	14,116
6/8/2007	114	135	522	52,191	0	868	20,463
6/9/2007	108	128	324	39,928	0	854	10,665
6/10/2007	106	124	398	65,287	0	1,928	20,555
6/12/2007	128	145	240	56,421	1	2,350	13,828
6/13/2007	145	170	593	92,714	2	5,279	24,087
6/14/2007	133	158	358	92,752	1	2,951	14,721
6/15/2007	149	215	459	154,841	1	8,204	29,851
6/17/2007	127	165	235	100,369	2	9,937	17,869
6/18/2007	142	187	263	115,081	0	9,899	20,356
6/19/2007	124	170	253	127,267	1	21,615	20,233
6/20/2007	128	164	161	138,064	7	21,337	19,503
6/22/2007	102	112	43	43,798	53	12,263	5,516
6/23/2007	84	111	88	89,952	47	27,657	8,603
6/24/2007	76	107	97	62,693	74	18,110	8,476
6/25/2007	87	119	106	143,178	96	50,109	19,393
6/27/2007	73	86	80	51,127	48	19,844	8,596
6/28/2007	76	118	97	61,802	173	25,691	7,251
6/29/2007	73	120	37	83,572	1,126	27,497	13,457
<b>Total</b>	<b>185</b>	<b>2,650</b>	<b>4,636</b>	<b>1,589,840</b>	<b>1,633</b>	<b>267,528</b>	<b>297,539</b>

- Data compiled from ADF&G fish ticket information system.

South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2008.

Date	Permits	Landings	Number of Salmon				
			Chinook	Sockeye	Coho	Pink	Chum
6/7/2008	32	34	39	5,199	0	3,703	3,457
6/8/2008	46	67	41	15,825	0	4,543	9,385
6/9/2008	52	61	103	13,606	0	7,058	9,363
6/10/2008	46	51	48	4,674	0	4,425	3,035
6/12/2008	70	77	82	19,926	80	4,435	13,537
6/13/2008	75	87	117	39,653	0	5,683	15,984
6/14/2008	78	96	133	55,317	0	5,447	17,948
6/15/2008	119	172	438	127,869	0	76,157	36,149
6/17/2008	141	170	577	109,924	0	151,373	30,689
6/18/2008	157	208	524	264,659	0	298,601	71,171
6/19/2008	155	199	186	177,393	0	179,733	25,096
6/20/2008	168	214	103	119,638	0	154,609	21,633
6/22/2008	137	161	92	89,719	0	158,847	20,159
6/23/2008	169	220	147	183,959	1	216,161	30,799
6/24/2008	158	198	92	173,632	8	259,249	32,480
6/25/2008	164	184	30	99,647	0	109,815	17,993
6/27/2008	147	177	113	83,591	11	126,978	19,878
6/28/2008	102	135	58	66,212	73	65,556	14,752
6/29/2008	62	80	34	63,132	5	138,895	17,424
<b>Total</b>	<b>196</b>	<b>2,591</b>	<b>2,957</b>	<b>1,713,575</b>	<b>178</b>	<b>1,971,268</b>	<b>410,932</b>

- Data compiled from ADF&G fish ticket information system.

Submitted by ADF&G; source: RC 4, Tab 1, FMS 09-07 (from 1/10 AYK BOF Meeting)

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Table 8.—Summary of escapement goal recommendations for Norton Sound/Port Clarence and Kotzebue Management Areas for 2010.

Stock Unit	Enumeration Method	Current Escapement Goal			Escapement Goal Recommendation		
		Goal	Type	Year Established	Action	New or Revised Goal	Type
<b>Norton Sound/Port Clarence Management Area</b>							
Chinook Salmon							
Fish R./Boston Cr.	Aerial Survey	>100	SEG	2005	No Revision		
Kwiniuk River	Tower	300-550	SEG	2005	No Revision		
North River (Unalakleet R.)	Tower	1,200-2,600	SEG	2005	No Revision		
Old Woman R. (Unalakleet R.)	Aerial Survey	550-1,100	SEG	2005	No Revision		
Shaktoolik River	Aerial Survey	400-800	SEG	2005	No Revision		
Chum Salmon							
Bonanza River	Expanded Aerial Survey	2,300-3,400	SEG	2001	Eliminate		
Eldorado River	Expanded Aerial Survey	6,000-9,200	SEG	2001	No Revision		
Flambeau River	Expanded Aerial Survey	4,100-6,300	SEG	2001	Eliminate		
Kwiniuk River	Tower	10,000-20,000	BEG	2001	No Revision		
Niukluk River (Fish R.)	Tower	>30,000	SEG	2005	Revise	>23,000	SEG
Nome River	Weir	2,900-4,300	SEG	2001	No Revision		
Old Woman R. (Unalakleet R.)	Aerial Survey	2,400-4,800	SEG	2005	No Revision		
Sinuk River	Expanded Aerial Survey	4,000-6,200	SEG	2001	Eliminate		
Snake River	Tower/weir	1,600-2,500	SEG	2001	No Revision		
Solomon River	Expanded Aerial Survey	1,100-1,600	SEG	2001	Eliminate		
Subdistrict One (Nome, all systems)	Multiple	23,000-35,000	BEG	2001	No Revision		
Tubutulik River	Expanded Aerial Survey	8,000-16,000	BEG	2001	No Revision		
Coho Salmon							
Kwiniuk River	Aerial Survey	650-1,300	SEG	2005	No Revision		
Niukluk River	Tower	2,400-6,100	SEG	2007	Revise	2,400-7,200	SEG
North River (Unalakleet R.)	Aerial Survey	550-1,100	SEG	2005	No Revision		

-continued-



Table 8.—Page 2 of 2.

Stock Unit	Enumeration Method	Current Escapement Goal			Escapement Goal Recommendation		
		Goal	Type	Year Established	Action	New or Revised Goal	Type
<b>Norton Sound/Port Clarence Management Area (Continued)</b>							
Pink Salmon							
	Kwiniuk River (all years)	Tower	>8,400	SEG	2005	No Revision	
	Niukluk River (all years)	Tower	>10,500	SEG	2005	No Revision	
	Nome River (even year)	Weir	>13,000	SEG	2005	No Revision	
	Nome River (odd year)	Weir	>3,200	SEG	2005	No Revision	
	North River (Unalakleet, R. all years)	Tower	>25,000	SEG	2005	No Revision	
Sockeye Salmon							
	Salmon Lake	Aerial Survey	4,000–8,000	SEG	2005	No Revision	
	Glacial Lake	Aerial Survey	800–1,600	SEG	2005	No Revision	
<b>Kotzebue Management Area</b>							
Chum Salmon							
	Kotzebue (all areas)	Expanded Aerial Survey	196,000–421,000	BEG	2007	No Revision	
	Noatak/Eli Rivers	Aerial Survey	42,000–91,000	SEG	2007	No Revision	
	Salmon River (Kobuk R. drainage)	Aerial Survey	3,300–7,200	SEG	2007	No Revision	
	Squirrel River (Kobuk R. drainage)	Aerial Survey	4,900–10,500	SEG	2007	No Revision	
	Tutuksuk River (Kobuk R. drainage)	Aerial Survey	1,400–3,000	SEG	2007	No Revision	
	Upper Kobuk and Selby Rivers	Aerial Survey	9,700–21,000	SEG	2007	No Revision	

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Submitted by ADF&G; Source: RCA, Tab 3, SP09-20 (from 1/10 AYK BOF Meeting)  
2/2/10

Table 1.—Subdistrict 1 (Nome) chum salmon estimated escapement, 1993–2009.

Year	Solomon River <sup>a</sup>	Bonanza River <sup>a</sup>	Flambeau River <sup>a</sup>	Sinuk River <sup>a</sup>	Eldorado River <sup>b</sup>	Snake River <sup>c</sup>	Nome River <sup>d</sup>	Subdistrict Total
1993	2,525	3,007	6,103	6,052	9,048	2,115	5,925	34,775
1994	1,066	5,178	12,889	4,905	13,202	3,519	2,893	43,652
1995	2,106	11,182	16,474	9,464	18,955	4,395	5,093	67,669
1996	2,141	7,049	13,613	6,658	32,970	2,772	3,339	68,542
1997	2,111	4,140	9,455	9,212	14,302	6,184	5,147	50,551
1998	925	4,552	9,129	6,720	13,808	11,067	1,930	48,131
1999	637	2,304	637	6,370	4,218	484	1,048	15,698
2000	1,294	4,876	3,947	7,198	11,617	1,911	4,056	34,899
2001	1,949	4,745	10,465	10,718	11,635	2,182	2,859	44,553
2002	2,150	3,199	6,804	6,333	10,243	2,776	1,720	33,225
2003	806	1,664	3,380	3,482	3,591	2,201	1,957	17,081
2004	1,436	2,166	7,667	3,197	3,273	2,145	3,903	23,787
2005	1,914	5,534	7,692	4,710	10,426	2,948	5,584	38,808
2006	2,062	708	27,828	4,834	41,985	4,128	5,677	87,222
2007	3,469	8,491	12,006	16,481	21,312	8,147	7,084	76,990
2008 <sup>e</sup>	1,000	1,000	11,618	1,000	6,746	1,244	2,607	25,215
2009	918	6,744	4,075	2,232	4,943	891	1,565	21,368
2005-2009 avg.	1,873	4,495	12,644	5,851	17,082	3,472	4,503	49,921
2000-2009 avg.	1,700	3,913	9,548	6,019	12,577	2,857	3,701	40,315

<sup>a</sup> The Bonanza, Flambeau, Sinuk, and Solomon rivers escapement estimate is obtained by expanding aerial survey counts and expanding by calculation from Clark, J. H. 2001.

<sup>b</sup> The Eldorado River escapement estimate is the same method as in Clark, J. H. 2001 for 1993–1996. From 1997–2002 escapement estimates are from counting tower and from 2003–2009 by weir.

<sup>c</sup> The Snake River escapement estimate is the same method as in Clark, J. H. 2001 for 1993–1994. From 1995–2002 escapement estimates are from counting tower and from 2003–2009 by weir.

<sup>d</sup> The Nome River escapement estimate is the same method as in Clark, J. H. 2001 for 1993. From 1994–1995 escapement estimates are from counting tower and from 1996–2009 by weir.

<sup>e</sup> A huge pink salmon run prevented surveyors from estimating chum salmon in the Solomon, Bonanza, and Sinuk rivers; escapement was conservatively listed at 1,000 chum salmon for each river, but based on historical data was likely higher.

Table 2.—Commercial and subsistence salmon catch by species, by year in Subdistrict 1 (Nome), Norton Sound District, 1964–2009.

Year	SUBDISTRICT 1 (NOME)																	
	Commercial						Subsistence <sup>a</sup>						Combined					
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
1964	5	-	-	1	1,194	1,200	-	-	-	-	-	-	5	-	-	1	1,194	1,200
1965	1	-	-	193	1,941	2,135	-	-	-	780	1,825	2,605	1	-	-	973	3,766	4,740
1966	1	-	32	1	581	615	12	-	-	1,794	1,762	3,568	13	-	32	1,795	2,343	4,183
1967	-	-	-	72	406	478	11	-	-	349	627	987	11	-	-	421	1,033	1,465
1968	-	-	-	50	102	152	7	-	-	6,507	621	7,135	7	-	-	6,557	723	7,287
1969	-	-	63	330	601	994	2	-	-	3,649	508	4,159	2	-	63	3,979	1,109	5,153
1970	-	-	6	55	960	1,021	-	-	35	5,001	458	5,494	0	-	41	5,056	1,418	6,515
1971	11	-	-	14	2,315	2,340	-	-	122	5,457	2,900	8,479	11	-	122	5,471	5,215	10,819
1972	15	-	-	12	2,643	2,670	19	-	52	4,684	315	5,070	34	-	52	4,696	2,958	7,740
1973	-	-	-	321	1,132	1,453	14	-	120	5,108	1,863	7,105	14	-	120	5,429	2,995	8,558
1974	19	-	123	7,722	10,431	18,295	8	-	5	3,818	183	4,014	27	-	128	11,540	10,614	22,309
1975	2	-	319	2,163	8,364	10,848	2	-	97	6,267	2,858	9,224	4	-	416	8,430	11,222	20,072
1976	2	10	26	1,331	7,620	8,989	13	-	189	5,492	1,705	7,399	15	10	215	6,823	9,325	16,388
1977	8	-	58	65	15,998	16,129	35	-	498	2,773	12,192	15,498	43	-	556	2,838	28,190	31,627
1978	19	-	-	22,869	8,782	31,670	35	-	225	13,063	4,295	17,618	54	-	225	35,932	13,077	49,288
1979	9	-	29	5,860	5,391	11,289	11	-	1,120	6,353	3,273	10,757	20	-	1,149	12,213	8,664	22,046
1980	8	-	-	10,007	13,922	23,937	129	-	2,157	22,246	5,983	30,515	137	-	2,157	32,253	19,905	54,452
1981	4	-	508	3,202	18,666	22,380	35	14	1,726	5,584	8,579	15,938	39	14	2,234	8,786	27,245	38,318
1982	20	-	1,183	18,512	13,447	33,162	21	6	1,829	19,202	4,831	25,889	41	6	3,012	37,714	18,278	59,051
1983	23	-	261	308	11,691	12,283	74	53	1,911	8,086	7,091	17,215	97	53	2,172	8,394	18,782	29,498
1984	7	-	820	-	3,744	4,571	83	16	1,795	17,182	4,883	23,959	90	16	2,615	17,182	8,627	28,530
1985	21	-	356	-	6,219	6,596	56	114	1,054	2,117	5,667	9,008	77	114	1,410	2,117	11,886	15,604
1986	6	-	50	-	8,160	8,216	150	107	688	8,720	8,085	17,750	156	107	738	8,720	16,245	25,966
1987	3	-	577	-	5,646	6,226	200	107	1,100	1,251	8,394	11,052	203	107	1,677	1,251	14,040	17,278
1988	2	-	54	182	1,628	1,866	63	133	1,076	2,159	5,952	9,383	65	133	1,130	2,341	7,580	11,249
1989	2	0	0	123	492	617	24	131	469	924	3,399	4,947	26	131	469	1,047	3,891	5,564
1990	0	0	0	0	0	0	58	234	510	2,233	4,246	7,281	58	234	510	2,233	4,246	7,281
1991	0	0	0	0	0	0	83	166	1,279	194	3,715	5,437	83	166	1,279	194	3,715	5,437
1992	1	2	693	185	881	1,762	152	163	1,481	7,351	1,684	10,831	153	165	2,174	7,536	2,565	12,593
1993	0	2	611	0	132	745	52	80	2,070	873	1,766	4,841	52	82	2,681	873	1,898	5,586
1994	0	1	287	0	66	354	23	69	983	6,556	1,673	9,304	23	70	1,270	6,556	1,739	9,658
1995	0	1	369	0	122	492	26	148	1,365	336	3,794	5,669	26	149	1,734	336	3,916	6,161
1996	0	0	9	13	3	25	9	185	828	3,510	2,287	6,819	9	185	837	3,523	2,290	6,844
1997	0	0	0	0	0	0	10	50	325	175	2,696	3,256	10	50	325	175	2,696	3,256
1998	0	0	0	0	0	0	15	14	1,057	4,797	964	6,847	15	14	1,057	4,797	964	6,847
1999 <sup>b</sup>	0	0	0	0	0	0	11	85	161	58	337	652	11	85	161	58	337	652

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Table 2.—Page 2 of 2.

Year	SUBDISTRICT 1 (Nome)																	
	Commercial						Subsistence <sup>a</sup>					Combined						
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	0	0	0	0	0	0	7	26	747	2,657	535	3,972	7	26	747	2,657	535	3,972
2001	0	0	0	0	0	0	2	92	425	113	858	1,490	2	92	425	113	858	1,490
2002	0	0	0	0	0	0	4	79	666	3,161	1,114	5,024	4	79	666	3,161	1,114	5,024
2003	0	0	0	0	0	0	63	76	351	507	565	1,562	63	76	351	507	565	1,562
2004	0	0	0	0	0	0	100	106	1,574	15,047	685	17,512	100	106	1,574	15,047	685	17,512
2005	0	0	0	0	0	0	62	177	1,287	5,075	803	7,404	62	177	1,287	5,075	803	7,404
2006	0	0	0	0	0	0	24	159	3,808	9,329	940	14,260	24	159	3,808	9,329	940	14,260
2007	0	0	0	0	0	0	18	297	1,103	850	2,938	5,206	18	297	1,103	850	2,938	5,206
2008	0	0	0	0	0	0	39	127	3,423	12,592	739	16,920	39	127	3,423	12,592	739	16,920
2009	0	0	0	0	0	0	32	58	1,127	471	383	2,071	32	58	1,127	471	383	2,071
5-year avg. <sup>d</sup>	0	0	0	0	0	0	35	164	2,150	5,663	1,161	9,172	35	164	2,150	5,663	1,161	9,172
10-year avg. <sup>e</sup>	0	0	0	0	0	0	35	120	1,451	4,980	956	7,542	35	120	1,451	4,980	956	7,542

<sup>a</sup> Subsistence harvest data are incomplete prior to 1975. From 1975–2009, a permit was required to subsistence fish and harvest numbers are from permits returned.

<sup>b</sup> Beginning in 1999, Tier II chum salmon fishing restrictions limited the number of permit holders that could fish for chum salmon.

<sup>c</sup> Beginning in 2006, Tier II chum salmon fishing restrictions have been suspended.

<sup>d</sup> This average includes the years 2005–2009.

<sup>e</sup> This average includes the years 2000–2009.

Submitted by ADF&G; source: RC 4, Tab 4, SP 09-19 (from 1/10 ANK BOF Meeting)  
 2/2/10

Table 1.—Historical salmon escapements at Niukluk River counting tower, 1995–2009. *Subdistrict*

Year	Operating period	Chum	Pink	Chinook <sup>a</sup>	Coho
1995	June 29–Sept 12	86,332	17,088	123	4,713
1996	June 23–Sept 12	80,178	1,154,922	243	12,781
1997	June 28–Sept 09	57,305	10,468	259	3,994
1998	July 04–Aug 09	45,588	1,624,438	260	840
1999	June 04–Sept 04	35,239	20,351	40	4,260
2000	July 04–Aug 27	29,573	961,603	48	11,382
2001	July 10–Sept 08	30,662	41,625	30	3,468
2002	June 25–Sept 10	35,307	645,141	621	7,391
2003	June 25–Sept 10	20,018	75,855	179	1,282
2004	June 25–Sept 08	10,770	975,895	141	2,064
2005	June 28–Sept 09	25,598	270,424	41	2,727
2006	June 26–Sept 08	29,199	1,371,919	39	11,169
2007	July 01–Sept 04	50,994	43,617	30	3,498
2008	July 01–Sept 06	12,078	669,234	33	13,779
2009	July 03–Sept 02	15,879	24,204	204	6,861
<b>5-year avg. <sup>b</sup></b>		<b>26,750</b>	<b>475,880</b>	<b>69</b>	<b>7,607</b>

<sup>a</sup> Chinook salmon counts from 1965–1984 were not expanded. Counts in 1985 and after were expanded.

<sup>b</sup> 5-year average from 2005–2009.

02/10

Table 2.—Historical salmon escapements at Kwiniuk River counting tower, 1965–2009. *Subdistrict 3*

Year	Operating period	Chum	Pink	Chinook	Coho
1965	June 18–Jul 19	32,861	8,668	19	
1966	June 19–Jul 28	32,786	10,629	7	
1967	June 18–Jul 28	26,661	3,587	13	
1968	June 18–Jul 24	19,976	129,052	27	
1969	June 26–Jul 26	19,687	56,683	12	
1970	June 25–Jul 29	66,604	226,831		
1971	June 29–Jul 29	38,679	16,634		
1972	June 28–Jul 27	30,686	62,461	65	
1973	June 25–Jul 25	28,029	37,070	57	
1974	June 20–Jul 26	35,161	39,375	62	
1975	July 04–Jul 26	14,049	55,293	44	
1976	July 04–Jul 25	8,508	35,226	12	
1977	June 26–Jul 25	21,798	47,934		
1978	July 04–Jul 22	11,049	70,148		
1979	June 28–Jul 25	12,355	167,492	107	
1980	June 22–Jul 28	19,374	319,363	177	
1981	June 19–Aug 02	34,565	566,534	136	
1982	June 21–Jul 26	44,099	469,674	138	
1983	June 19–Jul 27	56,907	251,965	267	
1984	June 19–Jul 25	54,043	736,544	736 <sup>a</sup>	
1985	June 26–Jul 28	9,013	18,237	955	
1986	June 19–Jul 26	24,700	241,446	654	
1987	June 25–Jul 23	16,133	5,566	317	
1988	June 18–Jul 26	13,303	187,907	321	
1989	June 27–Jul 27	14,529	27,488	248	
1990	June 21–Jul 25	13,957	416,512	900	
1991	June 18–Jul 27	19,801	53,499	708	
1992	June 27–Jul 28	12,077	1,464,716	479	
1993	June 27–Jul 27	15,824	43,063	600	
1994	June 23–Aug 09	33,012	2,303,114	625	2,547
1995	June 21–Jul 26	42,500	17,511	498	114
1996	June 20–Jul 25	28,493	907,893	577	461
1997	June 18–Jul 27	20,119	9,535	974	
1998	June 18–Jul 27	24,247	655,934	303	
1999	June 25–Jul 28	8,763	607	116	
2000	June 22–Jul 27	12,879	750,173	144	41
2001	June 27–Sept 15	16,598	8,423	261	9,532
2002	June 17–Sept 11	37,995	1,114,410	778	6,459
2003	June 15–Sept 15	12,123	22,329	744	5,490
2004	June 16–Sept 14	10,362	3,054,684	663	11,240
2005	June 17–Sept 13	12,083	341,048	342	12,950
2006	June 22–Sept 12	39,519	1,347,090	195	22,341
2007	June 21–Sept 10	27,756	54,255	258	9,429
2008	June 23–Sept 07	9,462	1,442,246	237	10,461
2009	June 24–Sept 13	8,733	42,957	444	8,563
5-year avg. <sup>b</sup>		19,511	645,519	295	12,749

<sup>a</sup> Chinook salmon counts from 1965-1984 were not expanded. Counts in 1985 and after were expanded.

<sup>b</sup> 5-year average from 2005–2009.

Tubutulik River					
Year <sup>a</sup>	Chinook	Chum	Pink	Pink & Chum <sup>e</sup>	Coho
1962	3	-	-	16,690	-
1963	9	16,069	4,355	-	-
1964	-	15,469	10,043	3,420	-
1965					
1966	-	5,514	26,000	-	-
1967	1	-	-	22,475	-
1969	3	12,040	12,788	3,045	-
1970	-	53,290	136,590	-	-
1971	-	16,820	7,500	5,065	-
1972	-	8,070	21,100	-	-
1973	131	5,383	15,665	-	-
1974	136	9,560	17,940	-	-
1975 <sup>h</sup>	7	17,141	38,003	-	-
1976	-	1,095	6,095	2,600	-
1977	-	8,540	4,685	-	-
1978	2	5,865	1,364	-	-
1979	-	812	1,624	-	-
1980	405	21,616	663,937	-	-
1981	30	2,105	480	-	-
1982	49	2,044	53,605	-	-
1983	135 <sup>1</sup>	16,345 <sup>1</sup>	40,797 <sup>1</sup>	-	-
1984	270	56,210	93,600	-	-
1985 <sup>h</sup>	472	13,645	8,940	-	-
1986	453	5,975	35,680	-	-
1987	474	9,605	580	-	-
1988	561	4,662	114,340	-	-
1990	397	4,350	186,400	-	-
1991	661	7,085	26,870	-	-
1992 <sup>h</sup>	260	2,595	138,600	-	-
1993	1,061	8,740	18,650	-	1,395
1995	377	16,158	4,020	-	930
1996	439	10,790	226,750	-	-
1997	1,946	3,105	16,890	-	-
1998	894	10,180	1,124,800	-	-
1999	-	-	-	-	-
2001	77	863	-	-	-
2002	42	180	182,000	-	-
2003	50	1,352	60	-	292
2004	321	1,117	391,000	-	779
2005	78	1,336	48,203	-	-
2006	-	-	-	-	-
2007	823	7,045	32,250	-	4,552
2008					4,197
2009	627	3,161	12,695	-	-

Note: Years for which there are no survey or weir count data are excluded.

<sup>a</sup> Represents "high count" for season.

<sup>b</sup> Boat survey.

<sup>c</sup> Numerous pink salmon made enumerating of chum salmon difficult; pink count may include some chum.

<sup>d</sup> Helicopter survey.

<sup>e</sup> Surveyor unable to distinguish between the two species.

<sup>f</sup> Foot survey.

<sup>g</sup> Total counts obtained from counting tower.

<sup>h</sup> Poor survey conditions or partial survey, poor counting tower conditions.

<sup>i</sup> Aerial survey; not tower count.

<sup>j</sup> Includes counts from Ophir Creek.

<sup>k</sup> Includes counts from Casadepaga and Ophir Creeks.

<sup>l</sup> Combined tower and aerial survey counts below the tower.

Table 3.—Commercial and subsistence salmon catch by species by year in Subdistrict 2 (Golovin), Norton Sound District, 1962–2009.

Year	SUBDISTRICT 2 (GOLOVIN)																	
	Commercial						Subsistence						Combined					
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
1962	45	11	264	10,276	68,720	79,316	-	-	-	-	-	-	45	11	264	10,276	68,720	79,316
1963	40	40	-	19,677	49,850	69,607	-	-	118	5,702	9,319	15,139	40	40	118	25,379	59,169	84,746
1964	27	40	3	7,236	58,301	65,607	-	-	-	-	-	-	27	40	3	7,236	58,301	65,607
1965	-	-	-	-	-	-	2	-	49	1,523	3,847	5,421	2	-	49	1,523	3,847	5,421
1966	17	14	584	4,665	29,791	35,071	4	-	176	1,573	3,520	5,273	21	14	760	6,238	33,311	40,344
1967	10	-	747	5,790	31,193	37,740	3	-	185	2,774	4,803	7,765	13	-	932	8,564	35,996	45,505
1968	12	-	205	18,428	10,011	28,656	4	-	181	4,955	1,744	6,884	16	-	386	23,383	11,755	35,540
1969	28	-	1,224	23,208	20,949	45,409	2	-	190	2,760	2,514	5,466	30	-	1,414	25,968	23,463	50,875
1970	13	-	3	18,721	20,566	39,303	4	-	353	2,046	2,614	5,017	17	-	356	20,767	23,180	44,320
1971	37	-	197	2,735	33,824	36,793	7	-	191	1,544	1,936	3,678	44	-	388	4,279	35,760	40,471
1972	36	-	20	6,562	27,097	33,715	4	-	62	1,735	2,028	3,829	40	-	82	8,297	29,125	37,544
1973	70	-	183	14,145	41,689	56,087	1	-	48	9	74	132	71	-	231	14,154	41,763	56,219
1974	30	-	3	28,340	30,173	58,546	3	-	-	967	205	1,175	33	-	3	29,307	30,378	59,721
1975	17	-	206	10,770	41,761	52,754	-	-	1	2,011	2,025	4,037	17	-	207	12,781	43,786	56,791
1976	12	-	1,311	24,051	30,219	55,593	3	-	-	1,995	1,128	3,123	12	-	1,311	26,046	31,347	58,716
1977	26	-	426	7,928	53,912	62,292	3	-	80	703	2,915	3,701	29	-	506	8,631	56,827	65,993
1978	22	-	94	72,033	41,462	113,611	1	-	-	2,470	1,061	3,532	23	-	94	74,503	42,523	117,143
1979	75	49	1,606	45,948	30,201	77,879	-	-	845	2,546	2,840	6,231	75	49	2,451	48,494	33,041	84,110
1980	36	36	328	10,774	52,609	63,783	12	-	692	10,727	4,057	15,488	48	36	1,020	21,501	56,666	79,271
1981	23	5	13	49,755	58,323	108,119	8	-	1,520	5,158	5,543	12,229	31	5	1,533	54,913	63,866	120,348
1982	78	5	4,281	39,510	51,970	95,844	7	-	1,289	4,752	1,868	7,916	85	5	5,570	44,262	53,838	103,760
1983	52	10	295	17,414	48,283	66,054	a	a	a	a	a	a	a	a	a	a	a	a
1984	31	-	2,462	88,588	54,153	145,234	a	a	a	a	a	a	a	a	a	a	a	a
1985	193	113	1,196	3,019	55,781	60,302	12	2	430	1,904	9,577	11,925	205	115	1,626	4,923	65,358	72,227
1986	81	8	958	25,425	69,725	96,197	a	a	a	a	a	a	a	a	a	a	a	a
1987	166	51	2,203	1,579	44,334	48,333	a	a	a	a	a	a	a	a	a	a	a	a
1988	108	921	2,149	31,559	33,348	68,085	a	a	a	a	a	a	a	a	a	a	a	a
1989	0	0	0	0	0	0	a	a	a	a	a	a	a	a	a	a	a	a
1990	52	21	0	0	15,993	16,066	a	a	a	a	a	a	a	a	a	a	a	a
1991	49	1	0	0	14,839	14,889	a	a	a	a	a	a	a	a	a	a	a	a
1992	6	9	2,085	0	1,002	3,102	a	a	a	a	a	a	a	a	a	a	a	a
1993	1	4	2	8,480	2,803	11,290	a	a	a	a	a	a	a	a	a	a	a	a
1994 <sup>b</sup>	0	0	3,424	0	111	3,535	253	168	733	8,410	1,337	10,901	253	168	4,157	8,410	1,448	14,436
1995 <sup>b</sup>	0	0	1,616	4,296	1,987	7,899	165	34	1,649	7,818	10,373	20,039	165	34	3,265	12,114	12,360	27,938
1996 <sup>b</sup>	0	0	638	0	0	638	86	134	3,014	17,399	2,867	23,500	86	134	3,652	17,399	2,867	24,138
1997 <sup>b</sup>	19	2	102	20	8,003	8,146	138	427	555	4,570	4,891	10,581	157	429	657	4,590	12,894	18,727

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Table 3.—Page 2 of 2.

Year	SUBDISTRICT 2 (GOLOVIN)																	
	Commercial						Subsistence						Combined					
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
1998 <sup>b</sup>	1	0	3	106,761	723	107,488	184	37	1,292	13,340	1,893	16,746	185	37	1,295	120,101	2,616	124,234
1999 <sup>b</sup>	0	0	0	0	0	0	60	48	1,234	469	3,656	5,467	60	48	1,234	469	3,656	5,467
2000 <sup>b</sup>	0	0	1,645	17,408	164	19,217	169	18	2,335	10,906	1,155	14,583	169	18	3,980	28,314	1,319	33,800
2001 <sup>b</sup>	0	43	30	0	7,094	7,167	89	72	880	1,665	3,291	5,997	89	115	910	1,665	10,385	13,164
2002 <sup>b</sup>	0	0	0	0	0	0	69	66	1,640	14,430	1,882	18,087	69	66	1,640	14,430	1,882	18,087
2003 <sup>b</sup>	0	0	0	0	0	0	166	28	309	5,012	1,477	6,992	166	28	309	5,012	1,477	6,992
2004 <sup>c</sup>	0	0	0	0	0	0	164	6	654	19,936	880	21,640	164	6	654	19,936	880	21,640
2005 <sup>c</sup>	0	0	0	0	0	0	96	15	686	11,467	1,852	14,116	96	15	686	11,467	1,852	14,116
2006 <sup>c</sup>	0	0	0	0	0	0	136	38	1,760	14,670	722	17,326	136	38	1,760	14,670	722	17,326
2007 <sup>c</sup>	0	0	0	0	0	0	188	321	1,179	3,980	4,217	9,885	188	321	1,179	3,980	4,217	9,885
2008 <sup>c</sup>	0	0	256	2,699	623	3,578	146	95	2,337	10,155	350	13,083	146	95	2,593	12,854	973	16,661
2009	0	0	2,452	0	87	2,539	237	33	1,377	3,787	1,694	7,128	237	33	3,829	3,787	1,781	9,667
5-year avg. <sup>d</sup>	0	0	542	540	142	1,223	161	100	1,468	8,812	1,767	12,308	161	100	2,009	9,352	1,909	13,531

<sup>a</sup> Subsistence harvests are based on household surveys. The number of households surveyed is unknown and varies annually. Actual harvests are greater.

<sup>b</sup> Subsistence harvests are based on expanded household survey estimates for Golovin and White Mountain. Harvest numbers do not include other residents outside of subdistrict that fished.

<sup>c</sup> Beginning in 2004, a permit was required for Golovin Subdistrict that replaced household surveys and includes residents outside of subdistrict that fished.

<sup>d</sup> 5-year average from 2005–2009.

Table 4.—Commercial and subsistence salmon catch by species, by year in Subdistrict 3 (Moses Point), Norton Sound District, 1962–2009.

Year	SUBDISTRICT 3 (MOSES POINT)																		
	Commercial					Subsistence					Combined								
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	
1962	27	-	-	11,100	50,683	61,810	-	-	-	-	-	-	-	-	-	-	-	-	-
1963	15	-	-	2,549	46,274	48,838	5	-	-	5,808	8,316	14,129	20	-	-	8,357	54,590	62,967	
1964	32	3	-	3,372	28,568	31,975	-	-	-	63	348	411	-	-	-	3,435	28,916	32,386	
1965	-	-	-	-	-	-	16	-	72	1,325	9,857	11,270	-	-	-	-	-	-	-
1966	17	-	-	2,745	24,741	27,503	14	-	250	2,511	5,409	8,184	31	-	-	5,256	30,150	35,687	
1967	-	-	-	-	-	-	39	-	116	1,322	9,913	11,390	-	-	-	-	-	-	-
1968	12	-	1	9,012	17,908	26,933	2	-	80	6,135	2,527	8,744	14	-	81	15,147	20,435	35,677	
1969	29	-	-	11,807	26,594	38,430	9	-	109	1,790	1,303	3,211	38	-	-	13,597	27,897	41,641	
1970	39	-	-	13,052	29,726	42,817	16	-	160	4,661	6,960	11,797	55	-	-	17,713	36,686	54,614	
1971	95	-	4	922	43,831	44,852	16	-	271	1,046	2,227	3,560	111	-	275	1,968	46,058	48,412	
1972	190	-	11	5,866	30,919	36,986	44	-	108	1,579	2,070	3,801	234	-	119	7,445	32,989	40,787	
1973	134	-	-	10,603	31,389	42,126	2	-	-	-	298	300	136	-	-	10,603	31,687	42,426	
1974	198	-	9	12,821	55,276	68,304	3	-	-	2,382	1,723	4,108	201	-	-	15,203	56,999	72,412	
1975	16	-	-	4,407	46,699	51,122	2	-	6	1,280	508	1,796	18	-	-	5,687	47,207	52,918	
1976	24	-	232	5,072	10,890	16,218	22	-	-	5,016	1,548	6,586	46	-	-	10,088	12,438	22,804	
1977	96	-	6	9,443	47,455	57,000	22	-	225	1,145	1,170	2,562	118	-	231	10,588	48,625	59,562	
1978	444	-	244	39,694	44,595	84,977	38	-	407	1,995	1,229	3,669	482	-	651	41,689	45,824	88,646	
1979	1,035	-	177	40,811	37,123	79,146	16	-	890	6,078	1,195	8,179	1,051	-	1,067	46,889	38,318	87,325	
1980	502	-	-	1,435	14,755	16,692	131	-	229	4,232	1,393	5,985	633	-	-	5,667	16,148	22,677	
1981	198	-	5	26,417	29,325	55,945	32	-	2,345	6,530	2,819	11,726	230	-	2,350	32,947	32,144	67,671	
1982	253	-	318	9,849	40,030	50,450	1	-	1,835	3,785	3,537	9,158	254	-	2,153	13,634	43,567	59,608	
1983	254	-	-	17,027	65,776	83,057	a	a	a	a	a	a	a	a	a	a	a	a	a
1984	-	-	5,959	28,035	9,477	43,471	a	a	a	a	a	a	a	a	a	a	a	a	a
1985	816	32	1,803	559	24,466	27,676	67	-	1,389	1,212	947	3,615	883	-	3,192	1,771	25,413	31,291	
1986	600	41	5,874	15,795	20,668	42,978	a	a	a	a	a	a	a	a	a	a	a	a	a
1987	907	15	64	568	17,278	18,832	a	a	a	a	a	a	a	a	a	a	a	a	a
1988	663	93	3,974	13,703	18,585	37,018	a	a	a	a	a	a	a	a	a	a	a	a	a
1989	62	0	0	0	167	229	a	a	a	a	a	a	a	a	a	a	a	a	a
1990	202	0	0	501	3,723	4,426	a	a	a	a	a	a	a	a	a	a	a	a	a
1991 <sup>b</sup>	161	0	0	0	804	965	312	-	2,153	3,555	2,660	8,680	473	-	2,153	3,555	3,464	9,645	
1992 <sup>b</sup>	0	0	3,531	0	6	3,537	100	-	1,281	6,152	1,260	8,793	100	-	4,812	6,152	1,266	12,330	
1993 <sup>b</sup>	3	0	4,065	0	167	4,235	368	-	1,217	1,726	1,635	4,946	371	-	5,282	1,726	1,802	9,181	
1994 <sup>b</sup>	0	0	5,345	0	414	5,759	322	104	1,180	9,345	3,476	14,427	322	104	6,525	9,345	3,890	20,186	
1995 <sup>b</sup>	4	44	3,742	2,962	1,171	7,923	284	17	1,353	2,046	3,774	7,474	288	61	5,095	5,008	4,945	15,397	
1996 <sup>b</sup>	0	0	1,915	68,609	0	70,524	417	52	1,720	9,442	2,319	13,950	417	52	3,635	78,051	2,319	84,474	
1997 <sup>b</sup>	844	0	1,409	0	2,683	4,936	619	50	1,213	1,314	2,064	5,260	1,463	50	2,622	1,314	4,747	10,196	

-continued-

Table 4.–Page 2 of 2.

Year	SUBDISTRICT 3 (MOSES POINT)																	
	Commercial						Subsistence						Combined					
	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Pink	Chum	Total
1990	202	0	0	501	3,723	4,426	-	-	-	-	-	-	-	-	-	-	-	-
1991	161	0	0	0	804	965	312	-	2,153	3,555	2,660	8,680	473	-	2,153	3,555	3,464	9,645
1992	0	0	3,531	0	6	3,537	100	-	1,281	6,152	1,260	8,793	100	-	4,812	6,152	1,266	12,330
1993	3	0	4,065	0	167	4,235	368	-	1,217	1,726	1,635	4,946	371	-	5,282	1,726	1,802	9,181
1994 <sup>b</sup>	0	0	5,345	0	414	5,759	322	104	1,180	9,345	3,476	14,427	322	104	6,525	9,345	3,890	20,186
1995 <sup>b</sup>	4	44	3,742	2,962	1,171	7,923	284	17	1,353	2,046	3,774	7,474	288	61	5,095	5,008	4,945	15,397
1996 <sup>b</sup>	0	0	1,915	68,609	0	70,524	417	52	1,720	9,442	2,319	13,951	417	52	3,635	78,051	2,319	84,475
1997 <sup>b</sup>	844	0	1,409	0	2,683	4,936	619	50	1,213	1,314	2,064	5,261	1,463	50	2,622	1,314	4,747	10,197
1998 <sup>b</sup>	105	0	1,462	145,669	2,311	149,547	414	49	1,831	6,891	1,376	10,561	519	49	3,293	152,560	3,687	160,108
1999 <sup>b</sup>	0	0	0	0	0	0	424	13	975	1,564	744	3,720	424	13	975	1,564	744	3,720
2000 <sup>b</sup>	10	0	5,182	46,369	535	52,096	248	46	1,429	5,983	1,173	8,879	258	46	6,611	52,352	1,708	60,975
2001 <sup>b</sup>	7	0	1,696	0	681	2,384	427	70	1,352	1,390	898	4,137	434	70	3,048	1,390	1,579	6,521
2002 <sup>b</sup>	0	0	0	0	0	0	565	14	1,801	8,345	1,451	12,176	565	14	1,801	8,345	1,451	12,176
2003 <sup>b</sup>	0	0	0	0	0	0	660	39	1,143	2,524	1,687	6,053	660	39	1,143	2,524	1,687	6,053
2004 <sup>c</sup>	0	0	0	0	0	0	412	0	704	7,858	683	9,657	412	0	704	7,858	683	9,657
2005 <sup>c</sup>	0	0	0	0	0	0	225	9	1,011	3,721	598	5,564	225	9	1,011	3,721	598	5,564
2006 <sup>c</sup>	0	0	0	0	0	0	179	13	1,769	5,216	1,267	8,444	179	0	1,769	5,216	1,267	8,444
2007 <sup>c</sup>	1	0	5,908	1,648	4,567	12,124	260	0	2,295	1,742	2,334	6,631	261	0	8,203	3,390	6,901	18,755
2008 <sup>c</sup>	5	0	4,586	14,536	304	19,431	269	0	1,804	7,655	1,284	11,012	274	0	6,390	22,191	1,588	30,443
2009 <sup>c</sup>	0	0	9,582	35	597	10,214	532	13	2,417	1,505	595	5,062	532	13	11,999	1,540	1,192	15,276
5-year avg. <sup>d</sup>	1	0	4,015	3,244	1,094	8,354	293	7	1,859	3,968	1,216	7,343	294	7	5,874	7,212	2,309	15,696

<sup>a</sup> Subsistence harvests are based on household surveys. The number of households surveyed is unknown and varies annually. Actual harvests are greater.

<sup>b</sup> Subsistence harvests are based on expanded household survey estimates for Elim. Harvest numbers do not include residents outside of Elim that fished in the subdistrict.

<sup>c</sup> Beginning in 2004, a permit was required for Moses Point Subdistrict that replaced household surveys and includes residents outside of subdistrict that fished.

<sup>d</sup> 5-year average from 2005–2009.



BOF AK 02-03-10

Nelson Lagoon has been a long established fishing community throughout time. Ancient Native Tribes have used the resources of Nelson River (David's River) to sustain their families throughout the hard winters. Back then, fish were in abundance and there was not a question of whether the fish would be there from season to season.

In the late 1800's and early 1900's this resource was decimated by fish companies constructing fish traps located up and down the River System. These traps nearly wiped out the entire fish resource over a few simple years.

Today, according to elders in the community, the Native Village of Nelson Lagoon is in the same dire situation as at the time of the fish trap decimation.

Today, fuel costs are excessive, groceries are financially unattainable, and the overall cost of living is 5 times the cost of Anchorage.

Nelson Lagoon sits in a region classified as Region 3, this means that out of all the Regions that the shipping companies ship to, Nelson Lagoon is the most expensive.

The State of Alaska Dept. of Fish & Game and Concerned Area M Fisherman have, by way of area proposals, diminished Nelson Lagoons fish recovery from a marginal average of 20% (previous years 26%) to a dismal 9% share. This is a trend that is evident in the graphs represented at a rate of 0.5% decline every year since 2004.

Nelson Lagoon is now in a position where it cannot warrant a sustainable community with these dismal fish catch circumstances. Nelson Lagoon is solely reliant on salmon fishing alone and does not have the option of other Employment.

Alaska Dept. of Fish & Game have done their job in maintaining the minimum escapements. However, this is minimum fish escapement and rarely is their ever a surplus of fish escapement.

Concerned NLG Fisherman,

Ray Johnson

Brian Hartman

Edward Erickson

Mark McNeley

## Escapement records by sections 1962-2009

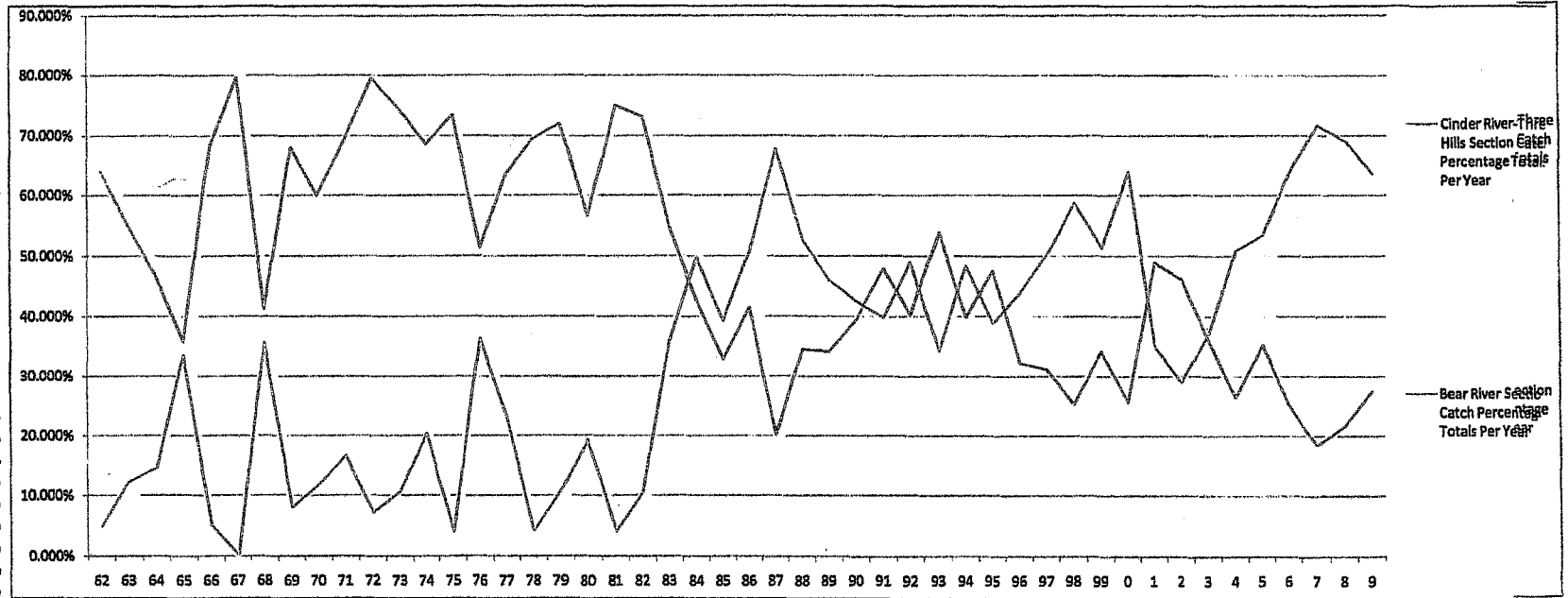
Note: Fish & Game records combined Cinder River and Outer Port Heiden Sections in "Table 3.-Northern District sockeye salmon runs by section (number of fish), 1962-2009" Published 2009 by Alaska Dept. of Fish & Game. Excluded areas from the original report that are not listed here are inner Port Heiden, Port Moller Bight & Herendeen-Moller Bay, and Caribou Flats & Black Hills Sections. Those sections excluded are not deemed as an intercept fisherys affecting Bear River and Nelson Lagoon. Where listed below as Cinder River-Three Hills, is combined sections of Cinder River, Outer Port Heiden, Ilnik and Three Hills (Cape Seniven North).

Year	Outer Port Heiden & Cinder River Section Escapement Totals Per Year	Ilnik Section Escapement Totals Per Year	Three Hills Section Escapement Totals Per Year	Bear River Section Escapement Totals Per Year	Nelson Lagoon Section Escapement Totals Per Year	Cinder River-Three Hills Section Escapement Totals Per Year
1962	5000	5900	0	215000	54200	10900
1963	1400	10400	0	238600	31000	11800
1964	1500	6500	0	250200	80000	8000
1965	7500	12500	0	137000	37000	20000
1966	3000	24300	0	185000	36500	27300
1967	3800	26400	0	200000	42000	30200
1968	4100	15000	0	166000	31000	19100
1969	3800	15600	0	406000	78500	19400
1970	1500	15300	800	294000	82400	17600
1971	2000	26100	400	281000	60100	28500
1972	400	13100	0	135400	28000	13500
1973	1200	16000	0	130100	18700	17200
1974	1300	14500	100	266500	39900	15900
1975	900	40500	300	310000	138600	41700
1976	6300	15100	600	328000	108900	22000
1977	3900	20600	100	265200	155000	24600
1978	3800	21200	0	814000	304300	25000
1979	6000	97200	300	1013000	360100	103500
1980	30000	100000	0	751000	352600	130000
1981	100000	151000	0	741500	251000	251000
1982	13000	41700	1300	361300	179600	56000
1983	9000	40000	100	358000	128800	49100
1984	16000	22300	0	414000	251000	38300
1985	12600	22700	0	451500	314800	35300
1986	25700	66800	100	279400	117900	92600
1987	15300	30700	0	266700	155700	46000
1988	2000	26900	0	347500	142500	28900
1989	4000	16600	100	487000	206800	20700
1990	14000	35700	100	564300	269200	49800
1991	47400	135000	200	681200	279200	182600
1992	15200	45100	0	471200	179700	60300
1993	20000	70000	300	501900	267200	90300
1994	83400	75300	0	581200	333400	158700
1995	47500	39000	400	430400	338700	86900
1996	60000	62500	0	431100	257000	122500
1997	33000	83000	400	398000	190100	116400
1998	57000	50600	300	469100	165300	107900
1999	12400	75000	100	408000	223300	87500
2000	51000	95000	0	275000	182700	146000
2001	33000	59000	300	351000	207100	92300
2002	11500	43000	650	324000	338400	55150
2003	102700	69000	300	432000	364211	172000
2004	58050	82000	600	467000	515397	140650
2005	141000	154000	5700	655300	303000	300700
2006	101100	88000	1800	493000	226000	190900
2007	142000	93000	1500	475702	187000	236500
2008	129800	44300	2000	353200	178600	176100
2009	133600	66000	1600	385500	159500	201200

1

Year	Cinder River-Three Hills Section Catch Percentage Totals Per Year	Bear River Section Catch Percentage Totals Per Year
1962	4.751%	64.052%
1963	12.196%	55.021%
1964	14.510%	46.841%
1965	33.448%	35.739%
1966	4.919%	68.247%
1967	0.000%	79.521%
1968	35.519%	41.211%
1969	7.939%	67.979%
1970	11.528%	59.918%
1971	16.630%	69.521%
1972	6.997%	79.450%
1973	10.528%	74.370%
1974	20.392%	68.471%
1975	3.853%	73.346%
1976	36.287%	51.340%
1977	23.149%	65.534%
1978	4.011%	69.376%
1979	10.593%	71.934%
1980	19.218%	56.516%
1981	3.892%	74.948%
1982	10.319%	73.084%
1983	35.671%	54.897%
1984	49.585%	42.497%
1985	39.087%	32.809%
1986	50.727%	41.400%
1987	67.756%	20.147%
1988	52.532%	34.471%
1989	46.021%	34.092%
1990	42.323%	39.279%
1991	39.617%	47.837%
1992	48.962%	40.161%
1993	34.068%	53.963%
1994	48.311%	39.593%
1995	38.703%	47.449%
1996	43.686%	32.148%
1997	50.176%	31.174%
1998	58.661%	25.170%
1999	51.271%	34.186%
2000	63.896%	25.625%
2001	34.915%	48.911%
2002	28.853%	46.003%
2003	37.040%	35.796%
2004	50.867%	26.368%
2005	53.380%	35.194%
2006	63.882%	25.034%
2007	71.529%	18.407%
2008	68.888%	21.615%
2009	63.491%	27.488%

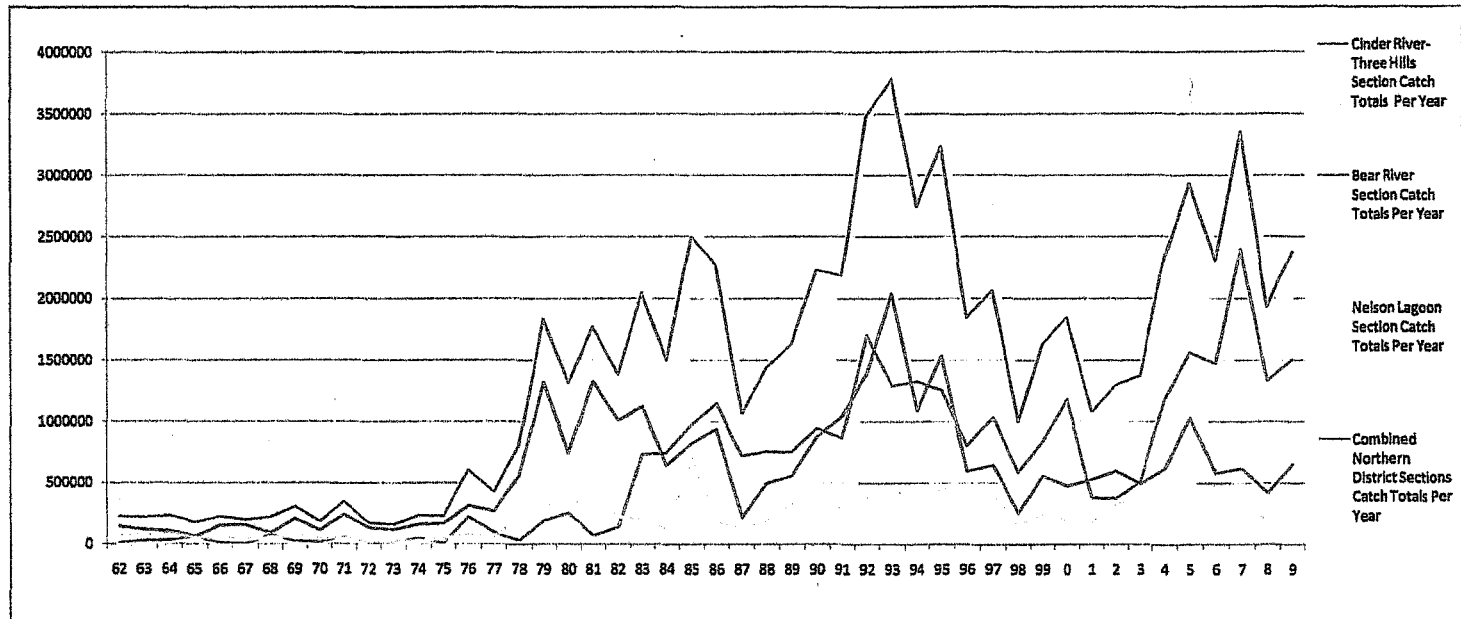
Note: Graph below shows catch percentage records of Cinder River-Three Hills sections compared to Bear River catch percentage records. According to data submitted by Alaska Department of Fish & Game 2009, nearly every instance when Cinder River-Three Hills section catches has increased, Bear River Section catches has decreased. When Cinder River-Three Hills Section has decreased in catch, Bear River Section has increased. Not until early 1980's has the catch percentages been extremely increased in the Cinder River-Three Hills Sections.



Years	Cinder River- Three Hills Section Catch Totals Per Year	Bear River Section Catch Totals Per Year	Nelson Lagoon Section Catch Totals Per Year	Combined Northern District Sections Catch Totals Per Year
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Note: Below graph shows total catch records of Cinder River-Three Hills, Bear River, Nelson Lagoon Sections with the total of Northern District Sections Catch totals added. Data submitted by Alaska Department of Fish & Game 2009. Not until early 1980's has the catch in Cinder River-Three Hills Section increased at such a rate to dominate the entire catch of the Northern District by as much as 71.5% in 2007.

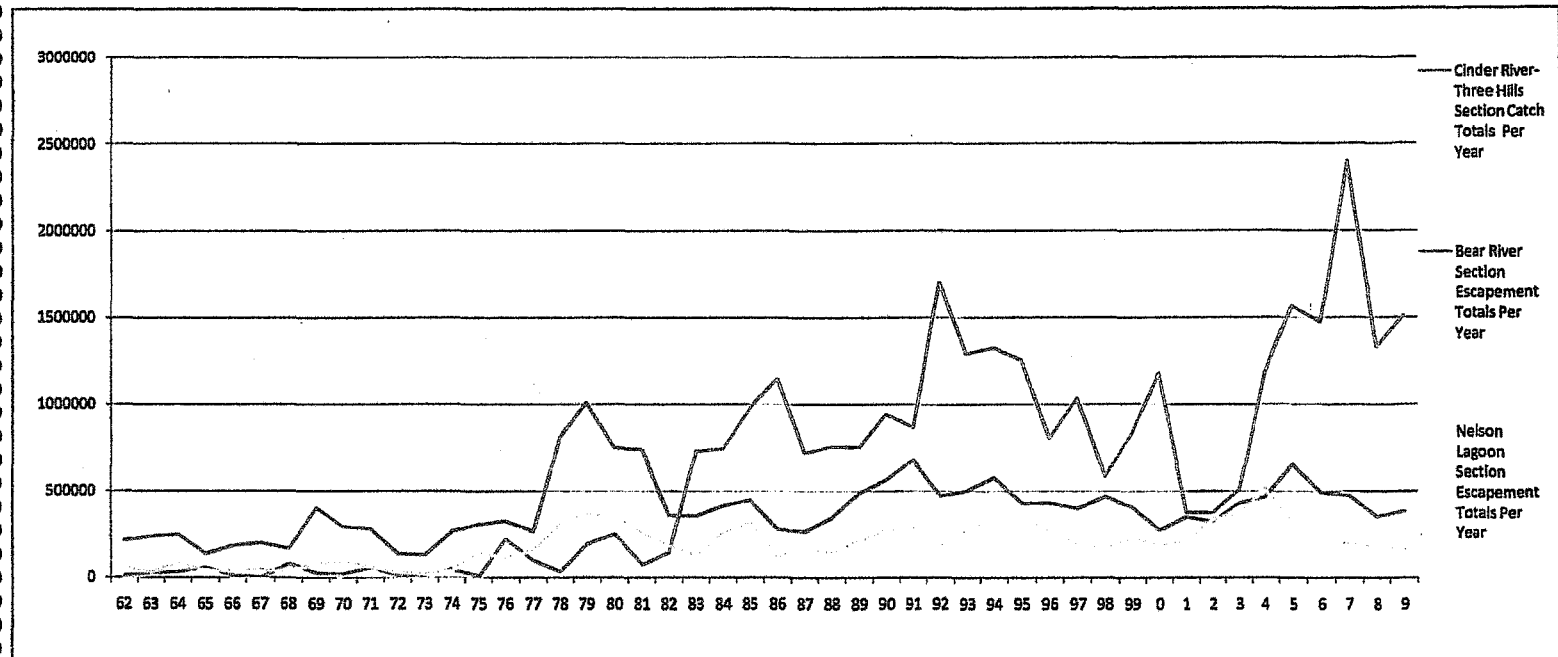
1962	10600	142900	69600	223100
1963	26600	120000	71500	218100
1964	33300	107500	88700	229500
1965	58400	62400	53800	174600
1966	11000	152600	60000	223600
1967	0	156100	40200	196300
1968	78000	90500	51100	219600
1969	24000	205500	72800	302300
1970	21011	109209	52043	182263
1971	57082	238628	47536	343246
1972	11991	136160	23227	171378
1973	16659	117678	23896	158233
1974	46895	157457	25611	229963
1975	8707	165730	51519	225956
1976	219722	310869	74914	605505
1977	97895	268676	56514	422885
1978	32168	556393	213430	801991
1979	194502	1320851	320856	1836209
1980	252273	741861	318526	1312660
1981	68917	1327219	374722	1770858
1982	142506	1009291	229203	1381000
1983	729684	1122976	192947	2045607
1984	743715	637400	118756	1499871
1985	978487	821312	703546	2503345
1986	1149529	938177	178401	2266107
1987	719565	213958	128471	1061994
1988	754288	494951	186616	1435855
1989	752031	557100	324979	1634110
1990	944146	876248	410417	2230811
1991	865151	1044660	273960	2183771
1992	1704687	1398253	378706	3481646
1993	1288970	2041716	452842	3783528
1994	1325742	1089249	329212	2744203
1995	1252921	1536039	448281	3237241
1996	805043	592413	445335	1842791
1997	1034069	642461	384370	2060900
1998	585737	251327	161441	998505
1999	836573	557805	237293	1631671
2000	1181002	473631	193694	1848327
2001	376401	527284	174363	1078048
2002	373979	596270	325904	1296153
2003	508944	491857	379252	1374053
2004	1178971	611147	527637	2317755
2005	1563738	1030989	334702	2929429
2006	1471244	576552	255265	2303061
2007	2399146	617402	337556	3354104
2008	1329835	417261	183330	1930426
2009	1507655	652732	214217	2374604



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Years	Cinder River-Three Hills Section Catch Totals Per Year	Bear River Section Escapement Totals Per Year	Nelson Lagoon Section Escapement Totals Per Year
1962	10600	215000	54200
1963	26600	238600	31000
1964	33300	250200	80000
1965	58400	137000	37000
1966	11000	185000	36500
1967	0	200000	42000
1968	78000	166000	31000
1969	24000	406000	78500
1970	21011	294000	82400
1971	57082	281000	60100
1972	11991	135400	28000
1973	16659	130100	18700
1974	46895	266500	39900
1975	8707	310000	138600
1976	219722	328000	108900
1977	97895	265200	155000
1978	32168	814000	304300
1979	194502	1013000	360100
1980	252273	751000	352600
1981	68917	741500	251000
1982	142506	361300	179600
1983	729684	358000	128800
1984	743715	414000	251000
1985	978487	451500	314800
1986	1149529	279400	117900
1987	719565	266700	155700
1988	754288	347500	142500
1989	752031	487000	206800
1990	944146	564300	269200
1991	865151	681200	279200
1992	1704687	471200	179700
1993	1288970	501900	267200
1994	1325742	581200	333400
1995	1252921	430400	338700
1996	805043	431100	257000
1997	1034069	398000	190100
1998	585737	469100	165300
1999	836573	408000	223300
2000	1181002	275000	182700
2001	376401	351000	207100
2002	373979	324000	338400
2003	508944	432000	364211
2004	1178971	467000	515397
2005	1563738	655300	303000
2006	1471244	493000	226000
2007	2399146	475702	187000
2008	1329835	353200	178600
2009	1507655	385500	159500

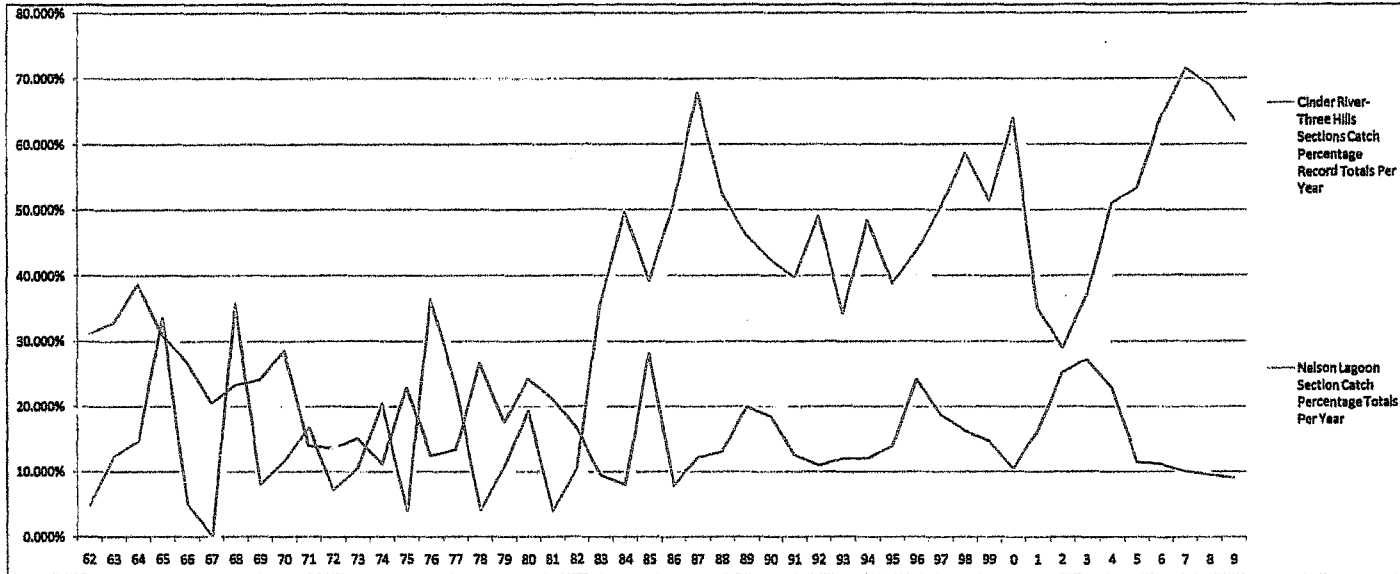
**Note:** Below graph shows total catch records of Cinder River-Three Hills Sections compared to Bear River and Nelson Lagoon Sections Escapements per year. Data submitted by Alaska Department of Fish & Game 2009. Keep in mind that the minimum escapement goals of Bear River and Nelson Lagoon Sections have been met each year due to the closures of these Terminal fisheries while intercept fishing effort in the Cinder River-Three Hills Sections continued. In order to accurately see what an impact that the Cinder River-Three Hills Sections have on Bear River and Nelson Lagoon Sections, data of catch per week needs to be compiled in relation to escapement numbers. Until and once this data is compiled, it will show the struggle these systems are having to achieve their year end Minimum Escapement Goals due to earlier and earlier continuous intercept fishing effort in the Cinder River-Three Hills Sections.



Year	Cinder River-Three Hills Section Catch Percentage Totals Per Year	Nelson Lagoon Section Catch Percentage Totals Per Year
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1962	4.751%	31.197%
1963	12.196%	32.783%
1964	14.510%	38.649%
1965	33.448%	30.813%
1966	4.919%	26.834%
1967	0.000%	20.479%
1968	35.519%	23.270%
1969	7.939%	24.082%
1970	11.528%	28.554%
1971	16.630%	13.849%
1972	6.997%	13.553%
1973	10.528%	15.102%
1974	20.392%	11.137%
1975	3.853%	22.800%
1976	36.287%	12.372%
1977	23.149%	13.317%
1978	4.011%	26.613%
1979	10.593%	17.474%
1980	19.218%	24.266%
1981	3.892%	21.160%
1982	10.319%	16.597%
1983	35.671%	9.432%
1984	49.585%	7.918%
1985	39.087%	28.104%
1986	50.727%	7.873%
1987	67.756%	12.097%
1988	52.532%	12.597%
1989	46.021%	19.887%
1990	42.323%	18.398%
1991	39.617%	12.545%
1992	48.962%	10.877%
1993	34.068%	11.969%
1994	48.311%	11.997%
1995	38.703%	13.848%
1996	43.686%	24.166%
1997	50.176%	18.651%
1998	58.661%	16.168%
1999	51.271%	14.543%
2000	63.896%	10.479%
2001	34.915%	16.174%
2002	28.853%	25.144%
2003	37.040%	27.164%
2004	50.867%	22.765%
2005	53.380%	11.426%
2006	63.882%	11.084%
2007	71.529%	10.064%
2008	68.888%	9.497%
2009	63.491%	9.021%

NOTE: Graph below shows catch percentage records of Cinder River-Three Hills sections compared to Nelson Lagoon Section catch percentage records. According to data submitted by Alaska Department of Fish & Game 2009, nearly every instance when Cinder River-Three Hills sections catch has increased, Nelson Lagoon Section catch has decreased. When Cinder River-Three Hills Section has decreased in catch, Nelson Lagoon Section catch has increased. Not until early 1980's has the catch percentages been extremely increased in the Cinder River-Three Hills Sections.



### Catch records by sections 1962-2009

Note: Fish & Game records combined Cinder River and Outer Port Heiden Sections in "Table 3.-Northern District sockeye salmon runs by section (number of fish), 1962-2009" Published 2009 by Alaska Dept. of Fish & Game. Excluded areas from the original report that are not listed here are Inner Port Heiden, Port Moller Bight & Herendeen-Moller Bay, and Caribou Flats & Black Hills Sections. Those sections excluded are not deemed as an intercept fisherys affecting Bear River and Nelson Lagoon. Where listed below as Cinder River-Three Hills, is combined sections of Cinder River, Outer Port Heiden, Ilnik and Three Hills (Cape Seniven North).

Years	Outer Port Heiden & Cinder River Section Catch Totals Per Year	Ilnik Section Catch Totals Per Year	Three Hills Section Catch Totals Per Year	Bear River Section Catch Totals Per Year	Nelson Lagoon Section Catch Totals Per Year	Combined Northern District Sections Catch Totals Per Year	Outer Port Heiden & Cinder River Section Catch Percentages Totals Per Year	Ilnik Section Catch Percentages Totals Per Year	Three Hills Section Catch Percentages Totals Per Year	Bear River Section Catch Percentages Totals Per Year	Nelson Lagoon Section Catch Percentages Totals Per Year	Cinder River-Three Hills Section Catch Percentage Totals Per Year	Nelson Lagoon Section Percentage Difference Compared To Cinder River-Three Hills Section Percentages Per Year	Bear River Section Percentage Difference Compared To Cinder River-Three Hills Section Percentages Per Year
1962	900	9700	0	142900	69600	223100	0.403%	4.348%	0.000%	64.052%	31.197%	4.751%	26.446%	59.301%
1963	0	26600	0	120000	71500	218100	0.000%	12.196%	0.000%	55.021%	32.783%	12.196%	20.587%	42.824%
1964	0	33300	0	107500	88700	229500	0.000%	14.510%	0.000%	46.841%	38.649%	14.510%	24.139%	32.331%
1965	0	58400	0	62400	53800	174600	0.000%	33.448%	0.000%	35.739%	30.813%	33.448%	-2.635%	2.291%
1966	0	11000	0	152600	60000	223600	0.000%	4.919%	0.000%	68.247%	26.834%	4.919%	21.914%	63.327%
1967	0	0	0	156100	40200	196300	0.000%	0.000%	0.000%	79.521%	20.479%	0.000%	20.479%	79.521%
1968	0	78000	0	90500	51100	219600	0.000%	35.519%	0.000%	41.211%	23.270%	35.519%	-12.250%	5.692%
1969	0	24000	0	205500	72800	302300	0.000%	7.939%	0.000%	67.979%	24.082%	7.939%	16.143%	60.040%
1970	0	21011	0	109209	52043	182263	0.000%	11.528%	0.000%	59.918%	28.554%	11.528%	17.026%	48.391%
1971	0	16153	40929	238628	47536	343246	0.000%	4.706%	11.924%	69.521%	13.849%	16.630%	-2.781%	52.891%
1972	0	4478	7513	136160	23227	171378	0.000%	2.613%	4.384%	79.450%	13.553%	6.997%	6.556%	72.453%
1973	0	0	16659	117678	23896	158233	0.000%	0.000%	10.528%	74.370%	15.102%	10.528%	4.574%	63.842%
1974	0	0	46895	157457	25611	229963	0.000%	0.000%	20.392%	68.471%	11.137%	20.392%	-9.255%	48.078%
1975	0	411	8296	165730	51519	225956	0.000%	0.182%	3.672%	73.346%	22.800%	3.853%	18.947%	69.493%
1976	3	11954	207765	310869	74914	605505	0.000%	1.974%	34.313%	51.340%	12.372%	36.287%	-23.915%	15.053%
1977	8	12592	85295	268676	56314	422885	0.002%	2.978%	20.170%	63.534%	13.317%	23.149%	-9.833%	40.385%
1978	0	7457	24711	556393	213430	801991	0.000%	0.930%	3.081%	69.376%	26.613%	4.011%	22.602%	65.365%
1979	140	53972	140390	1320851	320856	1836209	0.008%	2.939%	7.646%	61.934%	17.474%	10.593%	6.881%	61.341%
1980	46	121574	130653	741861	318526	1312660	0.004%	9.262%	9.953%	56.516%	24.266%	19.218%	5.047%	37.297%
1981	24	24334	44559	1327219	374722	1770858	0.001%	1.374%	2.516%	74.948%	21.160%	3.892%	17.269%	71.056%
1982	0	35088	107418	1009291	229203	1381000	0.000%	2.541%	7.778%	73.084%	16.597%	10.319%	6.278%	62.765%
1983	71	390883	338730	1122976	192947	2045607	0.003%	19.108%	16.559%	54.897%	9.432%	35.671%	-26.239%	19.226%
1984	0	409883	333832	637400	118756	1499871	0.000%	27.328%	22.257%	42.497%	7.918%	49.585%	-41.668%	47.088%
1985	333	508887	469267	821312	703546	2503345	0.013%	20.328%	18.746%	32.809%	28.104%	39.087%	-10.983%	-6.279%
1986	689	560339	588501	938177	178401	2266107	0.030%	24.727%	25.970%	41.400%	7.873%	50.727%	-42.854%	-9.327%
1987	214	506916	212435	213958	128471	1061994	0.020%	47.732%	20.003%	20.147%	12.097%	67.756%	-55.659%	-47.609%
1988	690	494616	258982	494951	186616	1435855	0.048%	34.447%	18.037%	34.471%	12.997%	52.532%	-39.535%	-18.062%
1989	3044	149399	599588	557100	324979	1634110	0.186%	9.143%	36.692%	34.092%	19.887%	46.021%	-26.134%	-11.929%
1990	1246	753030	189870	876248	410417	2230811	0.056%	33.756%	8.511%	39.279%	18.398%	42.323%	-23.925%	-3.044%
1991	296	610975	253880	1044660	273960	2183771	0.014%	27.978%	11.626%	47.837%	12.545%	39.617%	-27.072%	8.220%
1992	4472	740992	959223	1398253	378706	3481646	0.128%	21.283%	27.551%	40.161%	10.877%	48.962%	-38.085%	-8.801%
1993	8903	868790	411277	2041716	452842	3783528	0.235%	22.962%	10.870%	53.963%	11.969%	34.068%	-22.099%	19.895%
1994	5197	838945	481600	1089249	329212	2744203	0.189%	30.572%	17.550%	39.693%	11.997%	48.311%	-36.314%	-8.618%
1995	1280	320473	931168	1536039	448281	3237241	0.040%	9.900%	28.764%	47.449%	13.848%	38.703%	-24.856%	8.746%
1996	3726	612761	188556	592413	445335	1842791	0.202%	33.252%	10.232%	32.148%	24.166%	43.686%	-19.520%	-11.538%
1997	8342	762638	263089	642461	384370	2060900	0.405%	37.005%	12.766%	31.174%	18.651%	50.176%	-31.525%	-19.002%
1998	8321	470560	106856	251327	161441	998505	0.833%	47.126%	10.702%	25.170%	16.168%	58.661%	-42.493%	-33.491%
1999	19004	617330	200239	557805	237293	1631671	1.165%	37.834%	12.272%	34.186%	14.543%	51.271%	-36.728%	-17.085%
2000	7984	769548	403470	473631	193694	1848327	0.432%	41.635%	21.829%	25.625%	10.479%	63.896%	-53.416%	-38.271%
2001	5482	205041	165878	527284	174363	1078048	0.509%	19.020%	15.387%	48.911%	16.174%	34.915%	-18.741%	13.996%
2002	1548	121054	251377	596270	325904	1296153	0.119%	9.339%	19.394%	46.003%	25.144%	28.853%	-3.709%	17.150%
2003	2775	267495	238674	491857	373252	1374053	0.202%	19.468%	17.370%	35.796%	27.164%	37.040%	-9.875%	-1.244%
2004	0	1115036	63935	611147	527637	2317755	0.000%	48.108%	2.758%	26.368%	22.765%	50.867%	-28.102%	-24.499%
2005	116	1370001	193621	1030989	334702	2929429	0.004%	46.767%	6.610%	35.194%	11.426%	53.380%	-41.955%	-18.186%
2006	0	1317901	153343	576552	255265	2303061	0.000%	57.224%	6.658%	25.034%	11.084%	63.882%	-52.798%	-38.848%
2007	387786	1776430	234930	617402	337556	3354104	11.562%	52.963%	7.004%	18.407%	10.064%	71.529%	-61.465%	-53.121%
2008	320857	885634	123344	417261	183330	1930426	16.621%	45.878%	6.389%	21.615%	9.497%	68.888%	-59.391%	-47.273%
2009	762643	651624	93388	652732	214217	2374604	32.117%	27.441%	3.933%	27.488%	9.021%	63.491%	-54.470%	-36.003%

# In 2004 the BOF considered Fleet Growth Here are the results.

## South Unimak:

▪ 1991-2000	241 permits
▪ 2002-2003	118 permits
▪ 2004-2006	123 permits
▪ 2007-2009	138 permits

## Shumigan Islands:

▪ 1991-2000	99 permits
▪ 2002-2003	63 permits
▪ 2004-2006	68 permits
▪ 2007-2009	69 permits

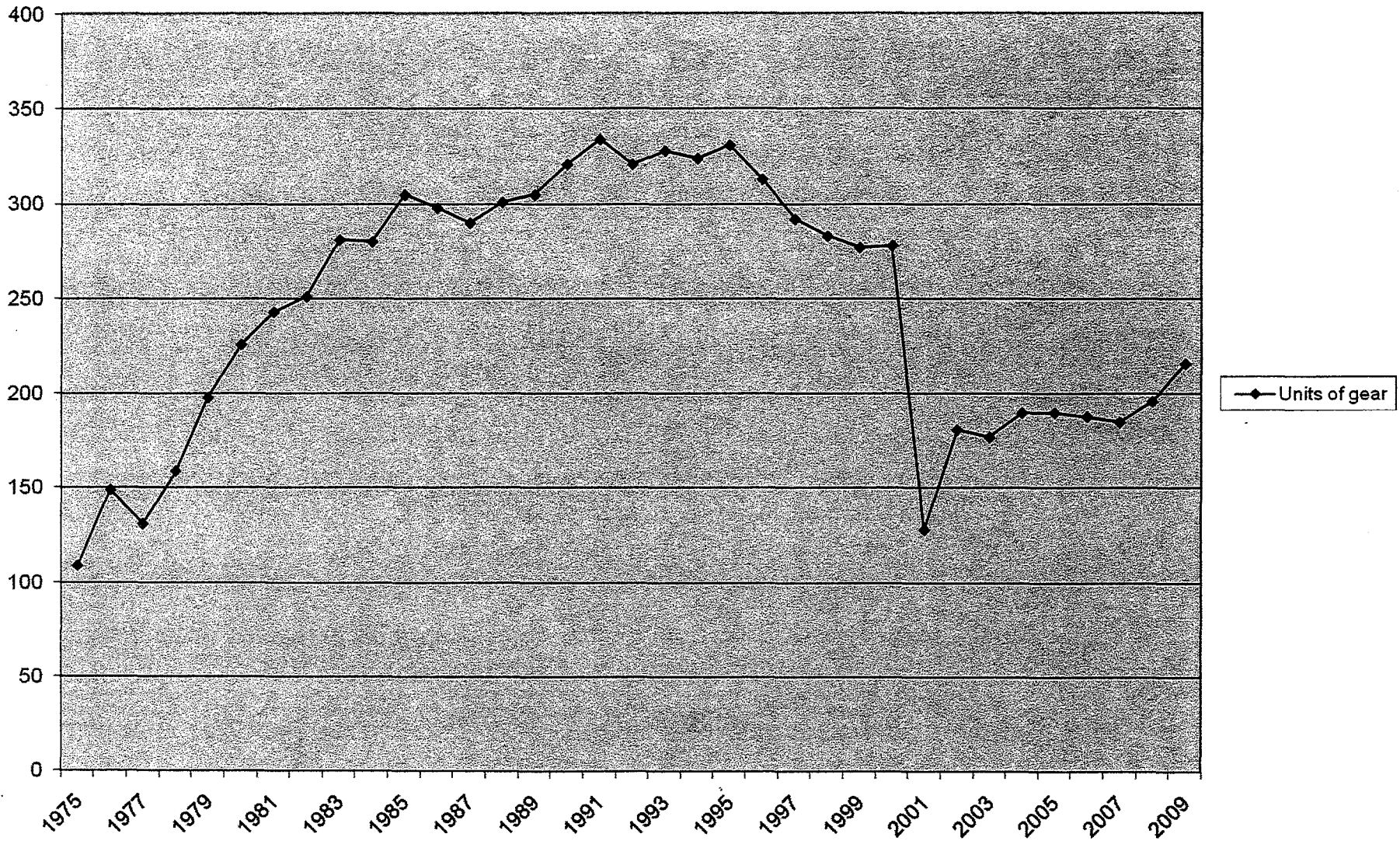
- Average permits fished per year in SUSI

Ref: 2006 SUSI Staff Report

RC 38



SUSI June Fishery Units of Gear Fished 1975 to 2009



RC 39

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RC40

Deliberation Materials  
for the Alaska Board of Fisheries

Alternative "Window" regulation effects for the South Peninsula June Fishery

By  
Alaska Department of Fish and Game  
Westward Region Staff

January 25, 2001

The attached tables illustrate the estimated sockeye and chum salmon harvest reductions by number and percent during selected years and areas under different "windows" fishing schedule scenarios. Further percentage reductions in drift gillnet gear only (10-20%) attempt to estimate the effect of prohibiting fishing during hours of darkness (since seiners generally do not fish during hours of darkness).

To analyze possible impacts of alternative "windows" fishing periods, specific years and areas were selected from the historical fish ticket database for the South Peninsula June fishery in which two criteria were met. The first criterion was a season and area in which the fishery was open continuously after the initial opening. The second criterion was a season and area in which the sockeye guideline harvest level (GHL) was not met. During the last 5 seasons, there were three years and areas that met the criteria: the 1997 South Unimak June fishery, the 1998 South Unimak and Shumagin Islands June fisheries, and the 2000 South Unimak June fishery. The 1996 South Unimak and Shumagin Islands June fisheries, the 1997 Shumagin Islands June fishery, the 1999 South Unimak and Shumagin Islands June fisheries, and the 2000 Shumagin Islands June fishery did not meet the criteria and therefore are not included in this analysis.

Using areas and years that met these criteria allowed estimation of the effects of various "windows" fishing schedules without estimating unknown harvests. Unknown harvests would be those that may have occurred during closures and after the date that the sockeye GHL was actually met which subsequently may not have been met under an altered fishing schedule.

To estimate the sockeye and chum salmon harvest reduction for different "windows" fishing schedule scenarios, the daily catch for each area was examined and analyzed. For example, to examine the effects on harvests of a schedule in which the season was open for three days then closed for two days, the daily catch was summed for the first three days of the season while the next two days were discarded. This method was continued throughout the remainder of the June season and for several "windows" fishing scenarios. The sockeye and chum salmon harvest reductions by number and percent were then calculated from the adjusted season totals.

In years that only one of the two fishing areas was used in the analysis (1997 South Unimak and 2000 South Unimak), it can be reasonably concluded that the chum and sockeye harvest reduction for both fishery areas combined would have been higher since the Shumagin Islands fishery area would also have been restricted which was not reflected in the analysis.

To explore the effects of eliminating fishing during hours of darkness, only the drift gillnet gear harvest was reduced since seine gear is usually not fished during the hours of darkness. Thus, daylight fishing, on a schedule of perhaps 6:00 AM to 10:00 PM would result in a reallocation. Such a reallocation cannot be estimated directly but, for this exercise, drift gillnet harvest reductions of 10% and 20% were used to estimate possible effects on harvests by eliminating fishing during hours of darkness. Set gillnet gear was not reduced since the harvests are relatively small.

## Effects of Alternative Fishing Schedules on Chum Salmon during Selected Years and Areas

Year	Area	Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time				
			1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off
1997	South Unimak											
	# Chum Caught	196,016	91,976	71,294	40,437	43,905	38,985	131,808	93,703	88,183	71,785	61,810
	# Chum Reduced	0	104,040	124,722	155,579	152,111	157,031	64,208	102,313	107,833	124,231	134,206
	% Chum Reduction	0%	53%	64%	79%	78%	80%	33%	52%	55%	63%	68%
1998	S. Unimak & Shumagins											
	# Chum Caught	245,619	114,626	64,824	56,458	56,593	51,497	160,913	119,692	101,747	70,642	76,558
	# Chum Reduced	0	130,993	180,795	189,161	189,026	194,122	84,706	125,927	143,872	174,977	169,061
	% Chum Reduction	0%	53%	74%	77%	77%	79%	34%	51%	59%	71%	69%
2000	South Unimak											
	# Chum Caught	168,888	88,995	66,916	54,076	38,825	35,064	120,427	95,561	79,462	58,810	56,451
	# Chum Reduced	0	79,893	101,972	114,812	130,063	133,824	48,461	73,327	89,426	110,078	112,437
	% Chum Reduction	0%	47%	60%	68%	77%	79%	29%	43%	53%	65%	67%
Total fishing days during June			9	6	5	4	4	12	10	8	6	6

Year	Area	Normal Schedule	3 consecutive days of fishing time					4 consecutive days of fishing time				
			3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off
1997	South Unimak											
	# Chum Caught		145,242	126,594	101,896	87,577	68,403	158,749	136,622	113,962	93,654	89,610
	# Chum Reduced		50,774	69,422	94,120	108,439	127,613	37,267	59,394	82,054	102,362	106,406
	% Chum Reduction		26%	35%	48%	55%	65%	19%	30%	42%	52%	54%
1998	S. Unimak & Shumagins											
	# Chum Caught		177,860	160,387	110,209	110,816	98,068	203,748	150,227	163,520	131,580	105,952
	# Chum Reduced		67,759	85,232	135,410	134,803	147,551	41,871	95,392	82,099	114,039	139,667
	% Chum Reduction		28%	35%	55%	55%	60%	17%	39%	33%	46%	57%
2000	South Unimak											
	# Chum Caught		130,480	113,751	83,922	88,184	79,999	138,394	116,247	113,801	102,756	97,021
	# Chum Reduced		38,408	55,137	84,966	80,704	88,889	30,494	52,641	55,087	66,132	71,867
	% Chum Reduction		23%	33%	50%	48%	53%	18%	31%	33%	39%	43%
Total fishing days during June			14	12	9	9	8	15	12	12	10	8

## Effects of Alternative Fishing Schedules on Sockeye Salmon during Selected Years and Areas

	Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time				
		1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off
1997 South Unimak											
# Sockeye Caught	1,179,179	563,743	416,168	282,559	251,324	237,675	799,312	599,442	502,703	476,276	392,021
# Sockeye Reduced	0	615,436	763,011	896,620	927,855	941,504	379,867	579,737	676,476	702,903	787,158
% Sockeye Reduction	0%	52%	65%	76%	79%	80%	32%	49%	57%	60%	67%
1998 S. Unimak & Shumagins											
# Sockeye Caught	1,288,725	639,706	365,894	341,609	308,355	267,509	865,612	652,584	534,557	415,113	429,713
# Sockeye Reduced	0	649,019	922,831	947,116	980,370	1,021,216	423,113	636,141	754,168	873,612	859,012
% Sockeye Reduction	0%	50%	72%	73%	76%	79%	33%	49%	59%	68%	67%
2000 South Unimak											
# Sockeye Caught	892,016	455,723	338,714	268,429	222,336	183,415	656,397	511,946	418,752	328,175	316,325
# Sockeye Reduced	0	436,293	553,302	623,587	669,680	708,601	235,619	380,070	473,264	563,841	575,691
% Sockeye Reduction	0%	49%	62%	70%	75%	79%	26%	43%	53%	63%	65%
Total fishing days during June		9	6	5	4	4	12	10	8	6	6
		3 consecutive days of fishing time					4 consecutive days of fishing time				
		3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off
1997 South Unimak											
# Sockeye Caught		880,626	764,042	660,357	521,132	398,667	987,206	840,128	678,022	540,840	506,773
# Sockeye Reduced		298,553	415,137	518,822	658,047	780,512	191,973	339,051	501,157	638,339	672,406
% Sockeye Reduction		25%	35%	44%	56%	66%	16%	29%	43%	54%	57%
1998 S. Unimak & Shumagins											
# Sockeye Caught		950,681	823,999	638,334	603,442	534,819	1,077,245	838,288	854,444	714,922	609,314
# Sockeye Reduced		338,044	464,726	650,391	685,283	753,906	211,480	450,437	434,281	573,803	679,411
% Sockeye Reduction		26%	36%	50%	53%	59%	16%	35%	34%	45%	53%
2000 South Unimak											
# Sockeye Caught		699,240	561,992	457,486	457,713	423,097	724,252	627,748	605,180	541,018	497,424
# Sockeye Reduced		192,776	330,024	434,530	434,303	468,919	167,764	264,268	286,836	350,998	394,592
% Sockeye Reduction		22%	37%	49%	49%	53%	19%	30%	32%	39%	44%
Total fishing days during June		14	12	9	9	8	15	12	12	10	8

### Effects of Alternative Fishing Schedules on Sockeye Salmon during Selected Years and Areas

10% Drift Gear Reduction	Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time				
		1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off
1997 South Unimak											
# Sockeye Caught	1,089,515	520,497	383,952	260,208	231,839	219,961	737,667	553,160	464,382	439,652	361,633
# Sockeye Reduced	89,664	658,682	795,227	918,971	947,340	959,218	441,512	626,019	714,797	739,527	817,546
% Sockeye Reduction	8%	56%	67%	78%	80%	81%	37%	53%	61%	63%	69%
1998 S. Unimak & Shumagins											
# Sockeye Caught	1,203,099	596,118	340,877	318,794	287,035	249,524	806,337	609,898	498,604	388,428	403,156
# Sockeye Reduced	85,626	692,608	947,848	969,931	1,001,690	1,039,201	482,388	678,827	790,122	900,297	885,569
% Sockeye Reduction	7%	54%	74%	75%	78%	81%	37%	53%	61%	70%	69%
2000 South Unimak											
# Sockeye Caught	819,731	418,269	311,959	246,581	204,079	168,853	603,211	470,994	385,352	302,529	291,212
# Sockeye Reduced	72,286	473,747	580,057	645,435	687,937	723,163	288,806	421,022	506,664	589,487	600,804
% Sockeye Reduction	8%	53%	65%	72%	77%	81%	32%	47%	57%	66%	67%
Total fishing days during June		9	6	5	4	4	12	10	8	6	6
		3 consecutive days of fishing time					4 consecutive days of fishing time				
		3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off
1997 South Unimak											
# Sockeye Caught		813,449	707,545	609,356	481,063	368,232	912,523	774,943	626,560	498,791	466,133
# Sockeye Reduced		365,730	471,634	569,823	698,116	810,947	266,657	404,236	552,619	680,388	713,046
% Sockeye Reduction		31%	40%	48%	59%	69%	23%	34%	47%	58%	60%
1998 S. Unimak & Shumagins											
# Sockeye Caught		887,221	769,905	597,113	563,953	498,127	1,006,957	782,790	796,958	663,976	561,695
# Sockeye Reduced		401,504	518,820	691,612	724,772	790,598	281,768	505,935	491,767	624,749	727,030
% Sockeye Reduction		31%	40%	54%	56%	61%	22%	39%	38%	48%	56%
2000 South Unimak											
# Sockeye Caught		642,682	517,145	421,125	420,878	389,029	665,702	577,610	555,871	497,543	458,715
# Sockeye Reduced		249,334	374,871	470,891	471,139	502,987	226,314	314,406	336,145	394,473	433,301
% Sockeye Reduction		28%	42%	53%	53%	56%	25%	35%	38%	44%	49%
Total fishing days during June		14	12	9	9	8	15	12	12	10	8

5

## Effects of Alternative Fishing Schedules on Chum Salmon during Selected Years and Areas

10% Drift Gear Reduction		Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time					
			1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off	
1997	South Unimak												
	# Chum Caught	183,251	85,782	66,855	37,434	41,104	36,377	123,307	87,437	82,492	66,934	57,604	
	# Chum Reduced	12,765	110,234	129,161	158,582	154,912	159,639	72,710	108,579	113,524	129,082	138,412	
	% Chum Reduction	7%	56%	66%	81%	79%	81%	37%	55%	58%	66%	71%	
1998	S. Unimak & Shumagins												
	# Chum Caught	229,362	106,603	60,600	52,708	53,041	48,236	150,080	111,829	95,217	66,092	72,049	
	# Chum Reduced	16,257	139,017	185,019	192,911	192,578	197,383	95,539	133,790	150,402	179,527	173,570	
	% Chum Reduction	7%	57%	75%	79%	78%	80%	39%	54%	61%	73%	71%	
2000	South Unimak												
	# Chum Caught	157,407	82,810	62,650	50,430	35,943	32,854	112,045	89,135	73,860	55,077	52,437	
	# Chum Reduced	11,481	86,078	106,238	118,458	132,946	136,034	56,843	79,754	95,028	113,811	116,451	
	% Chum Reduction	7%	51%	63%	70%	79%	81%	34%	47%	56%	67%	69%	
Total fishing days during June			9	6	5	4	4	12	10	8	6	6	
			3 consecutive days of fishing time					4 consecutive days of fishing time					
			3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off	
1997	South Unimak												
	# Chum Caught		135,785	118,417	94,921	82,002	64,048	148,150	127,637	106,618	87,429	83,545	
	# Chum Reduced		60,231	77,599	101,095	114,014	131,968	47,866	68,379	89,398	108,587	112,471	
	% Chum Reduction		31%	40%	52%	58%	67%	24%	35%	46%	55%	57%	
1998	S. Unimak & Shumagins												
	# Chum Caught		165,724	150,315	102,902	103,701	91,547	190,943	140,300	152,952	122,480	97,672	
	# Chum Reduced		79,896	95,304	142,717	141,918	154,072	54,676	105,319	92,667	123,139	147,947	
	% Chum Reduction		33%	39%	58%	58%	63%	22%	43%	38%	50%	60%	
2000	South Unimak												
	# Chum Caught		121,514	106,127	78,394	81,748	74,084	128,888	108,456	105,418	95,512	91,049	
	# Chum Reduced		47,374	62,761	90,494	87,141	94,804	40,000	60,432	63,471	73,376	77,839	
	% Chum Reduction		28%	37%	54%	52%	56%	24%	36%	38%	43%	46%	
Total fishing days during June			14	12	9	9	8	15	12	12	10	8	

## Effects of Alternative Fishing Schedules on Chum Salmon during Selected Years and Areas

20% Drift Gear Reduction		Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time					
			1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off	
1997	South Unimak												
	# Chum Caught	170,487	79,588	62,415	34,431	38,304	33,768	114,805	81,170	76,801	62,083	53,398	
	# Chum Reduced	25,529	116,428	133,601	161,585	157,712	162,248	81,211	114,846	119,215	133,933	142,618	
	% Chum Reduction	13%	59%	68%	82%	80%	83%	41%	59%	61%	68%	73%	
1998	S. Unimak & Shumagins												
	# Chum Caught	213,106	98,579	56,377	48,959	49,488	44,975	139,246	103,967	88,687	61,542	67,539	
	# Chum Reduced	32,513	147,040	189,242	196,660	196,131	200,644	106,373	141,652	156,932	184,077	178,080	
	% Chum Reduction	13%	60%	77%	80%	80%	82%	43%	58%	64%	75%	73%	
2000	South Unimak												
	# Chum Caught	145,926	76,625	58,385	46,785	33,060	30,644	103,663	82,708	68,258	51,344	48,423	
	# Chum Reduced	22,962	92,263	110,503	122,103	135,828	138,244	65,225	86,180	100,630	117,544	120,465	
	% Chum Reduction	14%	55%	65%	72%	80%	82%	39%	51%	60%	70%	71%	
Total fishing days during June			9	6	5	4	4	12	10	8	6	6	
			3 consecutive days of fishing time					4 consecutive days of fishing time					
			3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off	
1997	South Unimak												
	# Chum Caught	126,327	110,240	87,946	76,427	59,694	137,551	118,652	99,274	81,204	77,479		
	# Chum Reduced	69,689	85,776	108,070	119,589	136,322	58,465	77,364	96,742	114,812	118,537		
	% Chum Reduction	36%	44%	55%	61%	70%	30%	39%	49%	59%	60%		
1998	S. Unimak & Shumagins												
	# Chum Caught	153,587	140,243	95,596	96,586	85,026	178,139	130,374	142,383	113,380	89,392		
	# Chum Reduced	92,032	105,376	150,023	149,033	160,593	67,480	115,245	103,236	132,239	156,227		
	% Chum Reduction	37%	43%	61%	61%	65%	27%	47%	42%	54%	64%		
2000	South Unimak												
	# Chum Caught	112,548	98,503	72,865	75,311	68,169	119,382	100,665	97,034	88,269	85,076		
	# Chum Reduced	56,340	70,385	96,023	93,577	100,719	49,506	68,223	71,854	80,619	83,812		
	% Chum Reduction	33%	42%	57%	55%	60%	29%	40%	43%	48%	50%		
Total fishing days during June			14	12	9	9	8	15	12	12	10	8	



## Effects of Alternative Fishing Schedules on Sockeye Salmon during Selected Years and Areas

20% Drift Gear Reduction	Normal Schedule	1 consecutive day of fishing time					2 consecutive days of fishing time				
		1 on 1 off	1 on 2 off	1 on 3 off	1 on 4 off	1 on 5 off	2 on 1 off	2 on 2 off	2 on 3 off	2 on 4 off	2 on 5 off
1997 South Unimak											
# Sockeye Caught	999,851	477,252	351,736	237,857	212,354	202,246	676,023	506,878	426,061	403,029	331,245
# Sockeye Reduced	179,328	701,927	827,443	941,322	966,825	976,933	503,156	672,301	753,118	776,150	847,934
% Sockeye Reduction	15%	60%	70%	80%	82%	83%	43%	57%	64%	66%	72%
1998 S. Unimak & Shumagins											
# Sockeye Caught	1,117,472	552,529	315,860	295,979	265,714	231,539	747,061	567,211	462,650	361,743	376,598
# Sockeye Reduced	171,253	736,196	972,865	992,746	1,023,011	1,057,186	541,664	721,514	826,075	926,982	912,127
% Sockeye Reduction	13%	57%	75%	77%	79%	82%	42%	56%	64%	72%	71%
2000 South Unimak											
# Sockeye Caught	747,445	380,814	285,205	224,732	185,823	154,291	550,024	430,042	351,952	276,883	266,099
# Sockeye Reduced	144,571	511,202	606,811	667,284	706,193	737,725	341,992	461,974	540,064	615,133	625,917
% Sockeye Reduction	16%	57%	68%	75%	79%	83%	38%	52%	61%	69%	70%
Total fishing days during June		9	6	5	4	4	12	10	8	6	6
		3 consecutive days of fishing time					4 consecutive days of fishing time				
		3 on 1 off	3 on 2 off	3 on 3 off	3 on 4 off	3 on 5 off	4 on 1 off	4 on 2 off	4 on 3 off	4 on 4 off	4 on 5 off
1997 South Unimak											
# Sockeye Caught		746,273	651,048	558,355	440,994	337,797	837,839	709,757	575,098	456,743	425,493
# Sockeye Reduced		432,906	528,131	620,824	738,185	841,382	341,340	469,422	604,081	722,436	753,686
% Sockeye Reduction		37%	45%	53%	63%	71%	29%	40%	51%	61%	64%
1998 S. Unimak & Shumagins											
# Sockeye Caught		823,761	715,811	555,892	524,464	461,436	936,668	727,291	739,472	613,029	514,076
# Sockeye Reduced		464,964	572,914	732,833	764,261	827,289	352,057	561,434	549,253	675,696	774,649
% Sockeye Reduction		36%	44%	57%	59%	64%	27%	44%	43%	52%	60%
2000 South Unimak											
# Sockeye Caught		586,124	472,297	384,765	384,042	354,961	607,151	527,472	506,562	454,068	420,006
# Sockeye Reduced		305,892	419,719	507,251	507,974	537,055	284,865	364,544	385,454	437,948	472,010
% Sockeye Reduction		34%	47%	57%	57%	60%	32%	41%	43%	49%	53%
Total fishing days during June		14	12	9	9	8	15	12	12	10	8

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January 2001

Prepared for:

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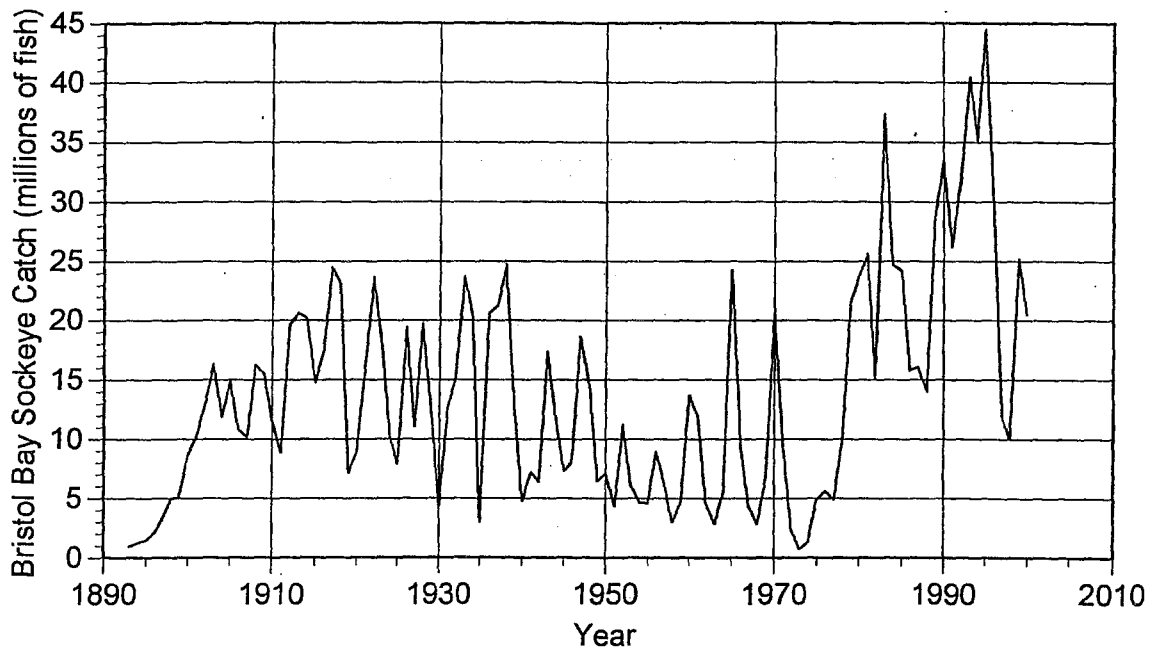
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### **About the Author**

**Charles P. Meacham, BS/MS Fisheries, heads Capital Consulting, 533 Main Street, Juneau, Alaska. Mr. Meacham established Capital Consulting following a 21-year career with the Alaska Department of Fish and Game. He retired from the department as Deputy Commissioner for Fisheries. Previously he was employed as a commercial fisherman, a seafood plant employee, and U.S. Government seafood inspector in Alaska. Mr. Meacham has been an Alaskan resident since 1956.**

## Introduction

The Bristol Bay sockeye salmon commercial fishery is the most valuable salmon fishery in the state and the largest fishery in terms of participation, with approximately 2,942 units of gear. It is often characterized as the best managed salmon fishery in the world. This fishery has operated continuously since 1884. The catch history for this fishery is illustrated below.



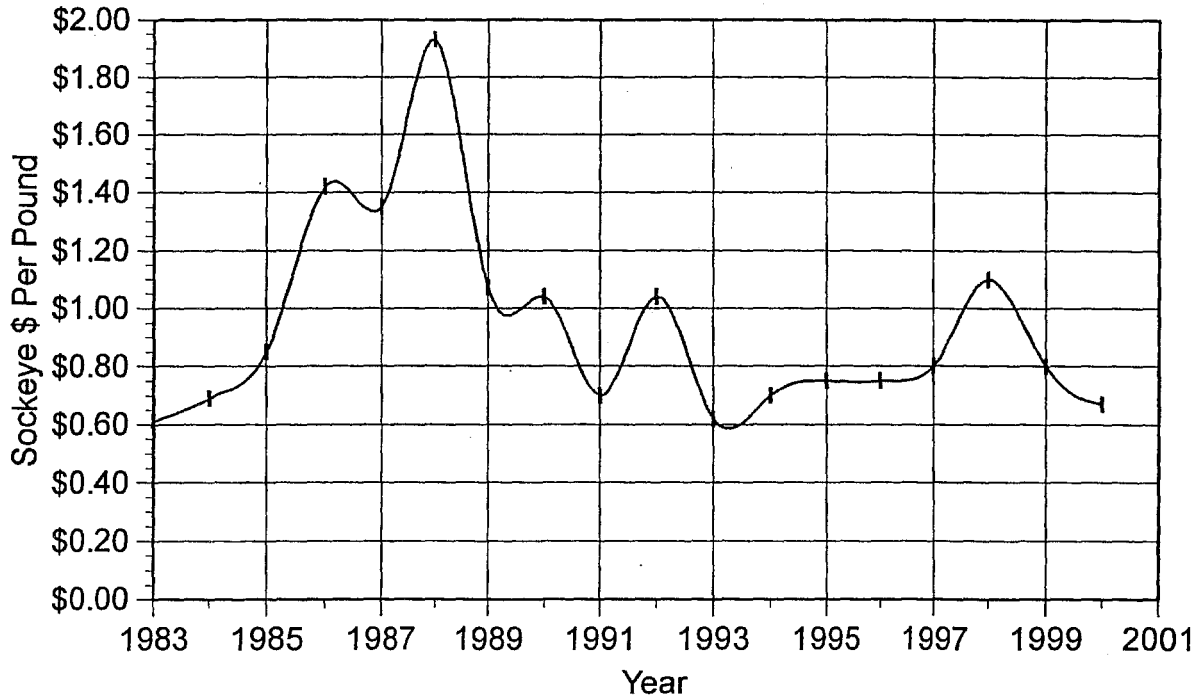
Between 1900 and 1970 annual sockeye salmon catches averaged 12 million fish. Due to a series of low temperature year and associated low salmon production, annual catches plummeted to an average of only 3 million fish for the entire bay during the 5-year period 1972-1976 (with a low catch of 761 thousand in 1973). During the 20 years 1980-1999, the average catch was 26 million fish. In 2000 the catch was 21 million. The forecast bay-wide harvest for 2001 is 15.6 million sockeye, slightly above the 100 year average catch.

Annual changes in sockeye salmon production patterns in Bristol Bay coupled with differences between individual Bristol Bay river systems have led to concern for Kvichak

River stocks. Of the various salmon producing river systems within Bristol Bay, the Kvichak River is characterized by the most dramatic fluctuations in salmon production. Returns to the Kvichak River since 1956 range from a low of 248 thousand in 1973 (with an escapement of 227 thousand) to a high of 42 million in 1965. The average commercial catch produced from the Kvichak over this same 45 year period is about 5 million sockeye. During the last 5 years, the commercial catch of Kvichak River sockeye ranged from 179 thousand to 6.4 million. Escapement goals were not achieved in 3 of the last 5 years.

Recent declines in production may well be a function of a change in the Pacific Decadal Oscillation which appears to have a strong influence on salmon production. It is very plausible that this shift away from high production regimes means that the relatively high yields having taken place during the past 20 years are not sustainable.

Price per pound paid to fishermen for sockeye has also varied over time. After reaching a high of nearly \$2.00 per pound in 1988, prices fell dramatically. In 2000 fishermen were paid only \$0.65-\$0.70 per pound.



Bristol Bay salmon CFEC permit holders can legally fish in any district, or combination of districts, within the bay (typically after a regulatory 48-hour "waiting period"). Those fishermen who choose to remain in a single district experiencing low returns face the combined effect of low catches coupled with low prices. This is most problematic for

setnet fishermen who are far less mobile than drift fishermen and who require an available shore based site.

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### **Sustainable Salmon Fisheries Policy**

The Alaska Board of Fish made a progressive conceptual move forward and is now evaluating proposed regulatory changes from the perspective of the Sustainable Salmon Fisheries Policy For The State Of Alaska, dated March 23, 2000. Provisions of this policy promote a more comprehensive approach to salmon habitat protection and management than existed previously.

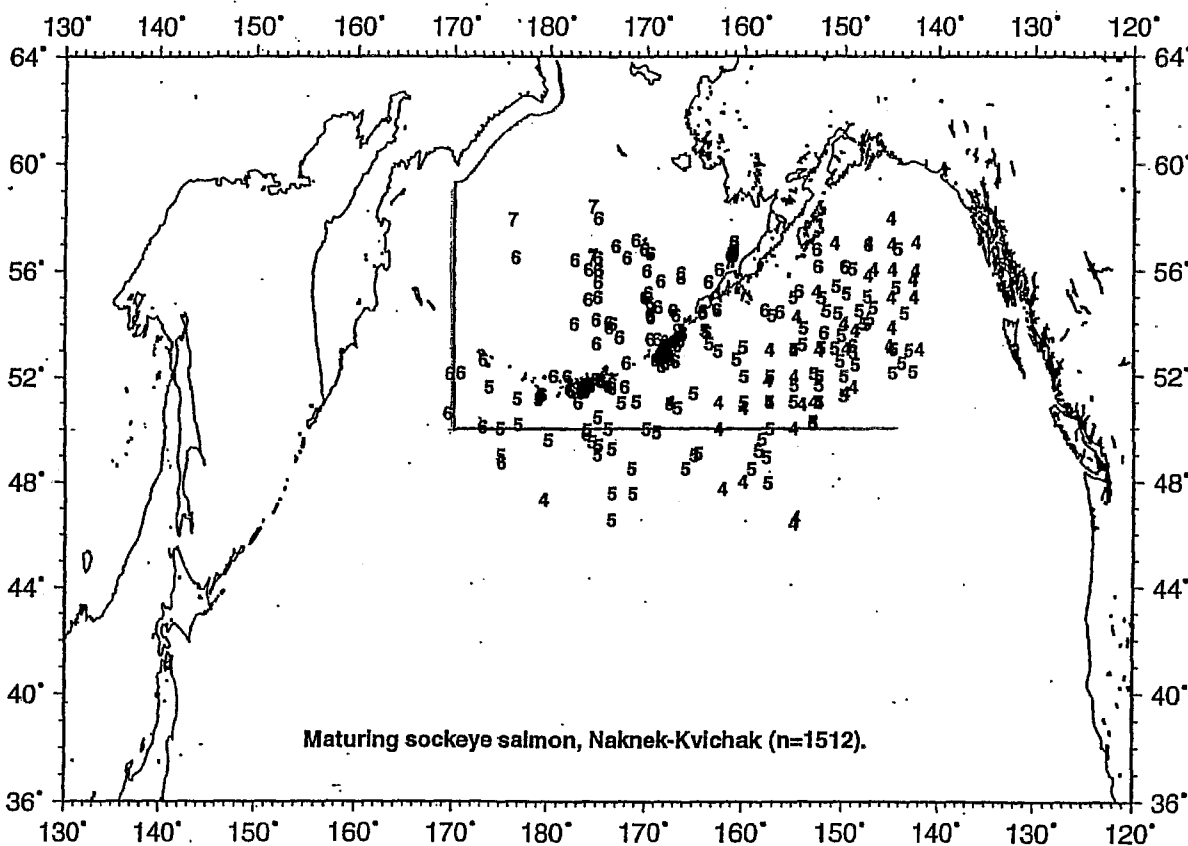
In evaluating the management of salmon stocks, this policy calls for an understanding of the proportion of mortality inflicted on each salmon stock by each user group and indicates that the burden of conservation should be allocated across user groups. Burden of conservation is defined as restrictions imposed by the board or department upon various users in order to achieve escapement, rebuild, or in some other way conserve a specific salmon stock or group of stocks. This burden should be generally applied to users in close proportion to the users' respective harvest of the salmon stock and should be shared among all fisheries in close proportion to each fisheries' respective use.

Three levels of stock concern are identified in this policy. The most serious is a conservation concern, which arises from a chronic (4-5 years) inability, despite the use of specific management measures, to maintain escapements for a stock above a sustained escapement threshold. Next most serious is a management concern, which is associated with a chronic inability, despite use of specific management measures, to maintain escapements for a stock within the bounds of the specified escapement goal range. The next level of concern is a yield concern, which is defined as a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields or harvestable surpluses above a stock's escapement needs. No conservation or management concerns have been identified for Bristol Bay systems. However, the Kvichak River sockeye stock was identified as having a yield concern.

Following the process outlined in the Sustainable Salmon Fisheries Policy For The State of Alaska results in identifying 4 areas in which Kvichak River stocks are subject to fishing mortality. These areas are the high seas, South Unimak and Shumagin Islands, the North Peninsula, and Bristol Bay. Each of these area will be evaluated relative to sockeye salmon of Kvichak River origin.

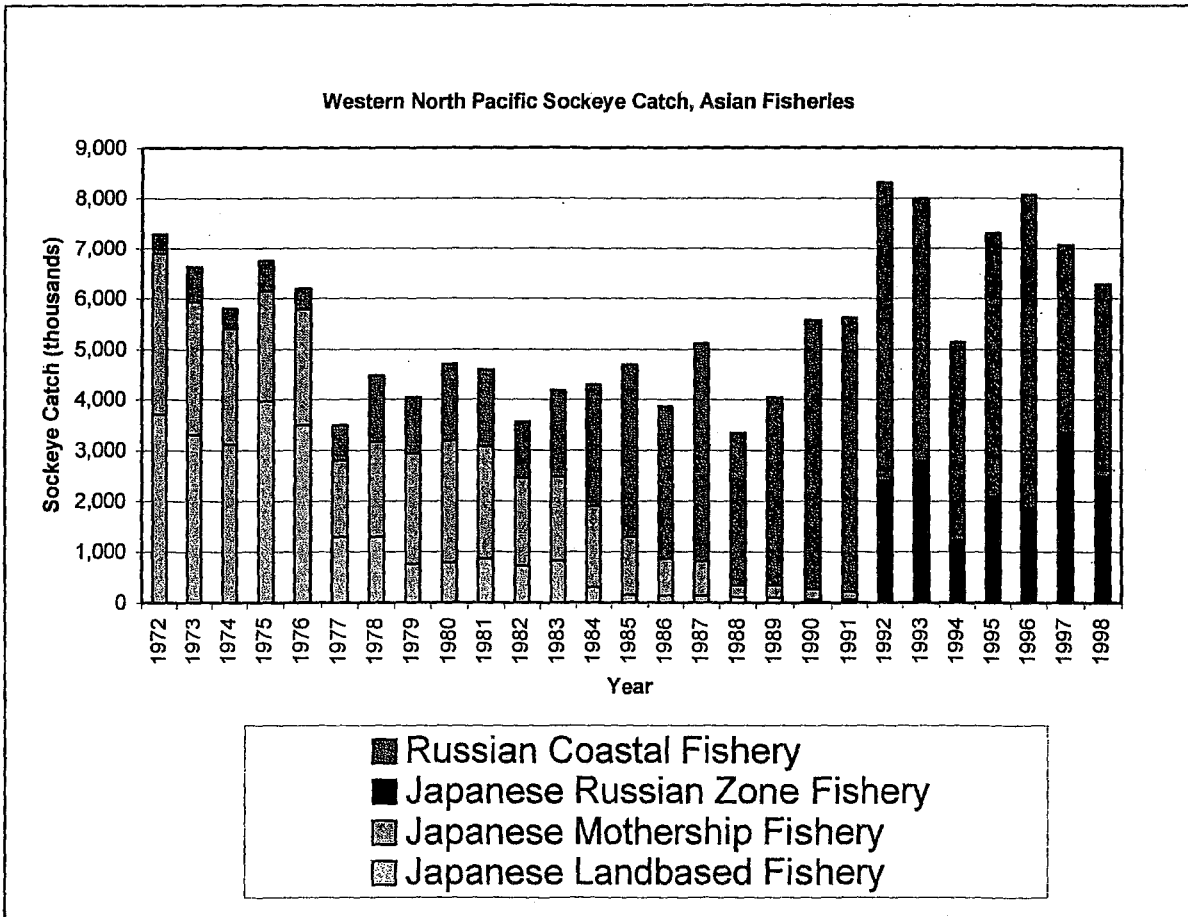
## High Seas Fisheries

Kvichak River sockeye are widely distributed in the Gulf of Alaska and the Bering Sea as both immature and maturing salmon. An evaluation of high seas tagging data between the years 1956 and 1998 provides the locations on the high seas where 1,512 maturing sockeye were tagged and subsequently recovered in the Naknek-Kvichak district and associated river systems.



Recent information pertaining to immature sockeye (Katherine Myers, personal communications), show a tendency for stocks with earlier migrating smolt (such as the Kvichak) to have a wider ocean distribution than those stocks with later migrating smolt. Such stocks appear to migrate farther to the north and west in the Bering Sea in their first ocean year and continue to repeat this pattern as immatures. Trawl fisheries occur in these same areas of the North Pacific and the Bering Sea and are known to catch some sockeye. The number of Kvichak sockeye taken incidentally in trawl fisheries is unknown.

High seas salmon gillnet fisheries are also conducted off Russia in and near areas where Kvichak sockeye are known to occur. In addition to sockeye salmon taken by Russian fishermen, fishing rights are leased to Japanese fishing interests. During the 1970s and up until about 1983 the Japanese mothership fishery and the Japanese land-based fleet took millions of sockeye salmon. Through contentious negotiations conducted over many years between the United States, Russia, and Japan, both of these fisheries were eventually phased out. However, now they have been effectively replaced by offshore fisheries conducted off Russia. Catches of sockeye salmon in this newer fishery have increased significantly and have occasionally exceeded 8 million fish in recent years (Eggers, personal communications). While most of these sockeye originate in Russian rivers, the potential exists for the taking of some unknown number of Kvichak River salmon.

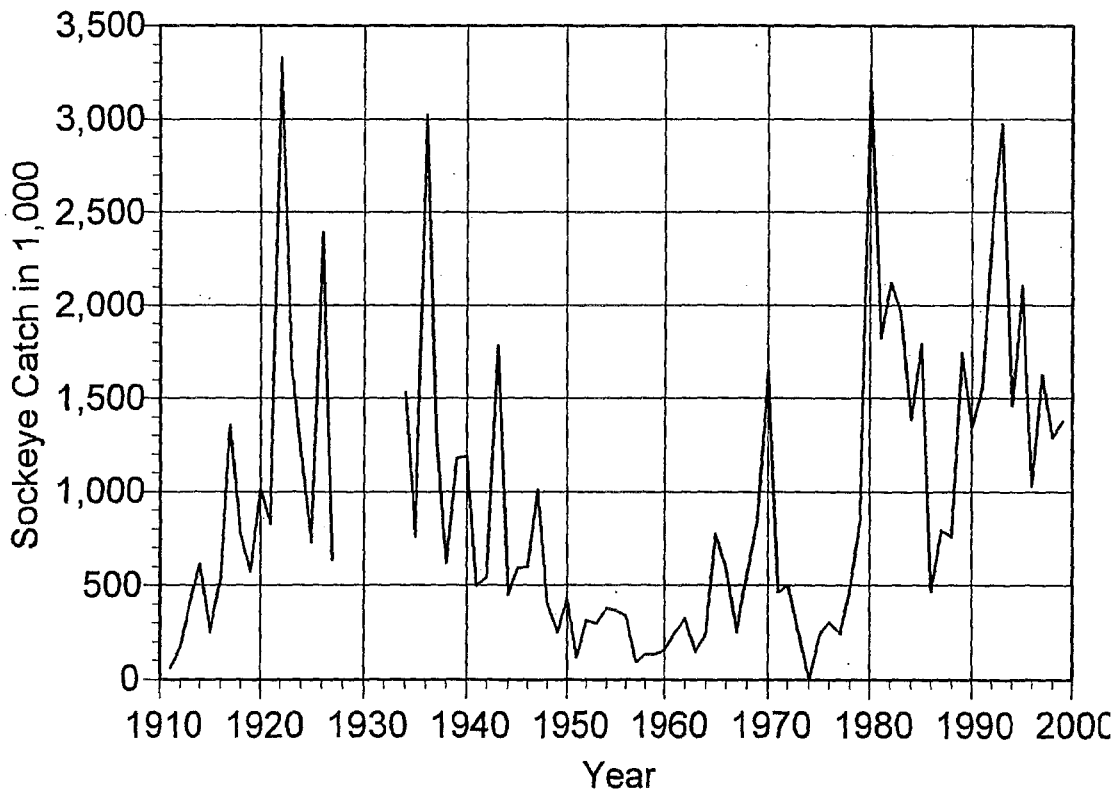




## South Unimak and Shumagin Islands

The South Unimak and Shumagin Island fisheries began in about 1911. There are 121 purse seine permits, 161 drift gillnet permits, and 115 set gillnets permits issued that can legally be fished in this area and in the North Peninsula. In 1999, the number of permits actually fished in the Unimak and Shumagin Islands area was 61 purse seine, 152 drift gillnet, and 64 set gillnet permits.

Fisheries in both areas are characterized as mixed stock interception fisheries, targeting sockeye salmon bound for Bristol Bay and incidentally taking significant numbers of chum salmon bound for river systems throughout western Alaska.



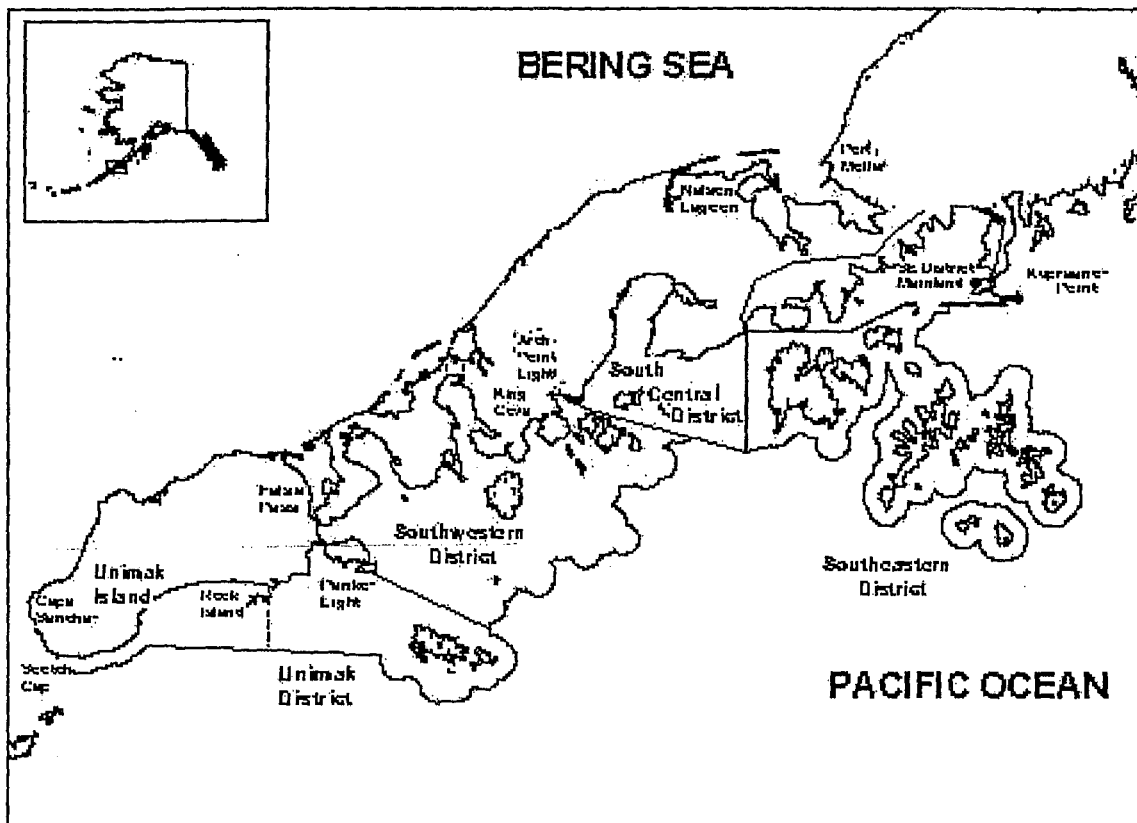
Recent South Unimak and Shumagin Islands June fishery catches average about 1.7 million sockeye, an increase of about 6% from the earlier 10 year average.

This fishery is managed under 5 AAC 09.365 South Unimak and Shumagin Islands June Salmon Management Plan. Sockeye are managed by a quota calculated at 8.3% of the forecast Bristol Bay sockeye catch (6.8% for South Unimak, 1.5% for Shumagin Islands). Previously the sockeye quota was further divided into weekly fishing periods in an

attempt to preclude over harvesting any particular Bristol Bay stock or sub-stock. This regulation is no longer in effect.

The chum salmon harvest is regulated by a floating guideline harvest level that ranges from 350,000 to 650,000 chum salmon, depending on run strength of chum salmon bound for rivers in the Arctic-Yukon-Kuskokwim management region.

An intensive tagging study was conducted in the area of these fisheries in 1987 (Eggers, 1991). Based on this study, most sockeye caught are from Bristol Bay but sockeye are also taken from stocks originating in Cook Inlet, Kodiak, and the Kuskokwim River. Differences in stock composition exist between South Unimak and the Shumagin Islands. Within the Unimak fishery, Bristol Bay stocks constituted 85% while in the Shumagin Islands area Bristol Bay stocks constitute about 55%.



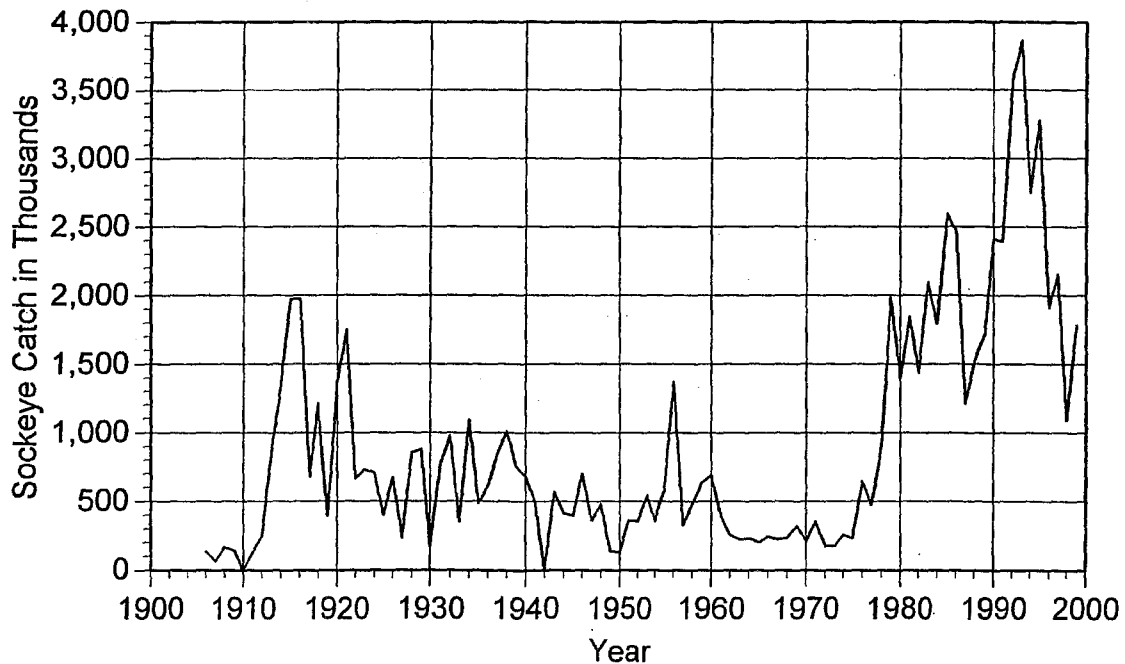
Chum salmon from within this area come from an extremely broad distribution of stocks, including Kotzebue, Norton Sound, Yukon, Kuskokwim, Bristol Bay, central Alaska, Japan, and Russia. As with sockeye, different stock proportions exist between the two fishing areas, with a higher percentage of Bristol Bay and western Alaskan stocks being present at Unimak.

## North Peninsula

There are presently 121 purse seine permits, 161 drift gillnet permits, and 115 set gillnets permits issued that can legally be fished in area M which includes the North Peninsula. However, a number of within district and section gear restrictions exist that preclude all gear types from fishing all areas. Most effort and the bulk of the North Peninsula harvest comes from the Northern District, a relative large district of approximately 400 square miles.

There are four primary sockeye producing rivers in this area, Nelson, Bear, Sandy, and Ilnik. Sockeye salmon escapement goals for these systems total 450,000 fish with 50% assigned to Bear River, 28% to Nelson River, 11% to Sandy River, and 11% to Ilnik River.

Commercial fishing began about 1906. Annual catches averaged well under a million sockeye until about 1980. At that time catches in this district increased dramatically and averaged 2.5 million sockeye during the 10 year period 1990-1999. Since there is no effective separation between fishing districts and sections, the fishery takes place over an extended geographical area and harvests mixed stocks.



Most sockeye salmon caught off the North Peninsula are taken in the Northern District, shown below. Most sockeye are taken by drift gillnet fisheries fishing nets up to 200 fathoms in length and 70 meshes deep, except in the Nelson Lagoon Section where drift gillnets are more restrictive, especially in terms of depth. This compares to only 150 fathoms of net 29 meshes in depth allowed in Bristol Bay.

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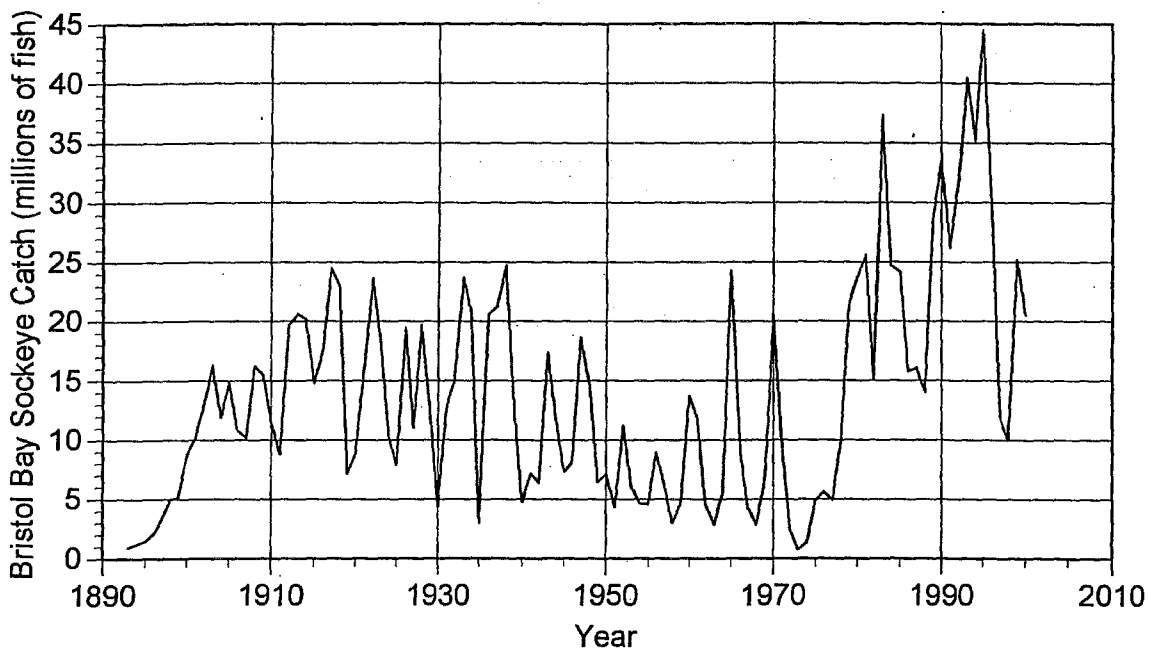
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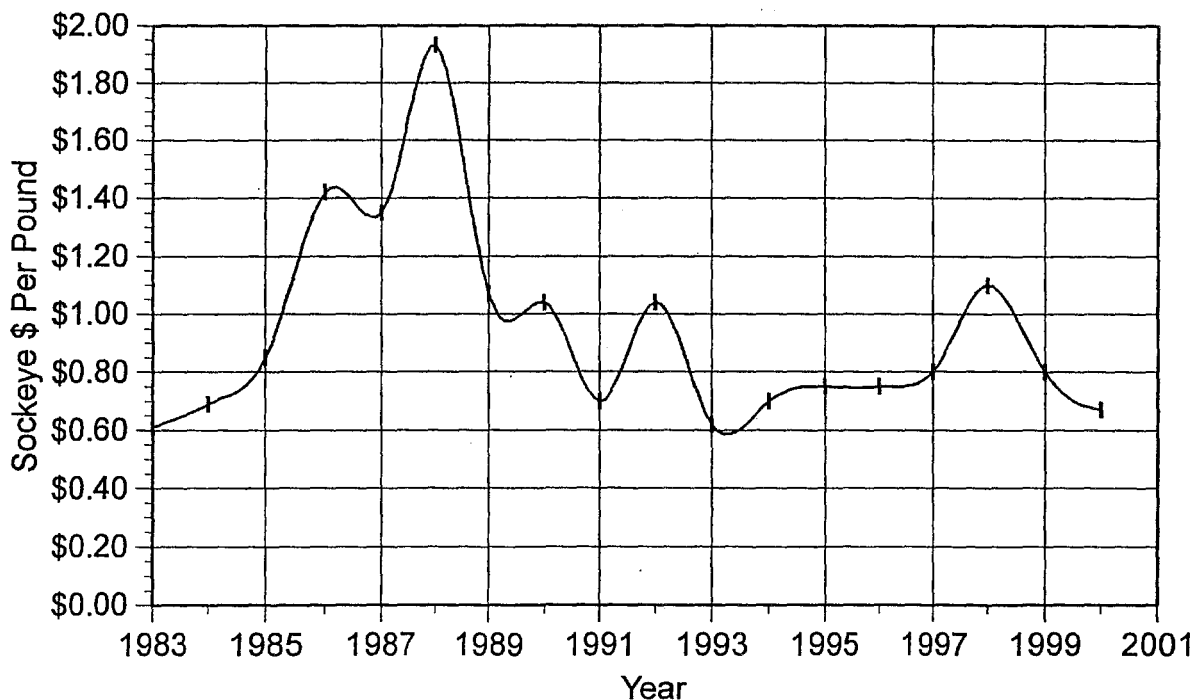
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### **Sustainable Salmon Fisheries Policy**

The Alaska Board of Fish made a progressive conceptual move forward and is now evaluating proposed regulatory changes from the perspective of the Sustainable Salmon Fisheries Policy For The State Of Alaska, dated March 23, 2000. Provisions of this policy promote a more comprehensive approach to salmon habitat protection and management than existed previously.

In evaluating the management of salmon stocks, this policy calls for an understanding of the proportion of mortality inflicted on each salmon stock by each user group and indicates that the burden of conservation should be allocated across user groups. Burden of conservation is defined as restrictions imposed by the board or department upon various users in order to achieve escapement, rebuild, or in some other way conserve a specific salmon stock or group of stocks. This burden should be generally applied to users in close proportion to the users' respective harvest of the salmon stock and should be shared among all fisheries in close proportion to each fisheries' respective use.

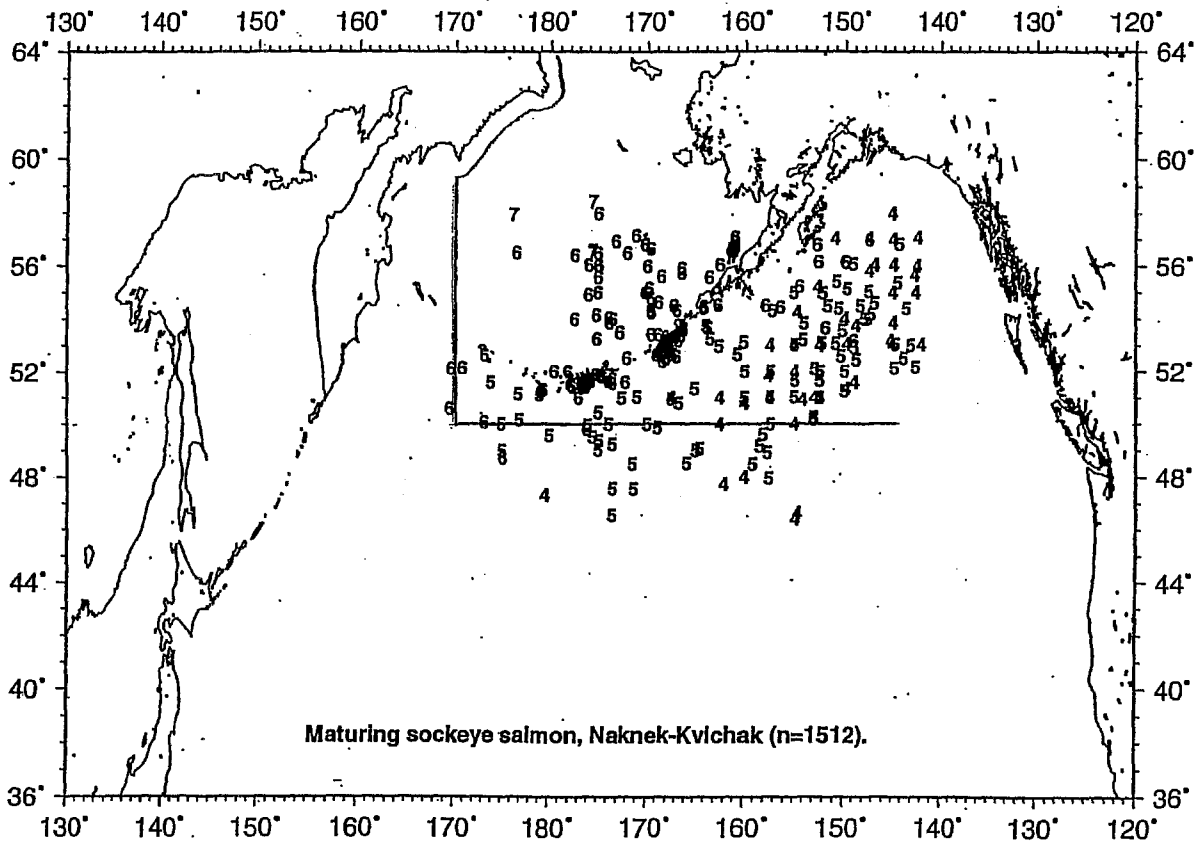
Three levels of stock concern are identified in this policy. The most serious is a conservation concern, which arises from a chronic (4-5 years) inability, despite the use of specific management measures, to maintain escapements for a stock above a sustained escapement threshold. Next most serious is a management concern, which is associated with a chronic inability, despite use of specific management measures, to maintain escapements for a stock within the bounds of the specified escapement goal range. The next level of concern is a yield concern, which is defined as a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields or harvestable surpluses above a stock's escapement needs. No conservation or management concerns have been identified for Bristol Bay systems. However, the Kvichak River sockeye stock was identified as having a yield concern.

Following the process outlined in the Sustainable Salmon Fisheries Policy For The State of Alaska results in identifying 4 areas in which Kvichak River stocks are subject to fishing mortality. These areas are the high seas, South Unimak and Shumagin Islands, the North Peninsula, and Bristol Bay. Each of these area will be evaluated relative to sockeye salmon of Kvichak River origin.



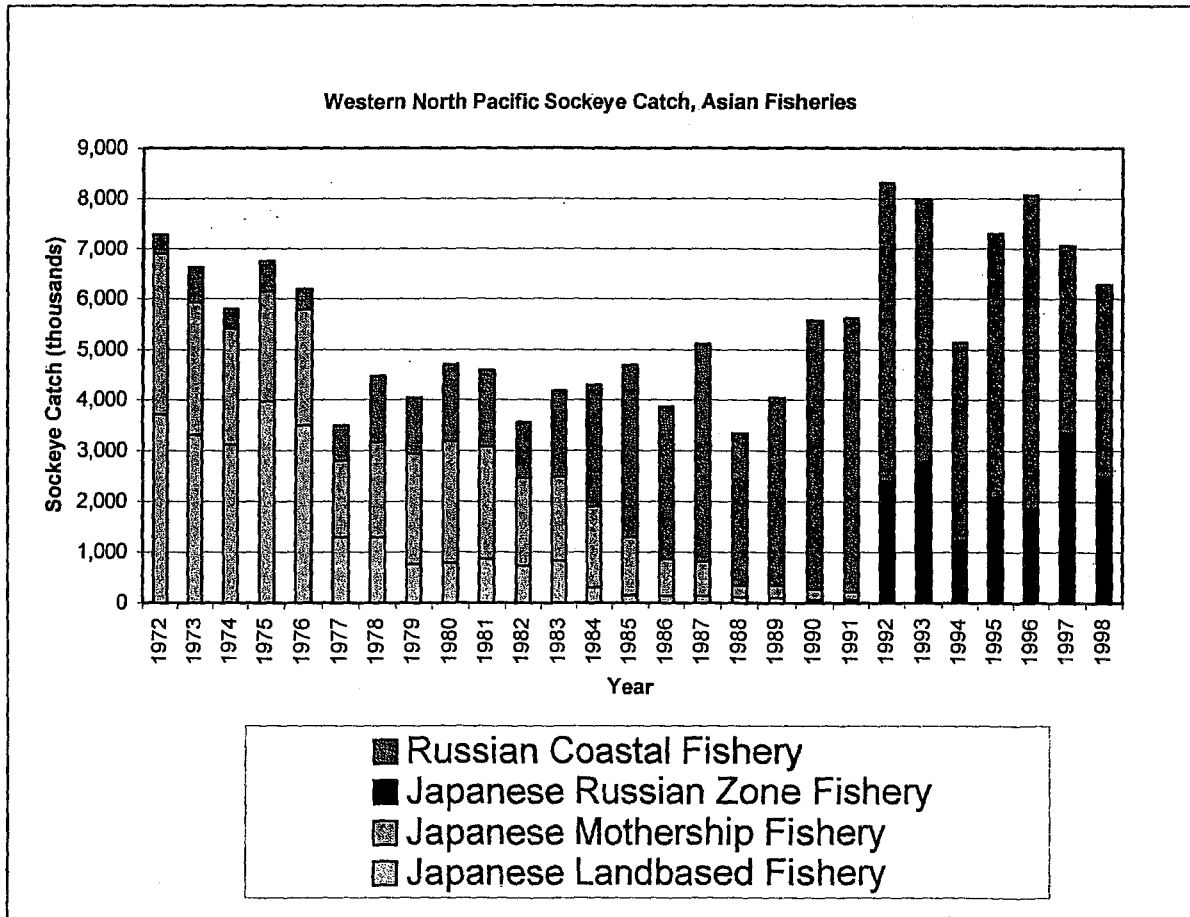
## High Seas Fisheries

Kvichak River sockeye are widely distributed in the Gulf of Alaska and the Bering Sea as both immature and maturing salmon. An evaluation of high seas tagging data between the years 1956 and 1998 provides the locations on the high seas where 1,512 maturing sockeye were tagged and subsequently recovered in the Naknek-Kvichak district and associated river systems.



Recent information pertaining to immature sockeye (Katherine Myers, personal communications), show a tendency for stocks with earlier migrating smolt (such as the Kvichak) to have a wider ocean distribution than those stocks with later migrating smolt. Such stocks appear to migrate farther to the north and west in the Bering Sea in their first ocean year and continue to repeat this pattern as immatures. Trawl fisheries occur in these same areas of the North Pacific and the Bering Sea and are known to catch some sockeye. The number of Kvichak sockeye taken incidentally in trawl fisheries is unknown.

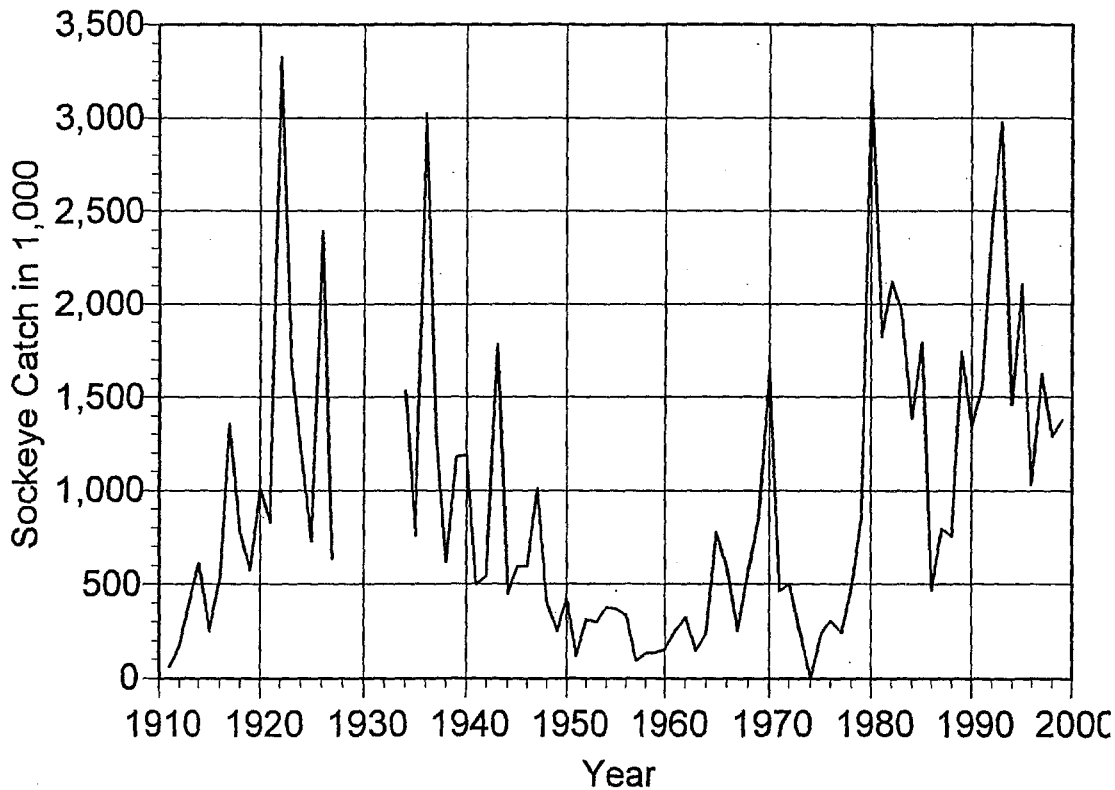
High seas salmon gillnet fisheries are also conducted off Russia in and near areas where Kvichak sockeye are known to occur. In addition to sockeye salmon taken by Russian fishermen, fishing rights are leased to Japanese fishing interests. During the 1970s and up until about 1983 the Japanese mothership fishery and the Japanese land-based fleet took millions of sockeye salmon. Through contentious negotiations conducted over many years between the United States, Russia, and Japan, both of these fisheries were eventually phased out. However, now they have been effectively replaced by offshore fisheries conducted off Russia. Catches of sockeye salmon in this newer fishery have increased significantly and have occasionally exceeded 8 million fish in recent years (Eggers, personal communications). While most of these sockeye originate in Russian rivers, the potential exists for the taking of some unknown number of Kvichak River salmon.



## South Unimak and Shumagin Islands

The South Unimak and Shumagin Island fisheries began in about 1911. There are 121 purse seine permits, 161 drift gillnet permits, and 115 set gillnets permits issued that can legally be fished in this area and in the North Peninsula. In 1999, the number of permits actually fished in the Unimak and Shumagin Islands area was 61 purse seine, 152 drift gillnet, and 64 set gillnet permits.

Fisheries in both areas are characterized as mixed stock interception fisheries, targeting sockeye salmon bound for Bristol Bay and incidentally taking significant numbers of chum salmon bound for river systems throughout western Alaska.



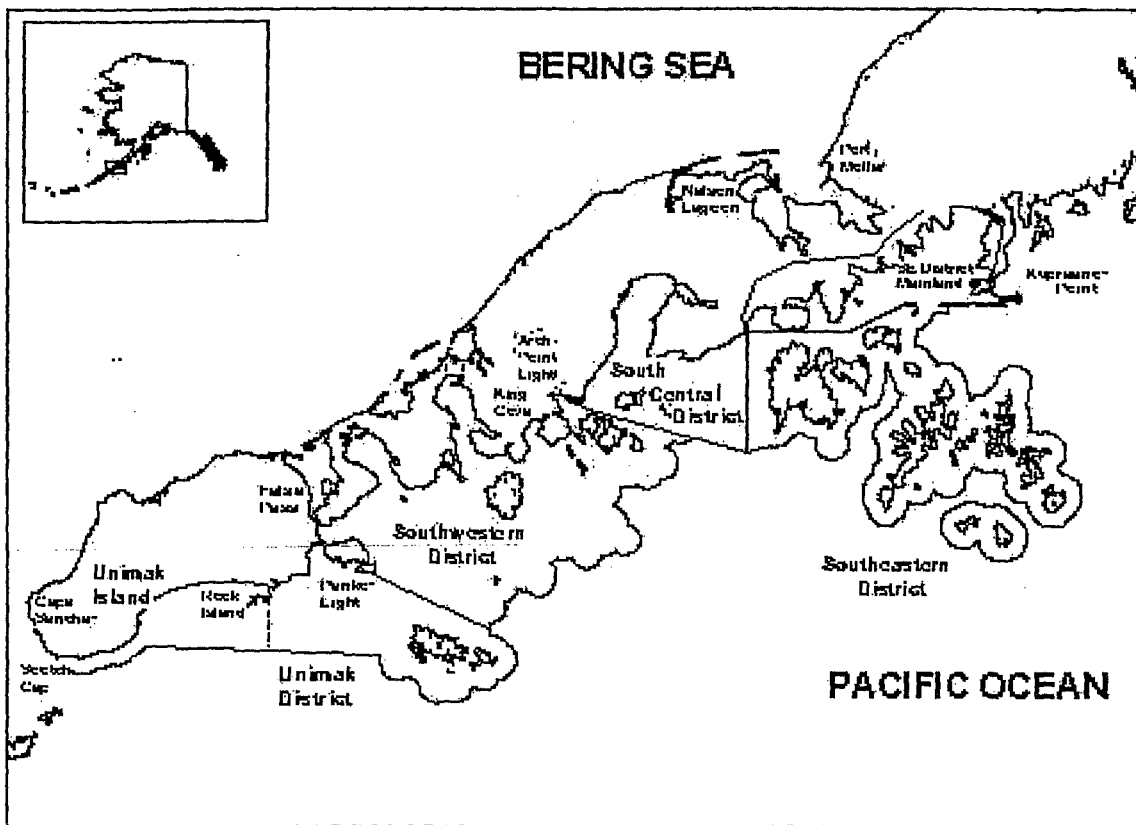
Recent South Unimak and Shumagin Islands June fishery catches average about 1.7 million sockeye, an increase of about 6% from the earlier 10 year average.

This fishery is managed under 5 AAC 09.365 South Unimak and Shumagin Islands June Salmon Management Plan. Sockeye are managed by a quota calculated at 8.3% of the forecast Bristol Bay sockeye catch (6.8% for South Unimak, 1.5% for Shumagin Islands). Previously the sockeye quota was further divided into weekly fishing periods in an

attempt to preclude over harvesting any particular Bristol Bay stock or sub-stock. This regulation is no longer in effect.

The chum salmon harvest is regulated by a floating guideline harvest level that ranges from 350,000 to 650,000 chum salmon, depending on run strength of chum salmon bound for rivers in the Arctic-Yukon-Kuskokwim management region.

An intensive tagging study was conducted in the area of these fisheries in 1987 (Eggers, 1991). Based on this study, most sockeye caught are from Bristol Bay but sockeye are also taken from stocks originating in Cook Inlet, Kodiak, and the Kuskokwim River. Differences in stock composition exist between South Unimak and the Shumagin Islands. Within the Unimak fishery, Bristol Bay stocks constituted 85% while in the Shumagin Islands area Bristol Bay stocks constitute about 55%.



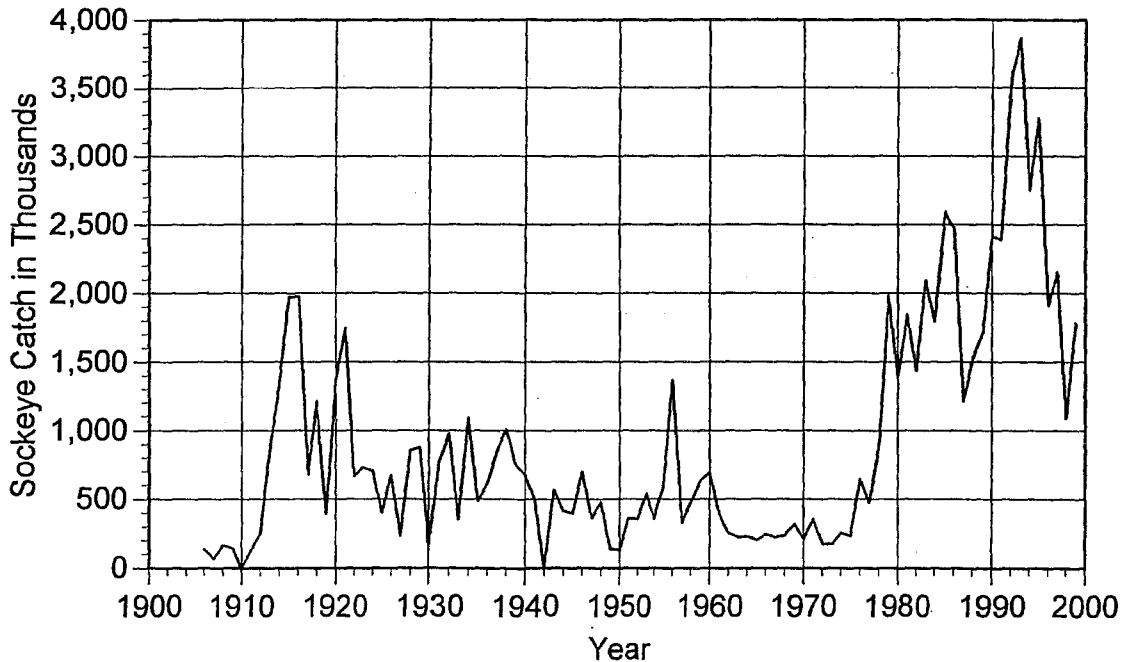
Chum salmon from within this area come from an extremely broad distribution of stocks, including Kotzebue, Norton Sound, Yukon, Kuskokwim, Bristol Bay, central Alaska, Japan, and Russia. As with sockeye, different stock proportions exist between the two fishing areas, with a higher percentage of Bristol Bay and western Alaskan stocks being present at Unimak.

## North Peninsula

There are presently 121 purse seine permits, 161 drift gillnet permits, and 115 set gillnets permits issued that can legally be fished in area M which includes the North Peninsula. However, a number of within district and section gear restrictions exist that preclude all gear types from fishing all areas. Most effort and the bulk of the North Peninsula harvest comes from the Northern District, a relative large district of approximately 400 square miles.

There are four primary sockeye producing rivers in this area, Nelson, Bear, Sandy, and Ilnik. Sockeye salmon escapement goals for these systems total 450,000 fish with 50% assigned to Bear River, 28% to Nelson River, 11% to Sandy River, and 11% to Ilnik River.

Commercial fishing began about 1906. Annual catches averaged well under a million sockeye until about 1980. At that time catches in this district increased dramatically and averaged 2.5 million sockeye during the 10 year period 1990-1999. Since there is no effective separation between fishing districts and sections, the fishery takes place over an extended geographical area and harvests mixed stocks.



Most sockeye salmon caught off the North Peninsula are taken in the Northern District, shown below. Most sockeye are taken by drift gillnet fisheries fishing nets up to 200 fathoms in length and 70 meshes deep, except in the Nelson Lagoon Section where drift gillnets are more restrictive, especially in terms of depth. This compares to only 150 fathoms of net 29 meshes in depth allowed in Bristol Bay.



## EXPERIMENT IN TAGGING ADULT RED SALMON, ALASKA PENINSULA FISHERIES RESERVATION, SUMMER OF 1922.

By CHARLES H. GILBERT,

*Special assistant, U. S. Bureau of Fisheries.*

Important fisheries conducted within the Alaska Peninsula Fisheries Reservation are dependent on runs of the red or sockeye salmon, the destination and spawning grounds of which have been undetermined. These runs are known to consist of mature fish that would spawn and die during the season in which they are captured, but the place of capture is not in close proximity to spawning grounds of sufficient importance, obviously, to account for the extensive runs in question, and no information has been hitherto available to connect them with more distant spawning grounds, toward which they are headed. It was for the purpose of throwing light on this important question that the tagging operations of the summer of 1922 were undertaken.

From the standpoint of conservation the final destination of a salmon run and the course it pursues in its final streamward migration are questions of prime importance. Not until the fish have approached the mouth of their spawning stream are they protected by law from capture. Along their migration routes in the sea they are subject to attack wherever they may mass themselves in sufficient numbers in close proximity to the coast. Should this repeatedly occur along a migration route that is annually traveled, a run of salmon may become decimated and eventually destroyed, even though the individual fisheries of which it repeatedly forms the subject are prosecuted in the usual manner and not with extraordinary severity.

To insure the adequate protection of a salmon run a spawning escapement that will bear a definite ratio to the total size of the run must be provided for. To make such provision we must first know the total number captured for commercial purposes and then the number that escape up the river to the spawning grounds. Obviously these facts can not be known unless the migration routes are established and the points at which salmon bound for the different streams are forced to contribute to the commercial fisheries. The more numerous the points of attack the greater the restrictions that will be necessary to save the runs from extinction.

The principal red salmon fisheries on the southern side of the Alaska Peninsula are those of Ikatan and Morzhovoi Bays, near the western extremity of the Peninsula, and those on Unga Island in the Shumagin Group, approximately 100 miles to the eastward. Problems of the kind above indicated have arisen regarding the

fish in each of these districts, for although local spawning grounds for red salmon occur in the vicinity of these fisheries, it has been generally believed that they are wholly inadequate to account for the very extensive runs that occur. As regards Ikatan Bay there can be no question that the salmon are on their passage, circling the shores of the bay on their journey elsewhere, because the red salmon runs are at times of great magnitude in this bay, although no spawning grounds of any size occur there. In the case of Morzhovoi Bay there has seemed to be more ground for divergence of opinion, for fresh-water lakes of large size, capable of producing very considerable runs of red salmon, are tributary to the head of the bay. On a preliminary examination of this district in 1918 it was considered not improbable that these lakes, together with the spawning grounds tributary to Thin Point, a short distance to the eastward, were the source of the Ikatan and the Morzhovoi runs. The investigations of 1922 failed to lend support to this hypothesis.

The Unga Island fishery is likewise concerned with a red salmon run which may at times reach large proportions. Local spawning grounds for red salmon exist, like those of Red Cove, Acheredin Bay, and a number of smaller streams, but these seem obviously inadequate to account for the run.

Another district in which the problem has arisen regarding the origin and destination of the run lies on the Bering Sea side of the Peninsula, immediately to the eastward of Port Moller. Here along a favorable stretch of coast, traps and purse seines have in certain years reaped an exceedingly rich harvest, whereas in other years the returns have been scanty. Two red salmon streams of importance—Bear River and Sandy River—have their mouths along this stretch of beach. Divergent views have been entertained concerning the destination of the Port Moller red salmon run, it being held by one faction that the run consists largely or wholly of local fish bound for Bear and Sandy Rivers, and by the other that, in the more prosperous years at least, the majority of the salmon are migrants, on their way to Bristol Bay. In our preliminary inspection of this field in 1918 all available evidence seemed to point to the local origin and destination of the run. The tagging experiments of 1922 gave no results in conflict with that theory. It must be recalled, however, that the runs in 1918 and 1922 were both small. Whether more prosperous years on the Port Moller grounds are in part or wholly due to Bristol Bay schools, which on those years more closely skirt the coast, is a problem still awaiting solution.

The tagging experiments of 1922 were planned to throw light on as many of these problems as possible. Consecutively numbered aluminum tags (fig. 1) were attached to the tails of 4,000 salmon, which were then released, and the time and place of recapture were recorded. Of these, 861 were attached at Unga Island, 200 in Morzhovoi Bay, 2,300 in Ikatan Bay, and 639 in the vicinity of Port Moller. Of the 4,000 salmon tagged, 709, or 18 per cent, were reported recaptured, either in the vicinity where tagged or at more distant points. A detailed record of all recaptures is presented in the tables given at the end of this paper. We here call attention to some of the more striking results.

1. *Shumagin Islands.*—The fish tagged at Unga Island, of the Shumagin Group, were obtained, through the highly appreciated cooperation of the Pacific American





FIG. 1.—Tag No. 909, attached at East Anchor Cove, Itanun Peninsula, June 16, 1929, and retaken July 4 at Squaw Creek, Kivichak River, Bristol Bay, distant by direct course about 350 miles from place of marking.

Bull. U. S. B. F., 1928-29. (Dec. 943.)

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Fisheries, from two traps located off the southeastern shore of the island, in the vicinity of Kelly Rock. Of the 861 red salmon tagged only 1 was recaptured in either of these traps, being removed from the trap on the third day after tagging. From this it is clear that salmon released from the Kelly Rock traps do not linger in the vicinity, where they would be subject to recapture, but pass on immediately to other grounds. This is strikingly different, as we shall see, from the procedure of the salmon in Ikatan and Morzhovoi Bays, where many of them circled about the bays for a period of two weeks, during which time they were constantly in the danger zone.

None of the fish tagged and released at Unga Island was taken at Red Cove, Acheredin Bay, or other local fishing grounds among the Shumagin Islands. Five of them moved eastward along the south shore of the Peninsula, one being captured at the mouth of the Ozernoi River, the other four being taken on the eastern shore of Cook Inlet. It is worthy of note that the four salmon bound for Cook Inlet passed on their way such important red salmon streams as the Chignik and Karluk Rivers. Although very extensive fisheries were being prosecuted at both these points no tagged salmon were observed there.

The great majority of the captures from the Unga experiments were of salmon that had started westward on their migration instead of eastward. Furthermore, they proceeded directly to Morzhovoi and Ikatan Bays, without entering on their way the minor red salmon streams of Pavlov or Volcano Bays, Cold Bay, or Thin Point. Of the 801 red salmon tagged and released from Kelly Rock trap No. 6 on June 30, 6 were recovered in Morzhovoi Bay traps on July 6, 4 on July 7, and 5 on July 8, and on the last-mentioned date 1 specimen was recaptured in Ikatan Bay. Inspection of Table 9, in which are detailed the results of this marking, indicates that a stream of migrants from Unga Island was entering Morzhovoi and Ikatan Bays and that they first reached Morzhovoi Bay in numbers and a few days later were present in Ikatan Bay in full force. The last of those released from the New Kelly Rock trap on June 30 were taken in Morzhovoi Bay on July 29, three weeks later. How much of this interval was spent in Ikatan and Morzhovoi Bays can not be specified, but from information derived from tagging experiments conducted in these two bays it is evident that red salmon entering them may mill around in them and pass back and forth from one to the other for two or three weeks before proceeding on their journey. Twenty-four individuals recaptured in Morzhovoi Bay had spent on the average 10 days between tagging and recapture. Fifteen individuals recaptured at Ikatan averaged 13 days en route. The remaining recaptures of the June 30 experiment were made in Bristol Bay from July 14 to August 1 on the Naknek, Kvichak, and Nushagak fishing grounds. The salmon recaptured on July 14 was obtained by the Alaska Packers Association off Koggiung, in the estuary of the Kvichak River, distant by the shortest direct course approximately 465 miles from the point where tagged. If we assume that this fish began its migration immediately on being released after tagging, that it proceeded in a direct line to Isanotski Strait (False Pass), which it traversed without delay, that it pursued an undeviating course to the mouth of the Kvichak River and was there captured on the date of its arrival, it would have traveled at the average rate of 33 miles per day. All of

these assumptions are improbable, entailing the corresponding certainty that the rate of travel was frequently more than 33 miles per day and may even have doubled or trebled that speed. That the rate was not notably exceptional in this individual is shown in Tables 9 and 10 by records of other recaptures in the Bristol Bay district. Six individuals of the June 30 marking averaged 20 days in passing from Unga Island to the point of capture in Bristol Bay. Among our unverified assumptions is that predicating False Pass rather than Unimak Pass for entrance into Bering Sea. This assumption is a probable one in view of the number of captures in Morzhovoi and Ikatan Bays, near the entrance to False Pass. If Unimak Pass had been traversed, the distance would have been approximately 125 miles farther and the minimum rate increased to 40 miles per day.

A second marking experiment was conducted on Unga Island on July 1, when 260 fish were tagged and released from the Pacific American Fisheries trap No. 3 (the Old Kelly Rock trap). As shown in Table 10, the majority of the recaptures were made in Morzhovoi and Ikatan Bays, the remainder being reported from Ugashik, Dzegik, Naknek, Kyichak, and Nusharak fishing grounds in Bristol Bay. The percentages of recapture from the two Unga experiments were almost identical—9 per cent in the first and 8 per cent in the second. In the first experiment 72 per cent of the total recaptures were made in Morzhovoi and Ikatan Bays, in the second experiment 65 per cent.

The rate of travel from the Old Kelly Rock trap of the salmon marked July 1 was consistently higher than in those tagged the previous day from the New Kelly Rock trap. In the second experiment the average time spent in reaching Morzhovoi and Ikatan Bays was 8 or 9 days and in reaching various points in Bristol Bay 15 days.

**2. Morzhovoi Bay.**—Two hundred red salmon were tagged and released in Morzhovoi Bay on June 29 from Pacific American Fisheries trap No. 2, located near the middle of the southwest shore.

Heavy recaptures were at once effected in Morzhovoi Bay, beginning with June 22 and continuing until June 30, during which period 59 salmon, or 30 per cent of the tagged fish, were recaptured in the same bay in which they were liberated. During this same period scattering captures were made in the adjacent Ikatan Bay, the total equalling 14 salmon, or 7 per cent. Three individuals were captured on the Port Moller fishing grounds between June 27 and July 7. Thirty-nine per cent of the salmon tagged in Morzhovoi Bay were recaptured in these three localities. None was reported from Bristol Bay or from any district other than those mentioned.

It is worthy of note that of the salmon recaptured from this experiment more than four times as many (59 as against 14) were taken in Morzhovoi Bay as in Ikatan Bay, yet they would have to pass through Ikatan Bay on their way to Isanotski Strait if bound for Bering Sea and Bristol Bay.

This becomes all the more noteworthy when considered in connection with proportionate recaptures of salmon tagged and released in Ikatan Bay. As an extensive migration is known to exist into Bering Sea and as the fish are free to traverse Isanotski Strait directly from Ikatan Bay, it would seem highly probable that a much larger proportion of Ikatan fish would be recaptured in Ikatan Bay

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than in Morzhovoi Bay, which they would enter only by way of a detour. But the reverse is the case. In the majority of the Ikatan tagging experiments (seven in all) more of the fish were recaptured in Morzhovoi than in Ikatan Bay, and if totals are considered, of all the recaptures from the Ikatan experiments 154 were made in Ikatan Bay and 173 in Morzhovoi Bay.

Two possible explanations occur to us. One is that a larger movement of fish takes place from Ikatan to Morzhovoi Bay than in the reverse direction. The other predicates a more efficient fishery in Morzhovoi Bay than in Ikatan Bay, although the number of traps is far less. The first of these explanations would seem valid if there were extensive spawning grounds tributary to Morzhovoi Bay, which would absorb a considerable percentage of the fish that enter the bay. Such grounds, in fact, do exist, but we have reasons, which we will not here discuss, to doubt their present efficiency. It is believed that in the season of 1922 comparatively few of the fish entering Morzhovoi Bay remained there to spawn, while practically none of them resorted to Thin Point, Cold Bay, Volcano Bay, or any of the minor spawning streams to the eastward.

There remains the hypothesis of more intense fishing and less chance of escape on the part of salmon entering Morzhovoi Bay than of those circling around Ikatan Bay or passing through it. This, we believe, is probably the case. As we have shown, 30 per cent of the fish tagged in Morzhovoi Bay were recaptured in this bay, and 38 1/2 per cent in all were retaken. This is far beyond the average recaptures from the Ikatan Bay experiments, which equaled 19 per cent for the first 1,800 tagged. If the Morzhovoi traps catch a larger percentage of the fish that approach them than do the Ikatan traps, their effect on the run must be carefully considered.

3. *Ikatan Bay, Louisiana Cove, East Anchor Cove.*—The most extensive tagging program in 1922 was carried out in Ikatan Bay and on grounds along the shore of the Ikatan Peninsula, where 2,300 red salmon were marked and released on dates ranging from June 13 to July 10.

This is the seat of an extensive fishery for red salmon, which are evidently intercepted on their spawning migration, with their final destination not obvious. The red salmon spawning grounds tributary to Ikatan Bay are wholly inconsiderable and are not worthy of attention as possible source of the salmon run of the bay.

In order to secure as much information as possible concerning the movements of the salmon within the bay and along the Ikatan shore, the tagging experiments were conducted in six different traps, selected as embracing the entire fishing field. Two of these were at the head of the bay, on either side of the entrance to Isanotski Strait; one was in East Anchor Cove, near the outer extremity of the Ikatan Peninsula and the outermost trap of the group; another was in Louisiana Cove, the next trap site inside East Anchor Cove; and two others were intermediate in position between Louisiana Cove and the entrance to the pass. This distribution was expected to throw light on the theory widely held by the fishermen that salmon circled the shores of the bay once and then disappeared, being first seen on the eastward side of the entrance to Isanotski Strait and thence passing outward along the shores of the Ikatan Peninsula until they reached East Anchor Cove and vanished.



the red salmon that form the great run on the northern shores of the Alaska Peninsula have their feeding grounds in the North Pacific and enter Bering Sea only when on their final spawning migration. The shortest time taken in passing from Ikatan to Bristol Bay (off the Naknek River) was 10 days. The average time during the height of the run was 20 days, but the rate was apparently accelerated toward the close, for six salmon tagged at Ikatan on July 10 were captured in Bristol Bay after an average interval of 12 days.

The number of tagged fish reported from Bristol Bay as a result of this experiment can not be accepted as furnishing reliable evidence concerning the magnitude of this movement. No rewards were offered for the return of tags from Bristol Bay, while to the westward such rewards were offered. As a result many of the recaptured tags in Bristol Bay were thrown away or were privately held and not reported. Current belief among fishermen and cannery employees was to the effect that the tags reported constituted a small fraction of those actually seen.

A similar series of tagging experiments on a larger scale is planned for the summer of 1923, when it will be hoped to throw additional light on the magnitude of the migration from the North Pacific into Bering Sea. This is a matter of the greatest importance in connection with conservation measures dealing with the most important red-salmon runs of Bristol Bay.

4. *Port Moller.*—Two tagging experiments were carried out in this district. On June 26, 200 red salmon were tagged from the Moller Bay trap in the immediate vicinity of the Port Moller cannery of the Pacific American Fisheries. This trap is not, primarily, a red-salmon trap, as the major part of its catch consists of cheaper grade fish; but it captures annually a considerable number of red salmon, the spawning destination of which has been unknown. As over 45 per cent of the tagged fish were recaptured, largely by purse seines, on the Bear River-Sandy River grounds between June 27 and July 7, it is safe to conclude that the red salmon taken in Moller Bay are bound for Bear and Sandy Rivers and enter Moller Bay in the course of their migration eastward along the coast of the peninsula. The very large percentage of these tagged fish that was recaptured, even during a year when the Bear River traps were not operating with their usual success, bears witness to the remarkable efficiency of this fishery. There are grounds for fearing that the escapement to the spawning grounds of Bear and Sandy Rivers has often been inadequate.

The second Port Moller experiment was conducted with red salmon that had been captured on June 27 by a purse-seine boat off the mouth of Sandy River. As this lies at the eastern end of the Port Moller grounds, hence nearest the Bristol Bay district, the fish captured at this point might well be expected to contain representatives of the Bristol Bay run, if any of these were to be found on the Port Moller grounds. Of 439 red salmon tagged and released at this point 19 per cent (83 fish) were recaptured between June 27 and July 7 on the Bear River-Sandy River fishing grounds. It was usually not possible to ascertain accurately on what part of the grounds the fish were taken, as the seine boats would make many hauls and the tagged fish were not recovered until the load was delivered at the cannery.

In several instances, however, the capture was known to be effected off the mouth of Bear River, and as this stream is far more important than the Sandy River it seems probable that the majority of the salmon that were schooling off the Bear River-Sandy River beaches in 1922 were bound for Bear River. It is strikingly corroborative of this view that not a single individual out of the 639 tagged in the Port Moller district was recaptured in Bristol Bay, whereas out of the nine tagging experiments conducted south of the Alaska Peninsula at Unga Island and in Ikatan Bay all but the first two experiments (June 13, 200 specimens; June 14, 100 specimens) contained salmon afterwards taken in Bristol Bay. The inference seems plain and unquestionable that in 1922 a stream of migrants was traversing Isanotaki Strait (False Pass) from the Pacific into Bering Sea, from early June to the middle of July at least, and that these distributed themselves to the red-salmon rivers along the entire northern shore of the Alaska Peninsula and throughout Bering Sea, from Nelson Lagoon to the Nushagak, and even to the Kuskokwim. The red salmon bound in 1922 for Bristol Bay assuredly did not school close inshore until after they had passed the Sandy River and were perhaps approaching the mouth of the Ugashik.

TABLE 3.—*Continued.*

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TABLE 1.—*Ikatan experiment. Tags 1 to 200, attached June 13, 1922, at P. E. Harris trap No. 7, Ikatan Bay.*

[Total recaptures 27—14 per cent.]

Date.	Recaptures.			Date.	Recaptures.		
	Ikatan Bay.	Morse-hovd Bay.	Port Moller.		Ikatan Bay.	Morse-hovd Bay.	Port Moller.
June 14.....	4			June 24.....		1	
June 15.....	1			June 25.....	1		
June 16.....	3	2		June 26.....			1
June 18.....		12		June 27.....			1
June 19.....	1			No date.....			
June 20.....	1	1		Total.....	9	16	2

TABLE 2.—*Ikatan experiment. Tags 201 to 300, attached June 14, 1922, at P. E. Harris trap No. 3, Ikatan Bay.*

[Total recaptures 29—29 per cent.]

Date.	Recaptures.			Date.	Recaptures.		
	Ikatan Bay.	Morse-hovd Bay.	Port Moller.		Ikatan Bay.	Morse-hovd Bay.	Port Moller.
June 15.....	1			June 23.....		1	
June 16.....	3			June 25.....		1	
June 18.....		12		June 26.....			1
June 19.....	1			June 27.....		1	
June 20.....	4	1		No date.....			1
June 21.....	1			Total.....	10	17	2
June 22.....		1					

My name is Melanie Rotter and I am from Sand Point, Alaska.

I am here on behalf of myself, my husband John Rotter, our seven boys, his crew, and my aunt and uncle Norma and William Gilbert Jr, owners of the 90 ft vessel Alaska Dawn, This vessel has been run by my husband for over eleven years and is a locally owned, operated, and crewed vessel. His crew is either family or other locals with families dependant on them.

We are opposed to Proposal 104 as written. We understand and agree with the overall intent to preserve our local fleet, but this will essentially eliminate this local boat from the Pollock fishery that takes place primarily in State waters. Despite meeting all qualifications, Gulf of Alaska fishing rights were taken away from us due to crab rationalization and only recently restored after pursuing a three year battle at the North Pacific Fisheries Management Council.

Limitations have already been enacted for groundfish at the Federal level. My husband and I participated at the North Pacific Fisheries Management Council meetings for years to get the 300,000 lb trip limit for Pollock. This limit has been further restricted recently by allowing only one trip per 24 hours. The recent sector split for the Cod quota was also enacted.

We would not be opposed to this proposal if it only applied to Cod as all of the other groundfish proposals before you clearly state. We would be supportive if it were amended to say "there will be a 90 ft vessel limit inside state waters".

My husband was told at the last Sand Point Fish and Game Advisory Committee meeting that this proposal only applied to Cod and not all groundfish as written and was amended to clearly reflect this. But as was stated by a previous testifier, it is clear that their intention was to include all groundfish. We believe that we have been singled out for elimination despite past participation in voluntary stand-downs to wait for the highest quality of fish.

The fishing vessel Alaska Dawn is often times the only boat operating in the area that is big enough to require observer coverage and logbook submissions to the National Marine Fisheries Service. It's hard to believe that the State would be willing to give up this source of important information for both Pollock and Cod management.



Proposal 104 falsely states that only a few non-local boats will suffer if enacted. We are more local than many of the 58 footers fishing this area. Furthermore, when repairs are needed, we have them done in Sand Point or if necessary in Kodiak, further contributing to our local economies.

Our Gilbert ancestors are listed in catch reports from over 80 years ago which should count for something. My husband was one of the first fishermen to fish Pollock out of Sand Point. He has decades of experience and catch history that goes back to the joint venture days and has always been willing to help other fishermen over the years. This too should count for something.

In conclusion, I thank you for this opportunity to defend ourselves and ask that you please not vote to take away our livelihood. Please don't take away the opportunity for our two youngest Aleut children to follow in their ancestors footsteps and to grow up to be full share crew members with their father on the boat they grew up on.

RC 44

Richard Walsh  
BOF Testimony 2010

## Comments on the South Alaska Peninsula June Fishery

Mr. Chairman and board members, my name is Richard Walsh. I'm a life long resident of Alaska and have fished commercially since 1966. I've been gillnetting in Area M since 1982.

Area M's, June South Peninsula Fishery is truly unique. You have just come from the AYK meeting that dealt largely with proposed regulatory changes on major interior rivers with a "corridor style of salmon migration and management and before that you met to consider Bristol Bay proposals regulating a region divided into several small terminal areas, most fished by several hundred boats. Now you are meeting to consider proposals affecting an area with relatively few fishermen spread over a large geographic area, targeting salmon runs that are dispersed over much of the North Pacific Ocean.

The best available science indicates that the salmon runs passing through the North Pacific are evenly mixed, widely dispersed and individual stocks have not yet segregated into identifiable groups. Even though our fishing area is large relative to others in the state, it is tiny when compared to the migratory routes of the salmon we target. Many of these stocks pass far to the south or west of the False Pass Fishery. There is little chance that this June Fishery will impact any single Western Alaska stock.

This graph illustrates harvest rates from selected salmon runs from across our state. Our June Fishery, labeled False Pass on the graph, has a very low harvest rate, ranging from 2.5% to 7%. Our harvest rate is lower than the error in run forecast or run reconstruction for Western Alaska stocks. With our harvest so low it has no effect on management policy, in fact, if Area M ceased to exist management in the AYK and Bristol Bay would not change at all.

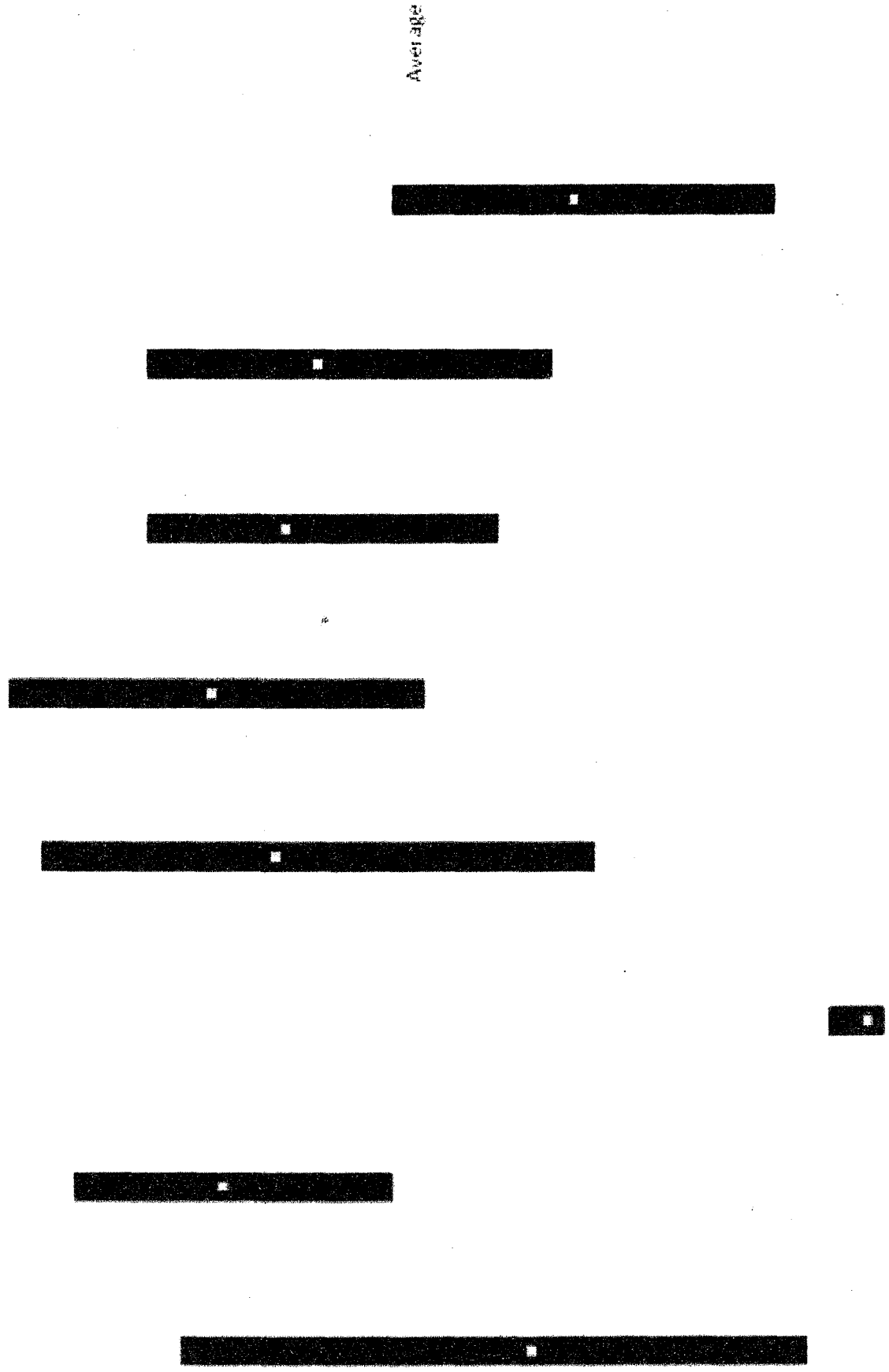
Our June Fishery is an open ocean fishery, but conducted near shore with short and shallow nets similar to other areas of the state. The fish we catch have high oil content and a silver bright color and do well in the marketplace.

There has been some confusion surrounding the 2009 chum harvest in our June Fishery. A total of 700,000 chum were harvested in June. The 1.7 million figure many of us have heard represents the total season chum harvest for the entire South Peninsula. One million of these chums were caught "Post June" and have no place in a discussion of chum stocks destined for the AYK or Bristol Bay. The South Peninsula chum escapement for the 2009 season was over 600,000.

Our fishery is "Unique" because the salmon stocks we fish are widely dispersed and our fleet is relatively small. It is a low impact fishery. The current Management Plan for the South Peninsula has worked well for six seasons, keeping our harvest of both reds and chums at or below historic levels. It does not need to be changed.

# Statewide Harvest Rates

100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%



Average

AYK Bristol Bay Eagle Pass Kodiak Aleut Cook Inlet PWS Copper River Southeast Taku Trois Coho

RC45



**ALEUTIA**

*Pure. Wild. Alaskan.*

To: Board of Fisheries  
Fr: Karen Montoya, Aleutia  
Date: February 3, 2010

Dear Members of the Board:

Aleutia is a 501(C)3 nonprofit organization founded in 2001 to market Area M harvested sockeye salmon. Aleutia is a membership organization made up of local families and harvesters.

As a nonprofit, Aleutia cannot lobby on behalf of any proposal. However, the organization would like to take this opportunity to provide the Board of Fisheries with some information it has gleaned over the years as the region's designated salmon marketing organization that may be helpful as you make your Area M-related regulatory decisions.

This information includes what we have learned about the quality of Area M salmon, the marketability of locally harvested sockeye and our work to reach out and include groups statewide for the benefit of all harvesters across the state.

When Aleutia was founded in 2001, it was not expected to survive. Aleutia doesn't have the access to funding that CDQ communities have, for example. Because of Aleutia's limited resources, many believed that the organization would last a year or two and then shut down.

However, Aleutia survived because of the astonishing quality of salmon that comes out of the Area M fishery. Using their centuries of experience on the sea, our harvester members—primarily Eastern Aleut Natives—bring a super-premium quality sockeye salmon to the market. Every fish is live bled, iced immediately and handled with the upmost care. Aleutia has a "zero-tolerance" policy for mishandling, because it results in bruising and gaping. Local harvesters willingly comply because of their appreciation for the resource.

The reaction on the market has been astonishing. Aleutia was recently told by a major retailer that it provides the highest quality fish available anywhere. The fish sells easily because of its flavor and appearance.

Despite the positive reaction on the market, the organization still faces its struggles. One of the problems Aleutia faces each year is that its limited catch ability hampers market penetration. Quite simply, the more fish Aleutia catches and sells, the more the Aleutia name gets out and the more good Aleutia can do promoting sockeye salmon around the region and state.

As a fisherman's group, we work very hard to support harvesters from regions around the state.

For example, Aleutia, with support of its members, has been absolutely adamant that it will not market chum salmon.

From time-to-time it finds itself unable to meet demand. This summer we partnered with the Yukon Delta Fisherman's Association to supply an international buyer with sockeye salmon after Aleutia found itself unable to fill the order. Rather than reach out to local processors, Aleutia supported the YDFA in filling the gap. We worked closely—and very successfully— with YDFA through the entire process.

Aleutia is now working with a small Yukon River processor to assist it in obtaining processing equipment so they can run a profitable small business and successfully sell chum salmon on the domestic market this year.

Aleutia provides this support because it feels strongly—again with local member's support—that it needs to support the entire state and the commercial and subsistence harvest.

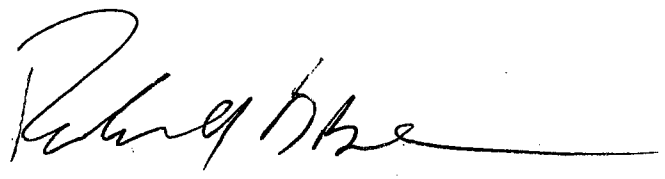
RCW

Comprise Proposal

Substitute Language for Proposal #152

Three Hills shall not open more than 2.5 day a week. The Ilnik section shall not open more than 2.5 days a week in the original district. If an EO is needed to control Ilnik escapement the department can open an area 3 miles on each side of Ilnik and 1 miles off shore.

Roland Briggs

A handwritten signature in black ink, appearing to read "Roland Briggs", with a long horizontal flourish extending to the right.

1247

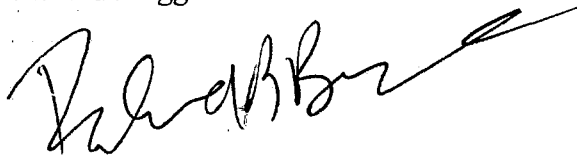
Comprise Proposal

Substitute Language for Proposal #151  
Close Outer Port Heiden section.

Open the Inter Port Heiden District shall consist of an area 2 miles south Strogonof Point to 1 mile off shore then extends 10 miles northeast to a point 1 mile off the beach near the mouth of Reindeer Creek then intersect the beach at 90 degrees. This section will be open to both area T and area M permit holders from Jan 1 to Dec 31

Open Cinder River Lagoon to both area T and area M permit holders form Jan 1 to Dec 31.

Roland Briggs

A handwritten signature in black ink, appearing to read 'Roland Briggs', with a long horizontal flourish extending to the right.



Prepared by Tom Wooding

RC 48

# Mixed

South Unimak

Very Small

Sherry takes place on

part of it.

© 2007 Europa Technologies  
Image © 2007 NASA  
Image © 2007 TerraMetrics

© 2007  
Google™

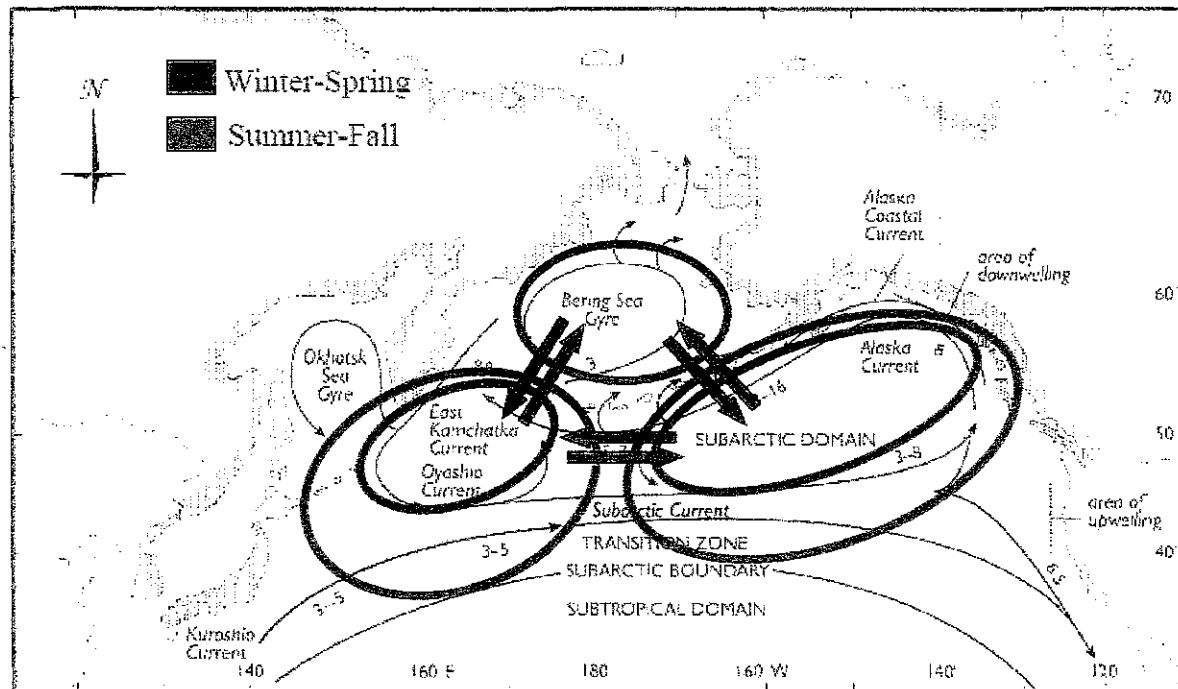
## **My Background and Views**

- **Started fishing at age 8.**
- **Began fishing in Area M at 13.**
- **Became skipper at 18.**
- **Received a BSME at 22.**
- **Constructed my boat at 24.**
- **Started attending BOF meetings at 26.**
- **Currently Vice-President of CAMF.**
- **Have fished with my 14 year-old son Zach for 5 years.**
- **The Board was right in 2004.**
- **It gave Area M fisherman more flexibility to target sockeyes and move away from chums by allowing more time in the fishery.**
- **The 2007 Board gave Area M fisherman even more flexibility by opening more area.**
- **Please approve Proposal 117.**

## **Sources**

- **ADFG Genetic Lab report "Migration patterns of sockeye salmon in the Bering Sea (October 2004)"**
- **NPAFC Bulletin No. 1 "Genetic Stock ID of Chum Salmon Harvested Incidentally in 1994 and 1995 Bering Sea Trawl Fishery" (Wilmot et al, NOAA)**
- **ADFG Report to the BOF at the Bristol Bay meeting (2006)**
- **NPAFC Bulletin No.5, "Stocks Origins of Chum Salmon in the Gulf of Alaska during Winter as Estimated with Microsatellites" ( Beacham et al) 2009**
- **Catches of Sockeye Salmon of Bristol Bay Origin by the Japanese Mothership Salmon Fishery, 1956-70 (Fredin et al) 1974**
- **A New Model of Ocean Migration of Bristol Bay Sockeye (French et al) 1973**
- **Hot and Cold running salmon: lessons from BASIS on stock-specific migration and distribution response to climate change. (Myers et al) 2008**

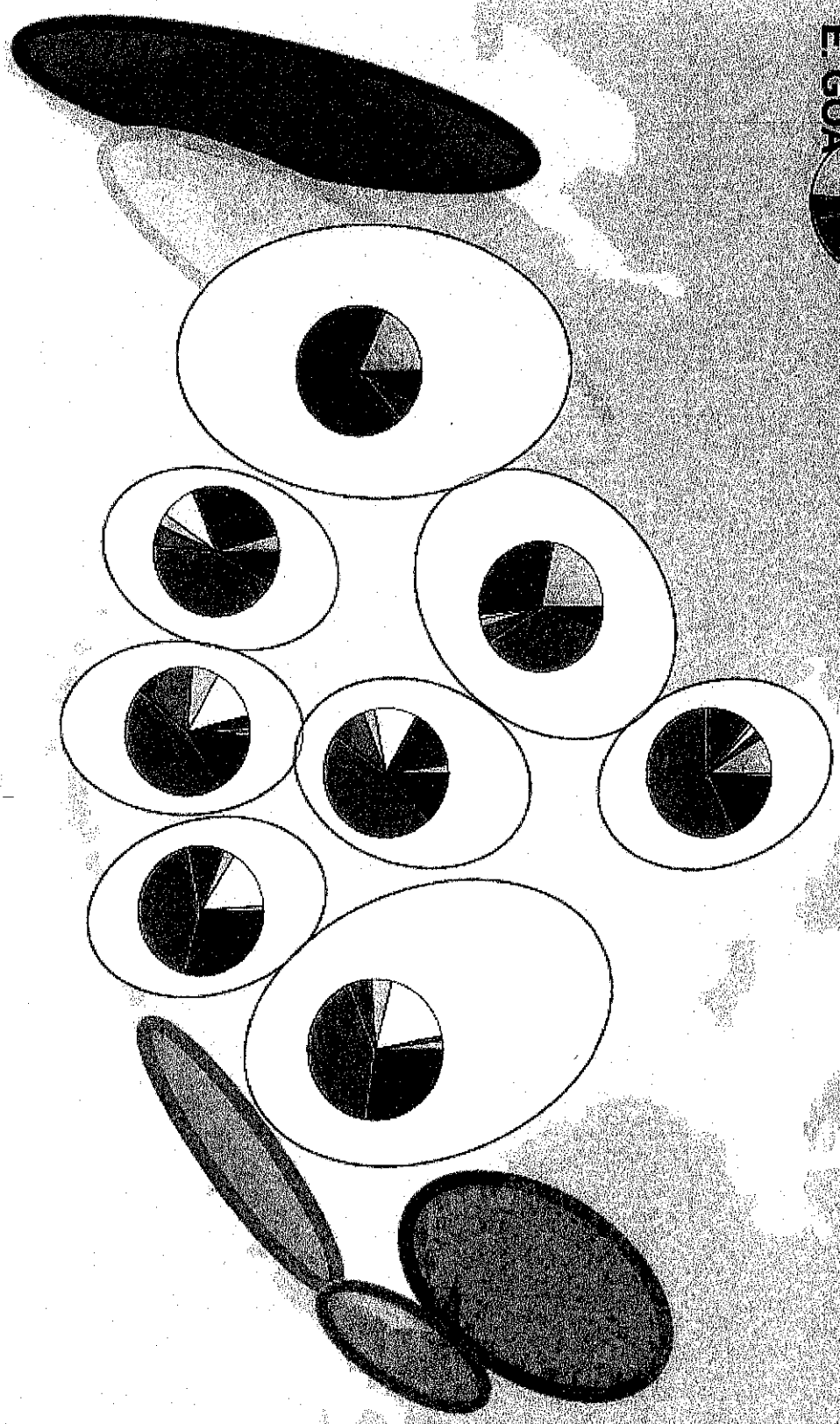
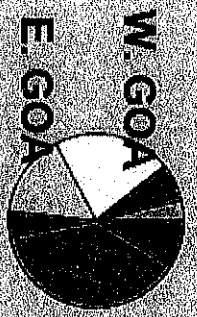
# BASIS results confirm general conceptual model of seasonal movements of salmon in the Bering Sea (Source: Myers et al. 2007)



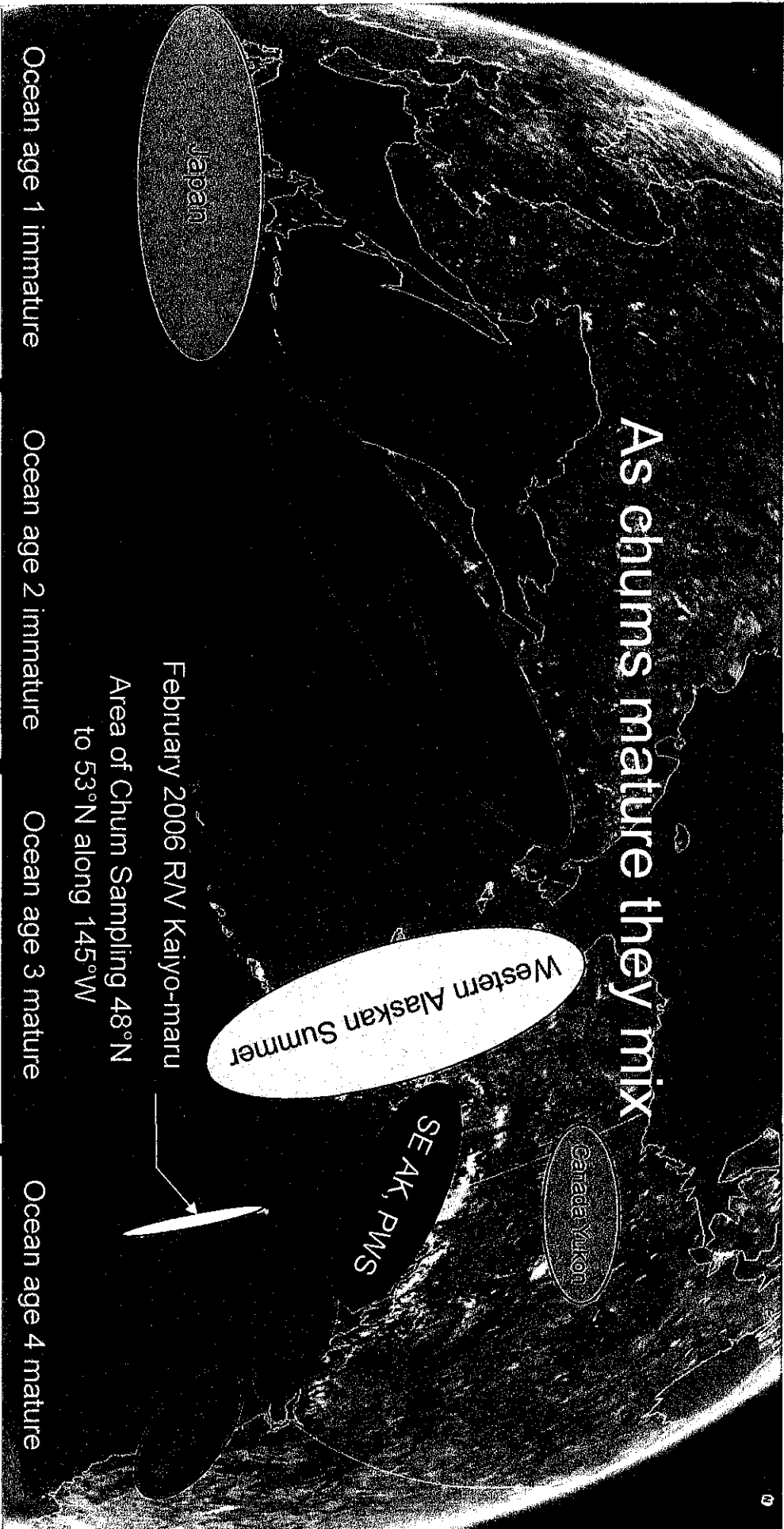
Base map showing oceanographic features and approximate current speed (km/d) are from Quinn (2005).

# August Stock Compositions

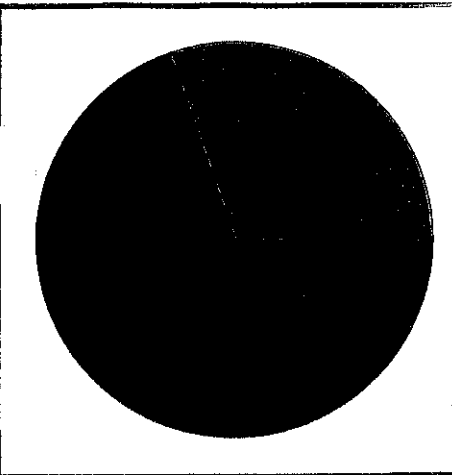
## Immature Sockeye



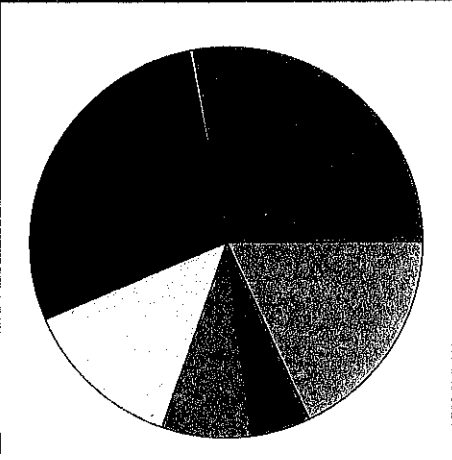
# As chums mature they mix



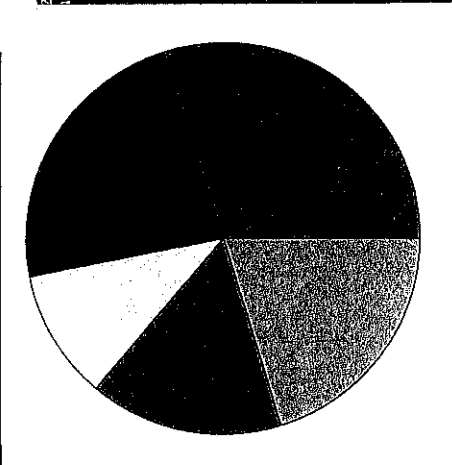
Ocean age 1 immature



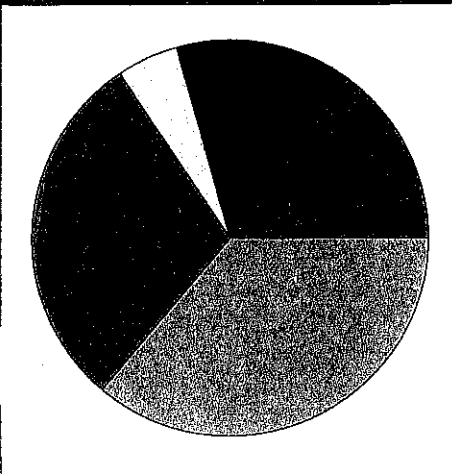
Ocean age 2 immature



Ocean age 3 mature



Ocean age 4 mature



pa  
141  
87

# 1956 to 1970 Japanese Mothership Fishery

82% of the mothership catch of mature Bristol Bay stocks occurred in the area inside the red boundary.



- Estimated catch of Bristol Bay sockeye varied between 250 thousand and 6.5 million fish.
- The average catch was 2.4 million per year during the 15 year period
- The exploitation rate on maturing Bristol Bay stocks was estimated to range from a low of 2.1% to a high of 35.6%. The 15 year average was 10%. Four times higher than the average exploitation rate of the June Fishery
- It is likely that the exploitation rate of Western Alaskan Chums was also greater.

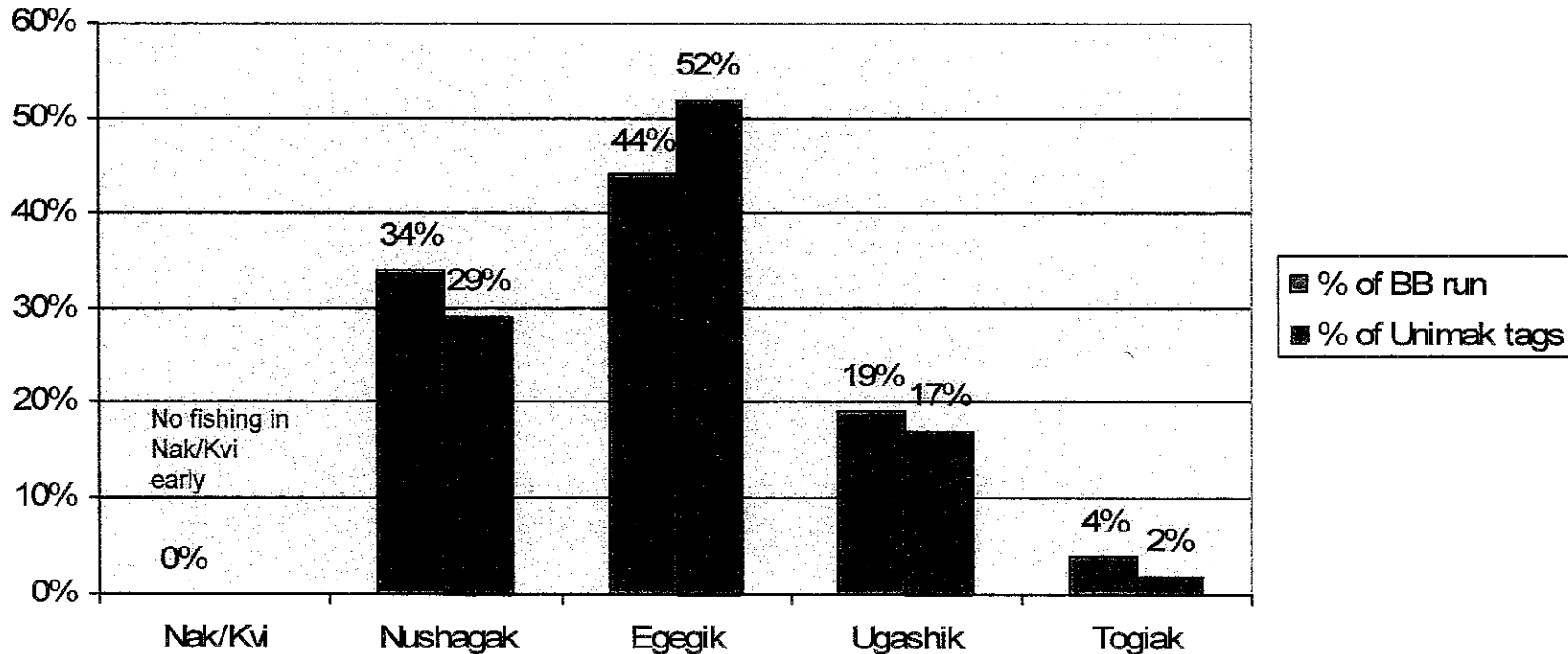
Chukotka

Dr. Don Rogers determined that fish in the June fishery are mixed.

- 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.

This is what he found. The relative abundance of each BB stock in the June Fishery is in close proportion to the relative abundance of each stock in the BB run

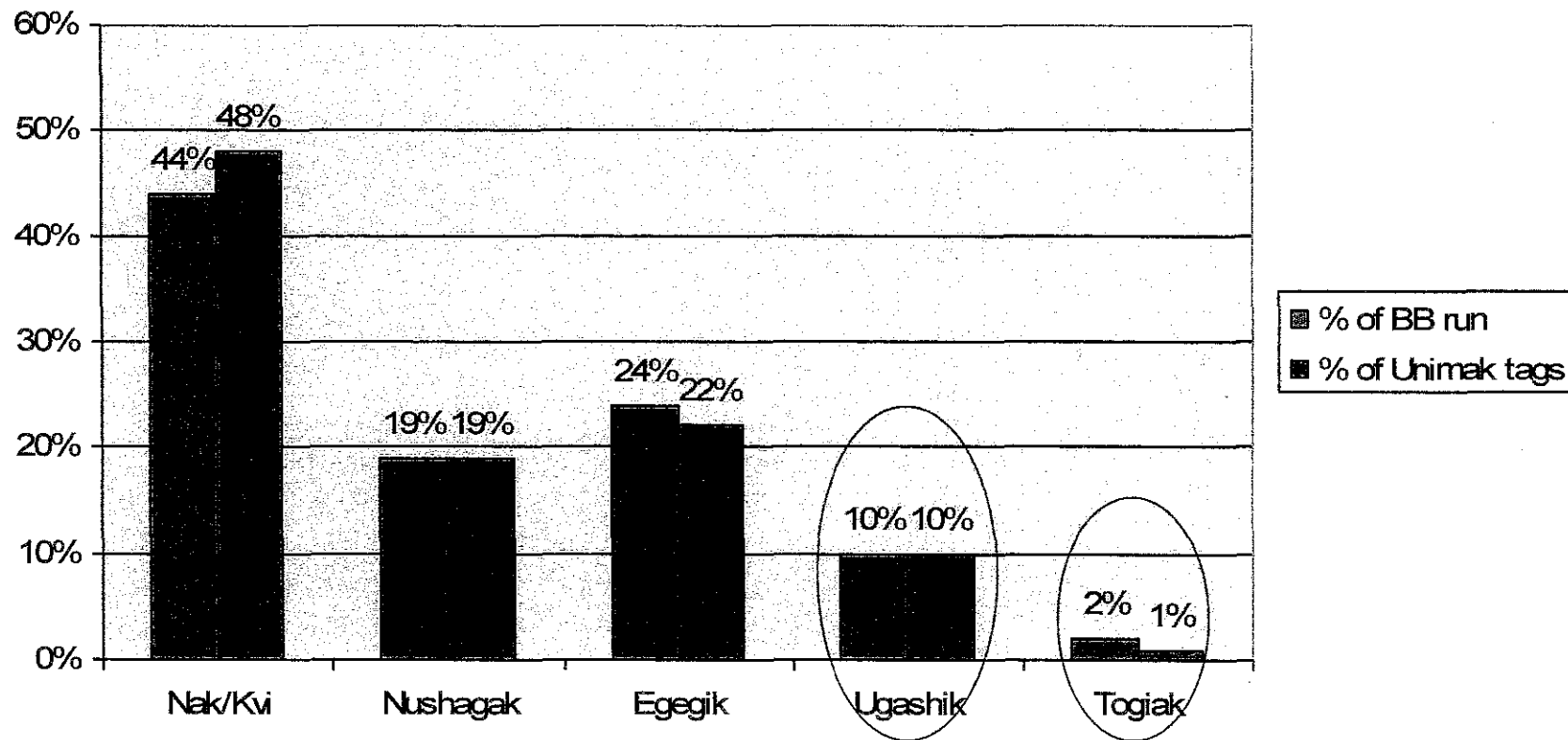
**Stock and Tag Return Compositions from Tagging in South Unimak  
June 13 to 19**





Furthermore, it doesn't change over time. Even though the Ugashik and Togiak fisheries peak later, their relative abundance stays the same in South Unimak throughout June. In other words, Fish are Well Mixed in the Ocean and in the June Fishery.

**Stock and Tag Compositions from tagging in South Unimak after June 22**



- **Dr. Eggers report to the BOF 2004 Area M meeting “What’s true for Sockeye is more than Likely True for Chums”**
- **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.**

## **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**

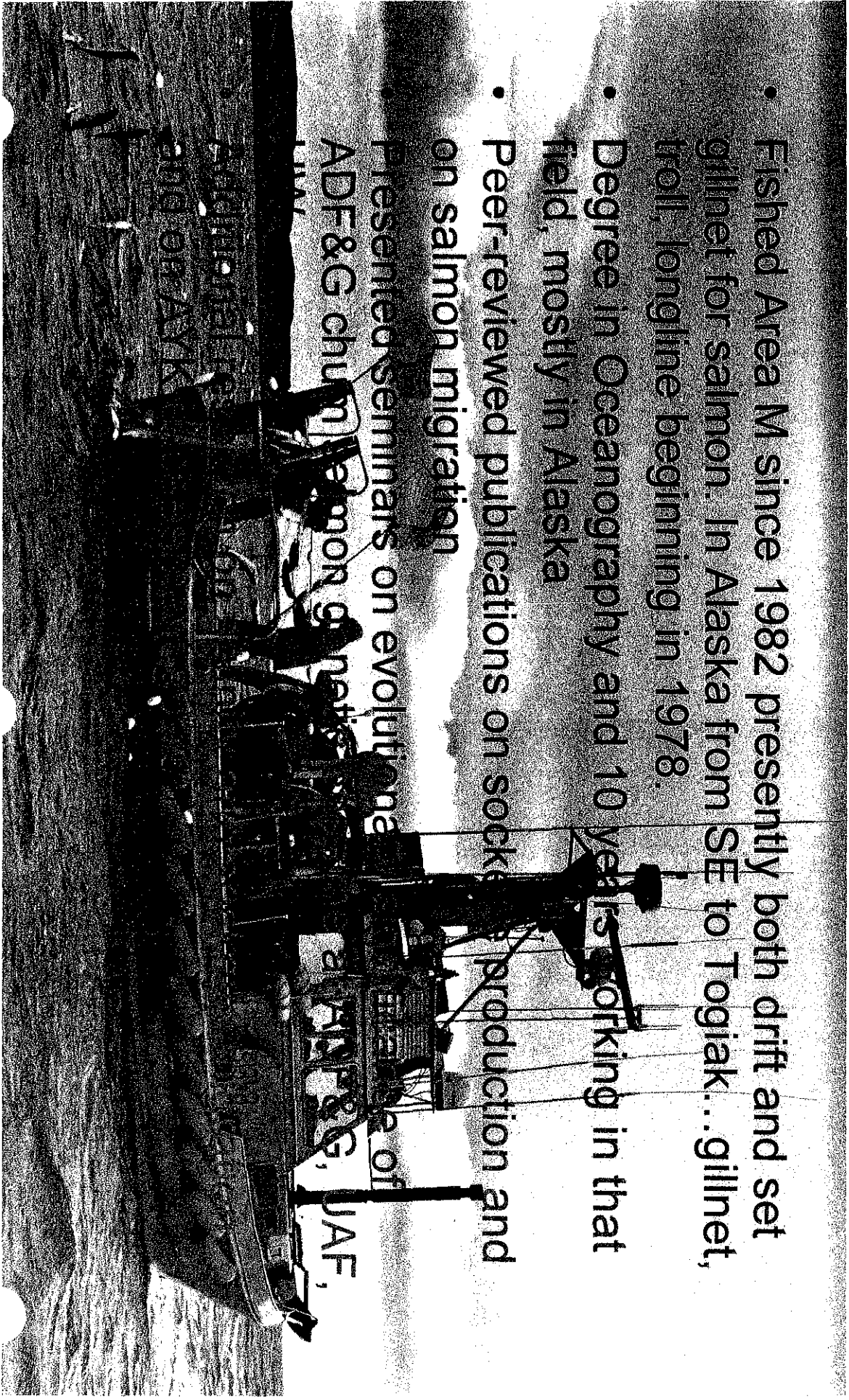
## **MY CONCLUSION**

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

# Pat Martin -- F/V Legacy - CAMF

- Fished Area M since 1982 presently both drift and set gillnet for salmon. In Alaska from SE to Togiak... gillnet, troll, longline beginning in 1978.
- Degree in Oceanography and 10 years working in that field, mostly in Alaska
- Peer-reviewed publications on sockeye salmon production and on salmon migration
- Presented seminars on evolutionary genetics of sockeye salmon genetics to ADF&G, UAF, JAF, and other groups.

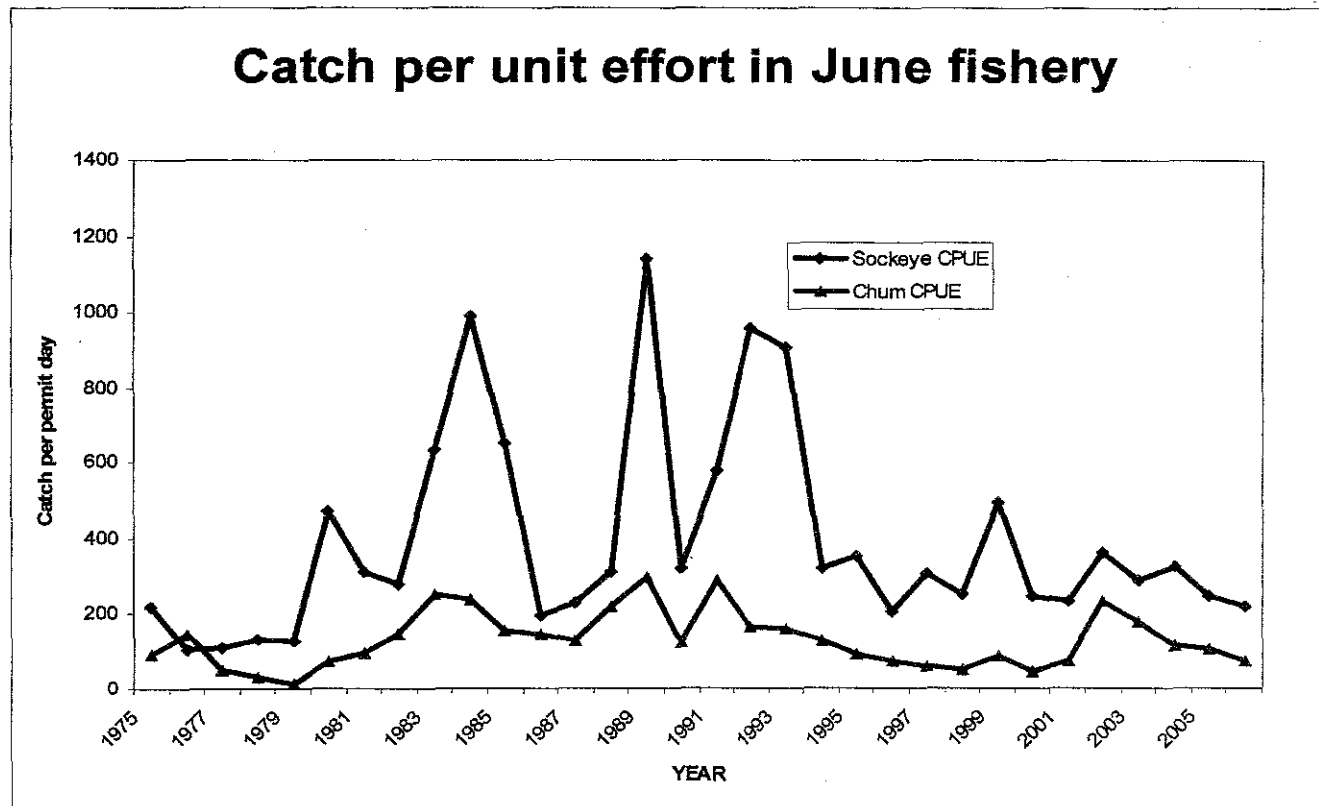
ADDITIONAL INFORMATION  
AND OR AVIA



**Do not support calls for additional windows, chum caps, or other restrictive measures in the June fishery**



# What has happened to catch rates in the June fishery?



- Catch rates are now about one quarter of the good years
- Why?

This work is based on an investigation begun for the Board of Fisheries meeting three years ago and culminating in publication in INPFC Bulletin Number 5 this month

NPAFC International Symposium on Bering-Aleutian Salmon  
International Surveys (BASIS)

**Climate Change, Production Trends  
and Carrying Capacity of Pacific  
Salmon in the Bering Sea and  
Adjacent Waters**

November 23-25, 2008

Sheraton Seattle Hotel, Seattle, WA, USA

**Call for Papers**

Three-day symposium will include oral and poster presentations. Abstracts (less than 400 words) must be submitted to NPAFC Secretariat by April 28, 2008. All papers presented at the symposium will be considered for publication in a NPAFC Bulletin series following peer-review.

**Registration**

Please complete your registration no later than October 6, 2008 via on-line, mail or fax.

**For More Information**

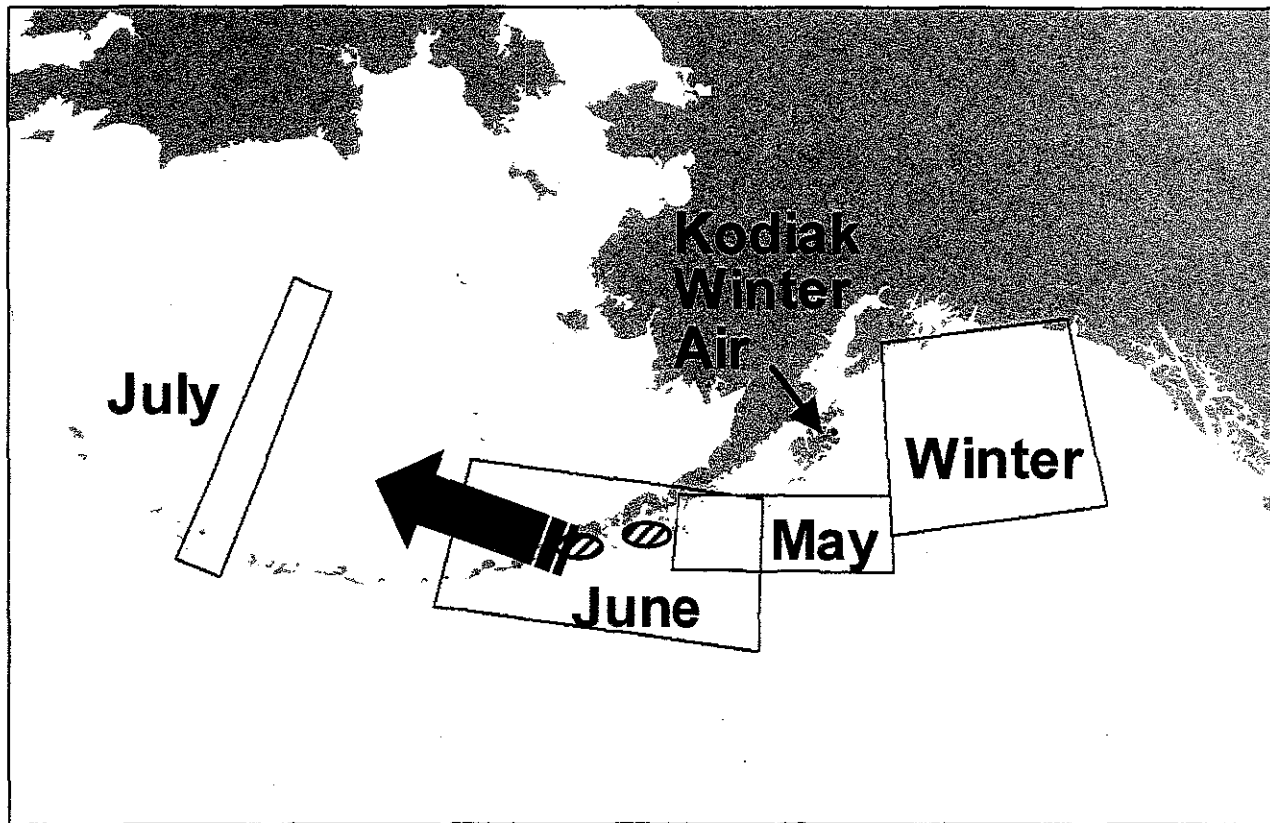
Please visit the NPAFC website ([www.npafc.org](http://www.npafc.org)) or contact NPAFC Secretariat.



**North Pacific Anadromous Fish Commission**

Suite 602, 896 West Pender Street, BC, Canada V6C 2B2. Phone: 1-604-775-5650;  
Fax: 1-604-775-5677. E-mail: [secretariat@npafc.org](mailto:secretariat@npafc.org); Website: <http://www.npafc.org>

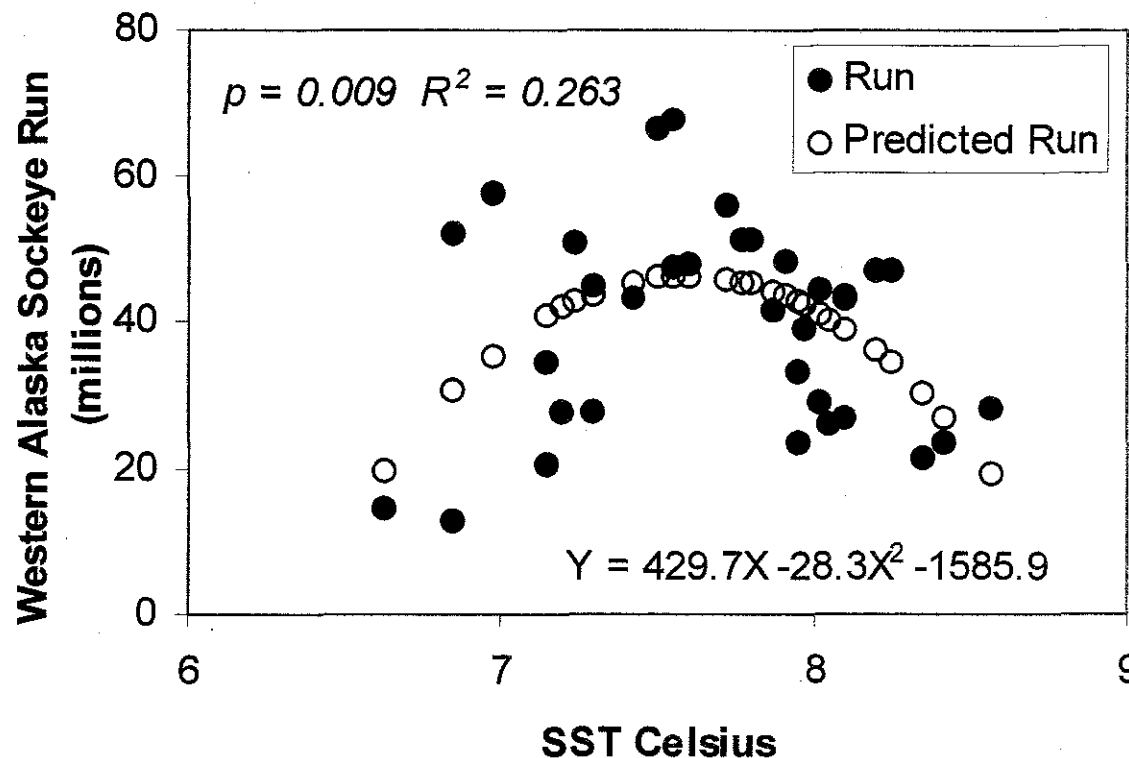
A warming trend in sea surface temperatures is associated with a shift in distribution away from areas near and east of the June fishery and into the Bering Sea



⊗ - Locations of June South Peninsula Fishery

□ - Boundaries of Sea Surface Temperature Areas

There is evidence of a climatic optimum in the Bering Sea for the size of the Western Alaska sockeye run



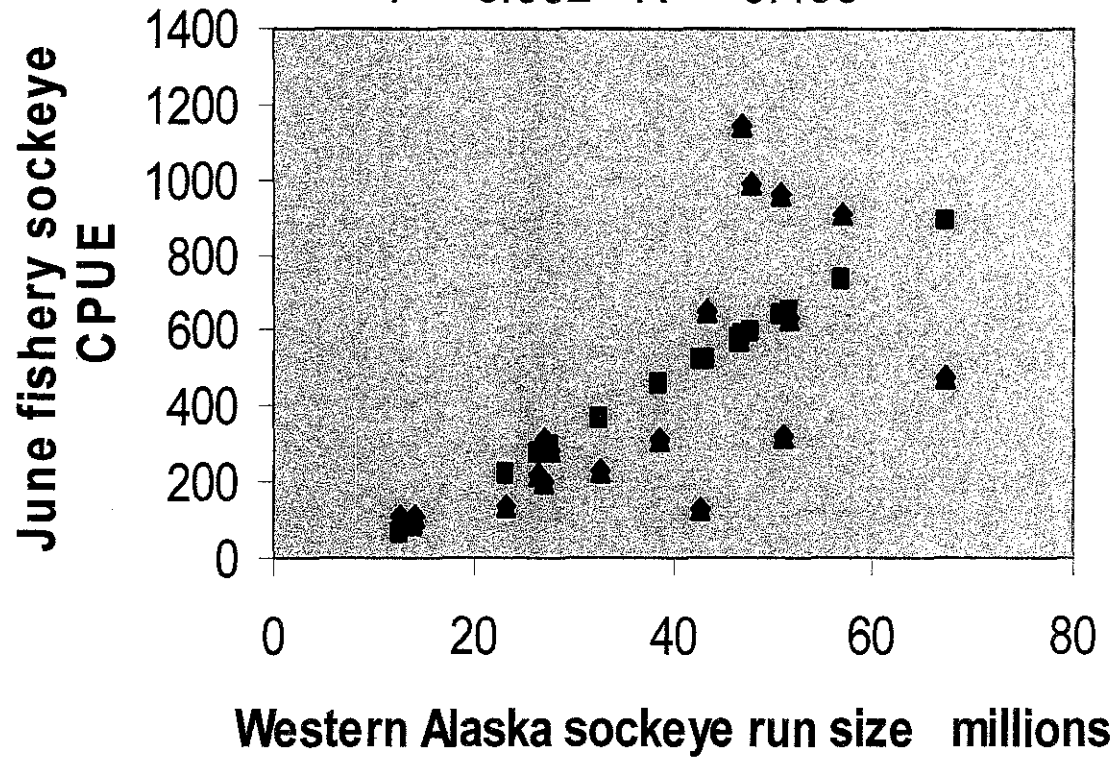


# What does all this mean for the June fishery?

- Before 1994 catch rates were driven by the size of the Western Alaska sockeye run
- That relation is not significant since 1994
- High catch rates in the June fishery are a special condition

**June S Pen sockeye CPUE v W Ak sockeye  
run 1975-1993**

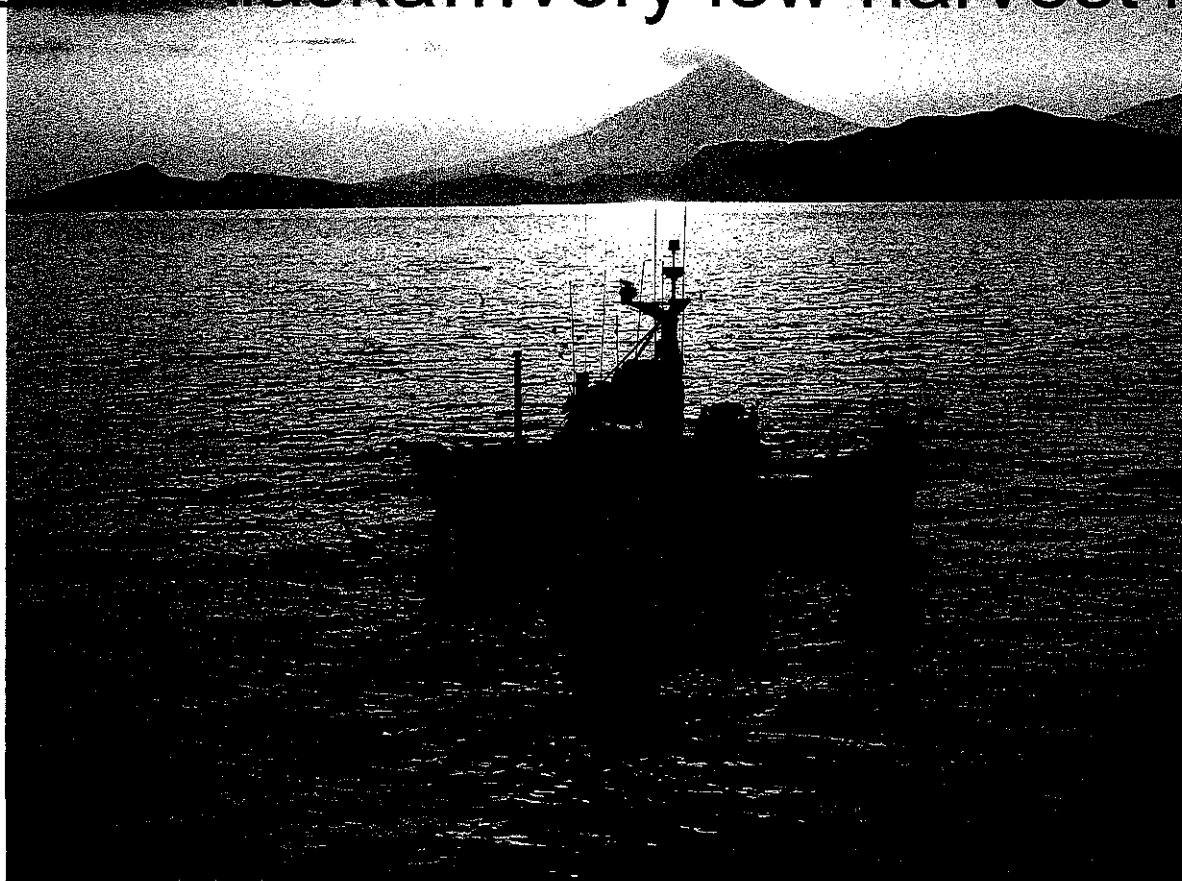
$P = 0.002$   $R^2 = 0.450$



# But my biggest challenge is to convince you that none of this matters

- Because from conservation and management perspectives June fishery catches are negligible
- The hard evidence of this fact is that the department does not bother to discuss the errors in post-season run size estimates, for example the errors in the size of the AYK and Bristol Bay chum run...because they are negligible
- June fishery harvest rates are only a fraction the size of these errors in run size estimates...less than negligible.

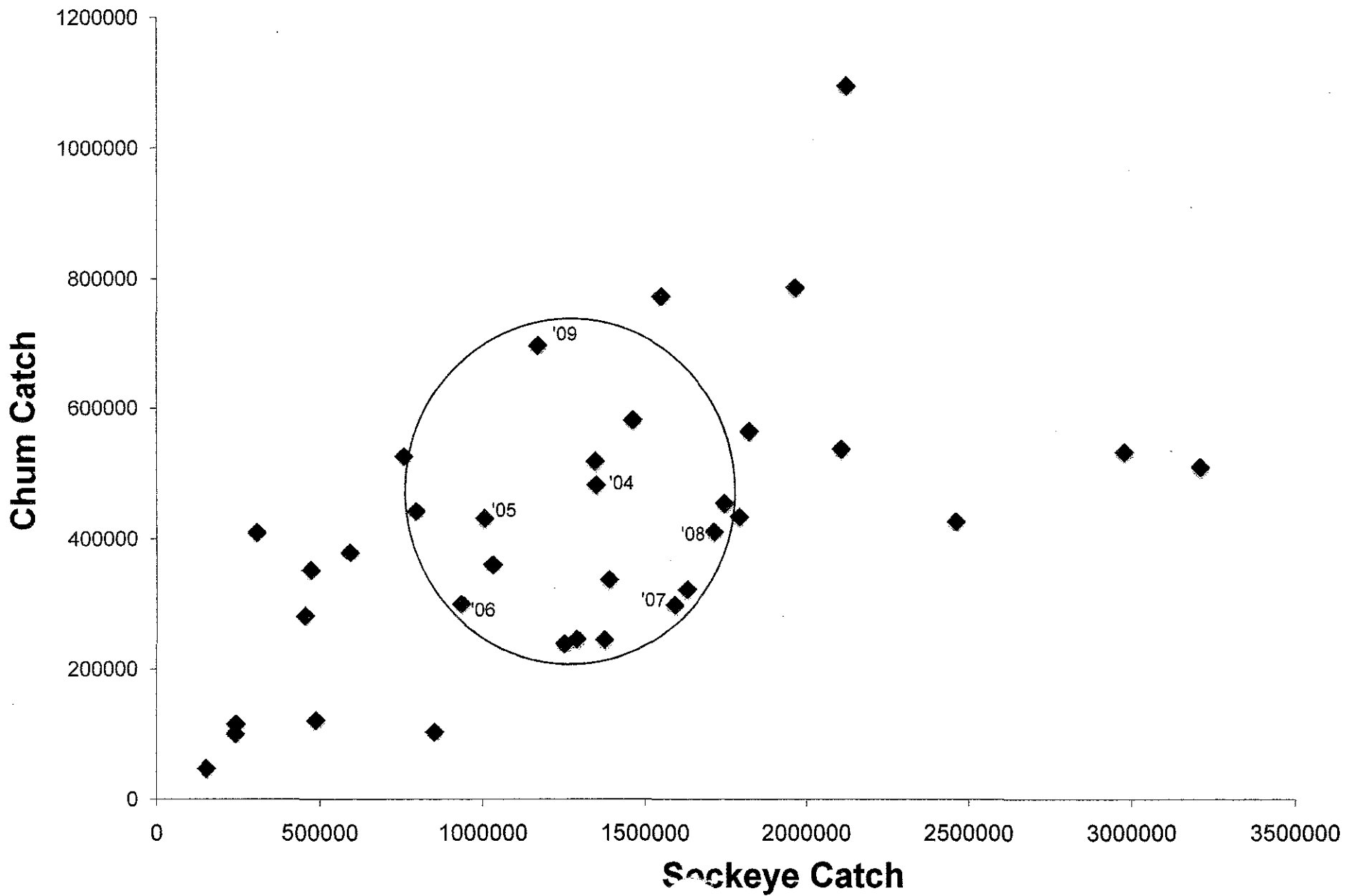
Please try to understand the way in which the June fishery is different from other fisheries in Alaska...very low harvest rates



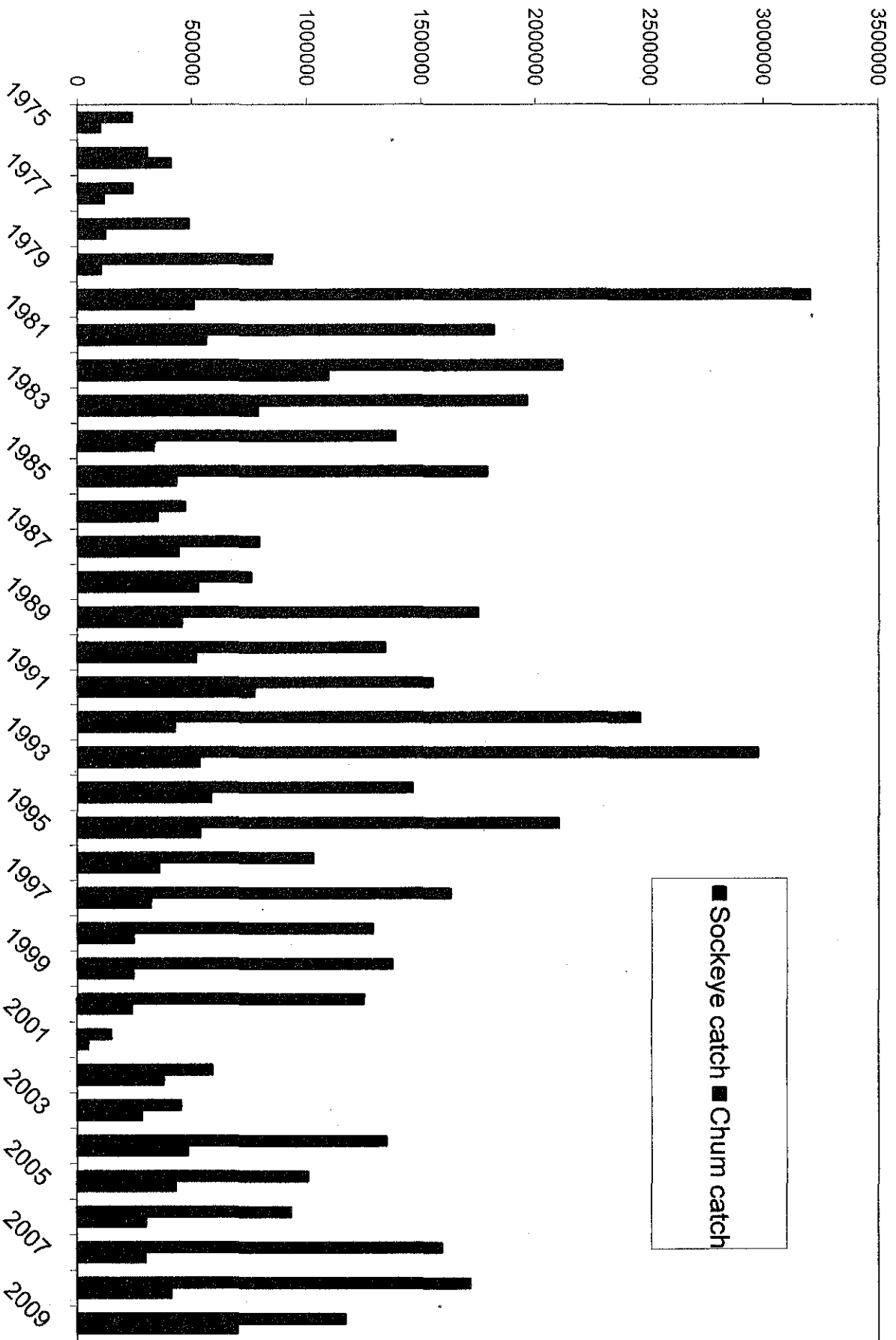
Resist the temptation to apply management measures from fisheries with high harvest rate potential to the June fishery

- My testimony will show you why the June Fishery is a low impact fishery and why this Board can feel confident it will remain that way.
- I oppose all proposals to restrict or return the June Fishery to past management practices.

# June SUSI Sockeye and Chum Catches



# June SUSI harvest



# The Impact of the June Fishery on migrating stocks is very small



© 2007 Europa Technologies  
Image © 2007 NASA  
Image © 2007 TerraMetrics

Pointer: 57-38  
70° 39' 15.28" W

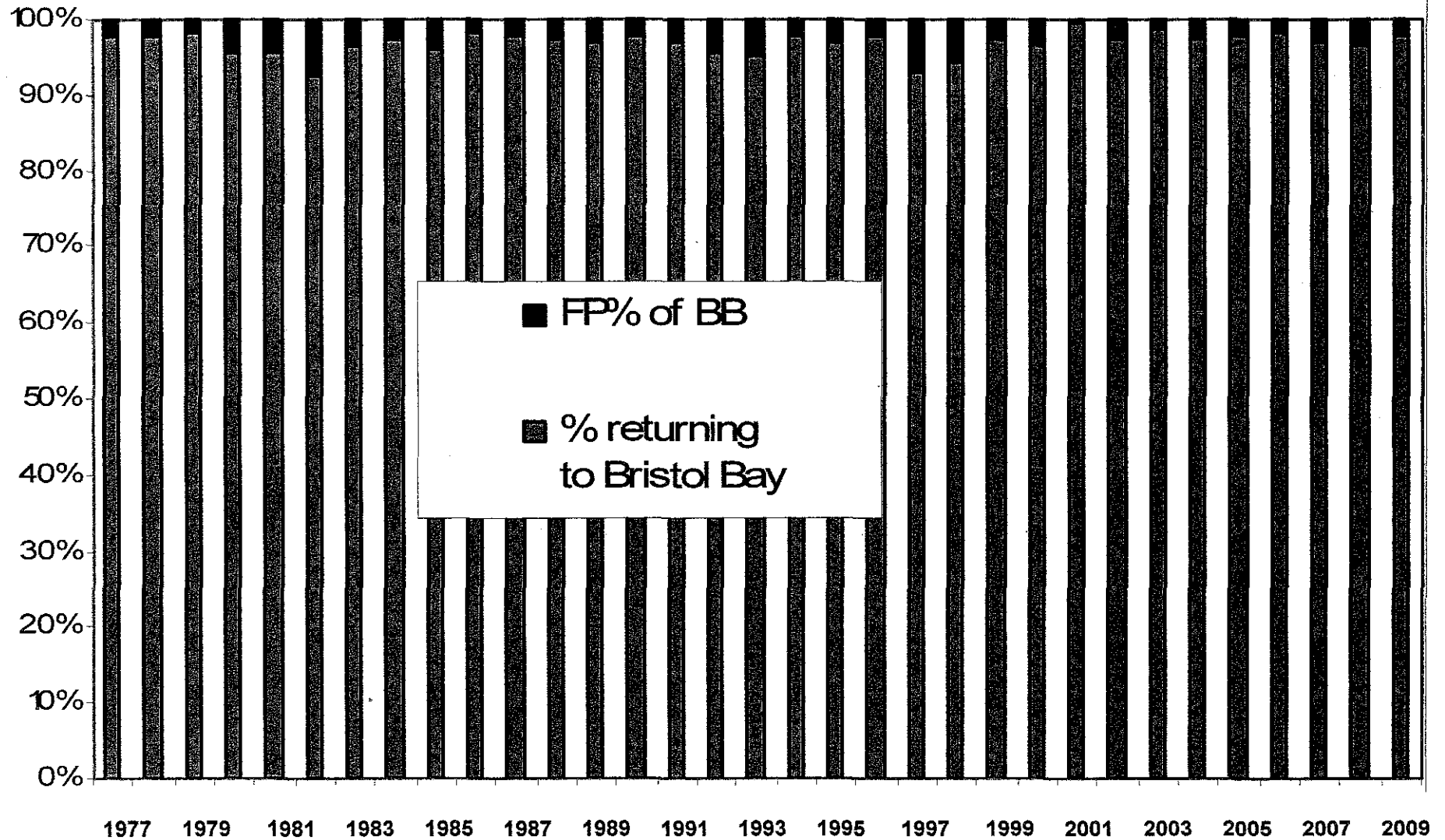
Streamline  
100%

© 2007  
Google™

366.49 mi



# Area M June Harvest Rate of Bristol Bay Sockeye and Percent Returning to Bristol Bay



The fears and concerns  
from

AYK and Bristol Bay

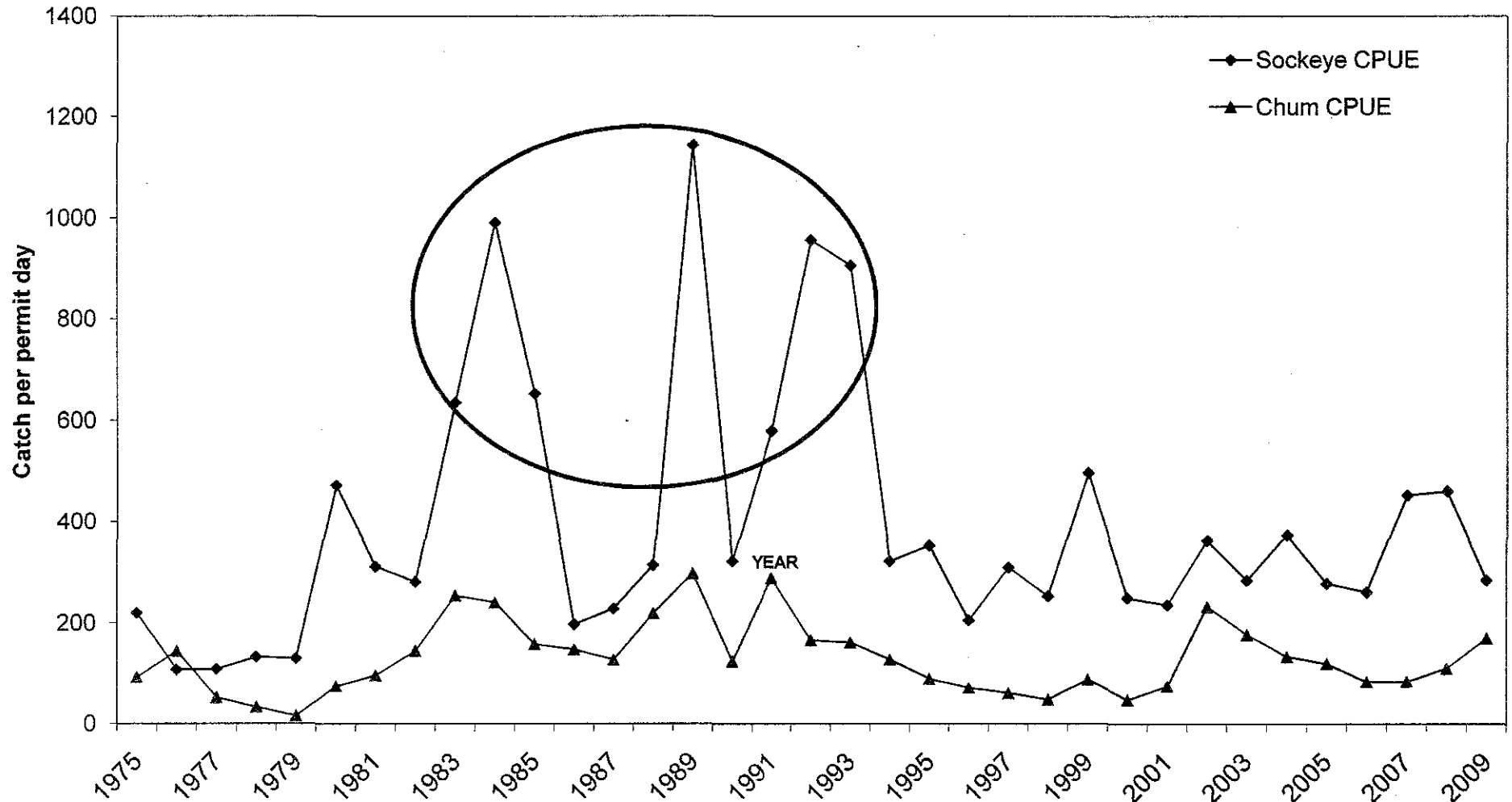
are

**OVERSTATED**

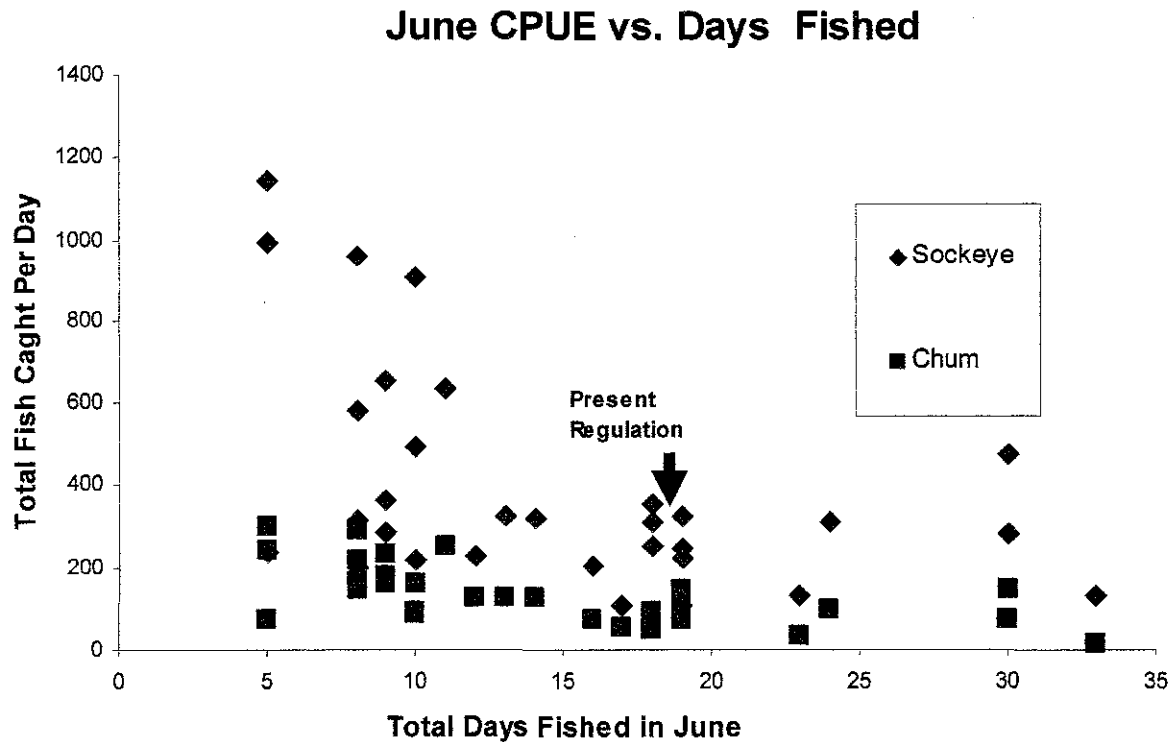
Shown here are sockeye & chum catches per permit/per day since 1975. Between 1983-1993 were pretty good and most proposals we see today are a product of those years.

But, you must note that other than the seven high points in the circle, "LOW" CPUE is more normal for the June Fishery.

**Catch per boat day in June fishery**



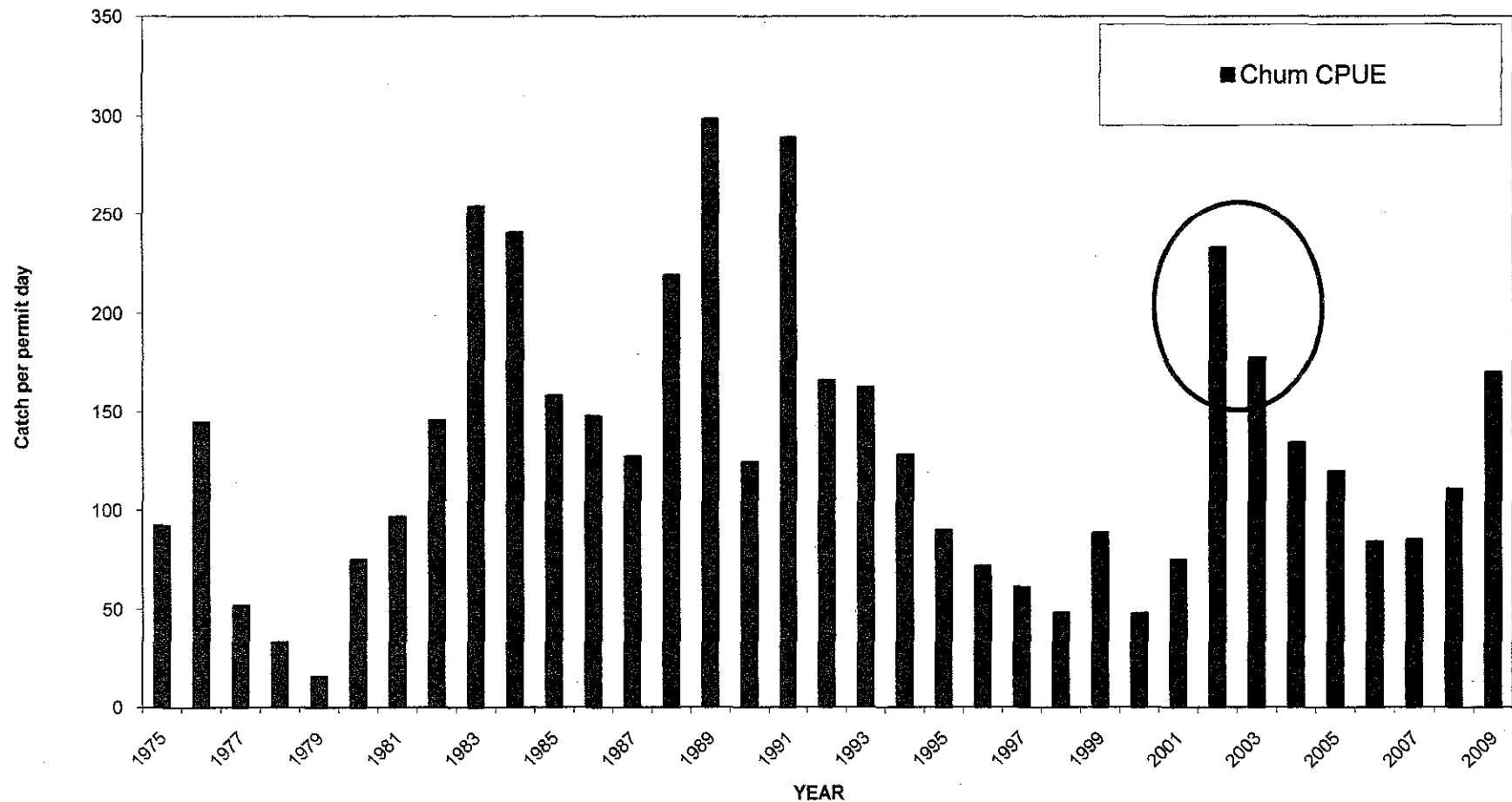
The scatter plot is very "IMPORANT" each data point represents one year.  
Vertical axis shows the average daily catch per year.  
Horizontal axis shows total days fished per year.  
The "arrow" shows our present regulation of 19 days.  
This graph shows that CPUE goes down with more day fished.



This is what happens when you micro-manage the June Fishery, In 2001 the Board took away all flexibility to use “chum avoidance practices” and it resulted in increased daily chum catches.

It shows that our fleet needs time and flexibility to avoid chums.

### Chum Catch per boat day in June fishery



## In Conclusion:

- Current management is the correct style of management for the South Unimak Shumigan Island June Fishery.
- The 2004 Board action provided our fleet with a reasonable harvest opportunity.
- The Board can be confident that the SUSI June Fishery will continue to perform within historical levels with low impact to other fisheries.

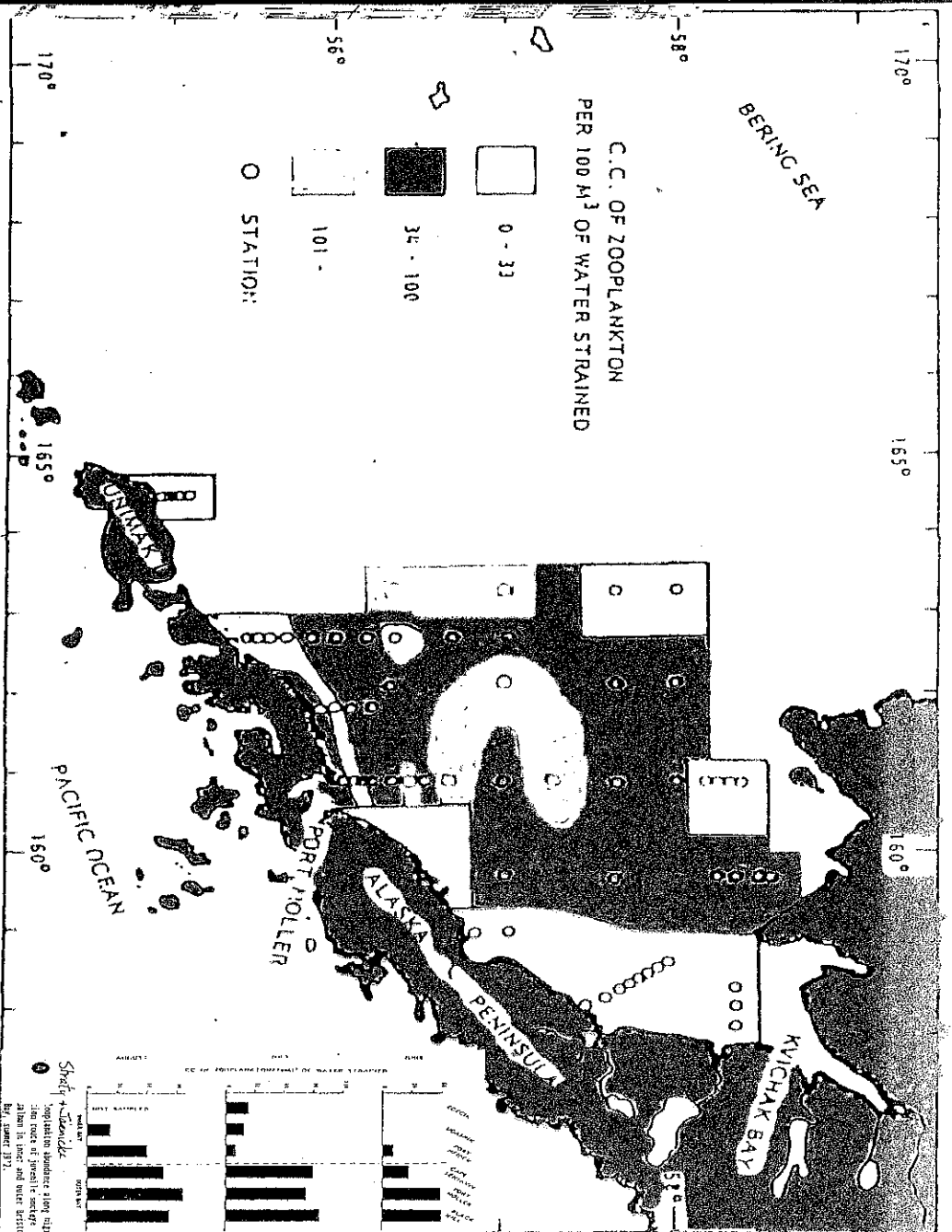
# N.P. JUVENILE PRODUCTION and ADULT MIGRATION

- 2010 BOF
- Ronald R Tavis
- CAMF Member
- GHC-Fish and Wildlife Mgt
- HSU-Fisheries Biology Major Biological Ocean minor



# 1 MILE PRODUCTION

- Plankton Abundance Offshore
- Zooplankton Inner Bay vs. Outer Bay
- Stomach Fullness



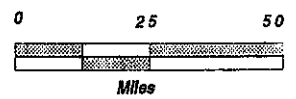


# MOLLER TEST BOAT RESULTS

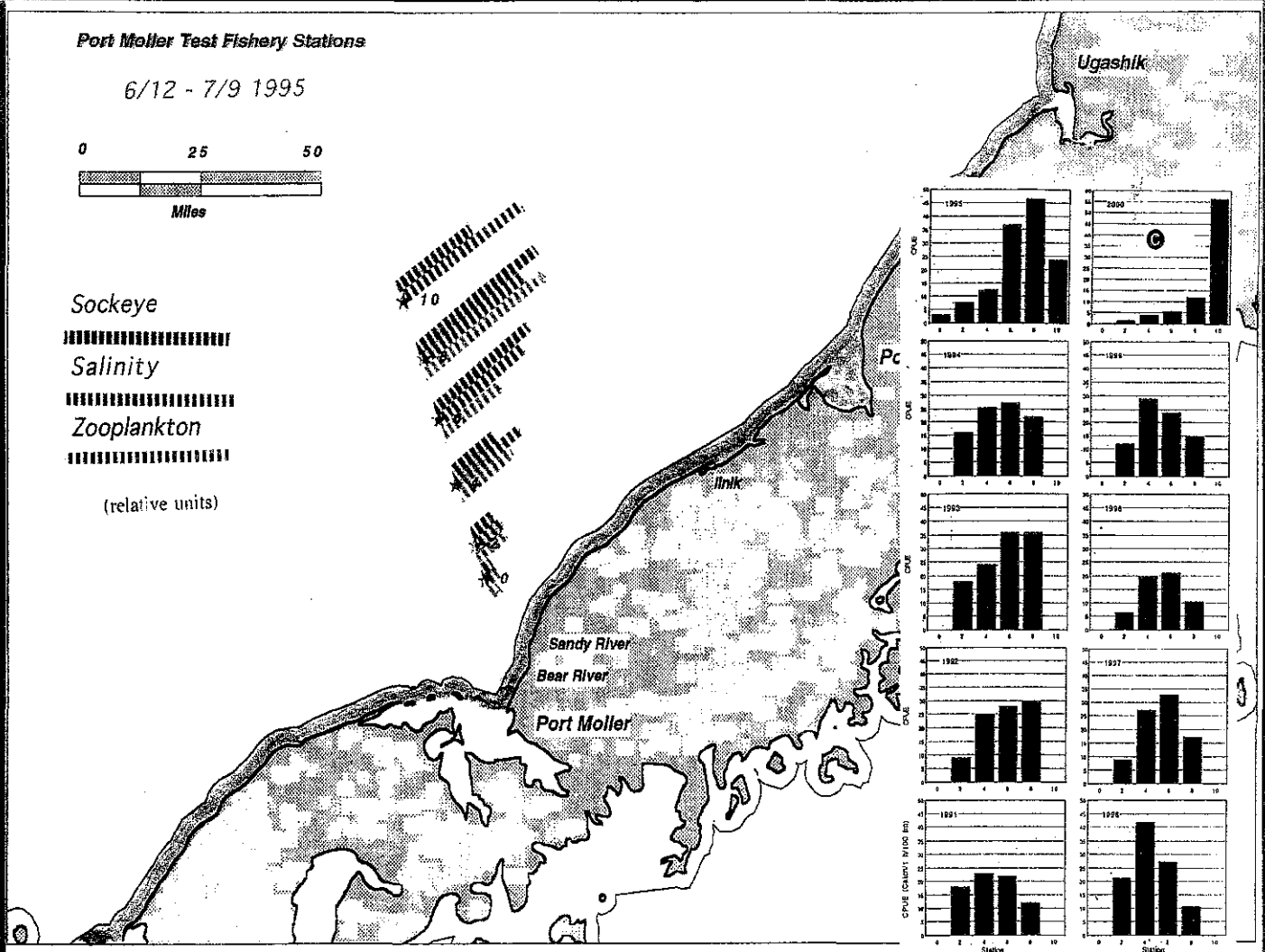
● SOCKEYE  
 ● PLANKTON  
 ● SALINITY  
 ● 3 MILE  
 ● LINE

Port Moller Test Fishery Stations

6/12 - 7/9 1995



Sockeye  
 Salinity  
 Zooplankton  
 (relative units)



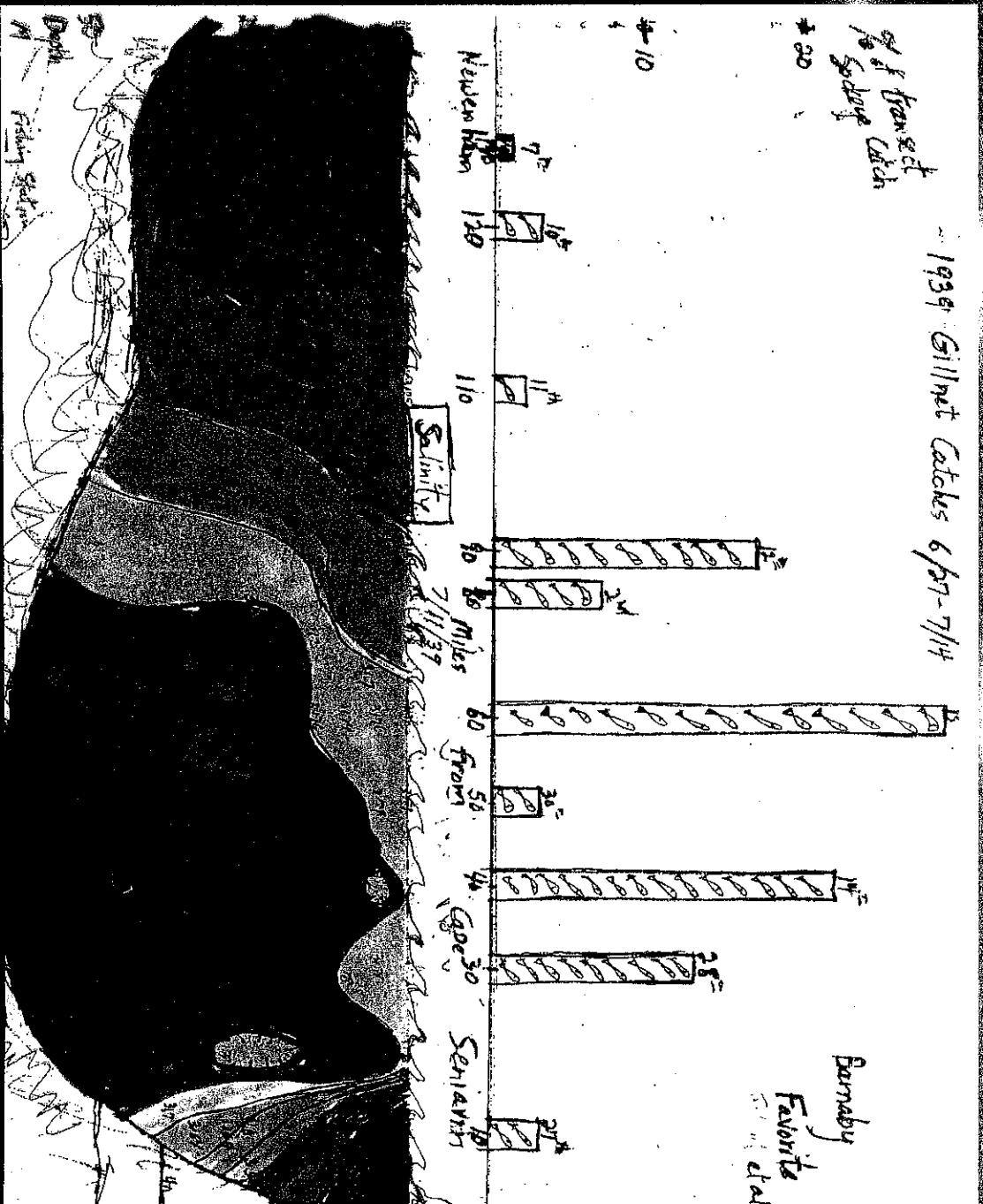
Distribution of Salinity, Sockeye and Zooplankton - June/July 1995. FIGURE 10. Distribution of sockeye average catches by station off Port Moller, 1991-2000

# VIEW INTO BRISTOL BAY

- Lack of Adults in Fresh Water

Wedge of High Salinity

- Salinity "Buffer Zone" Keeps Adults Offshore



**BRAD BARR**

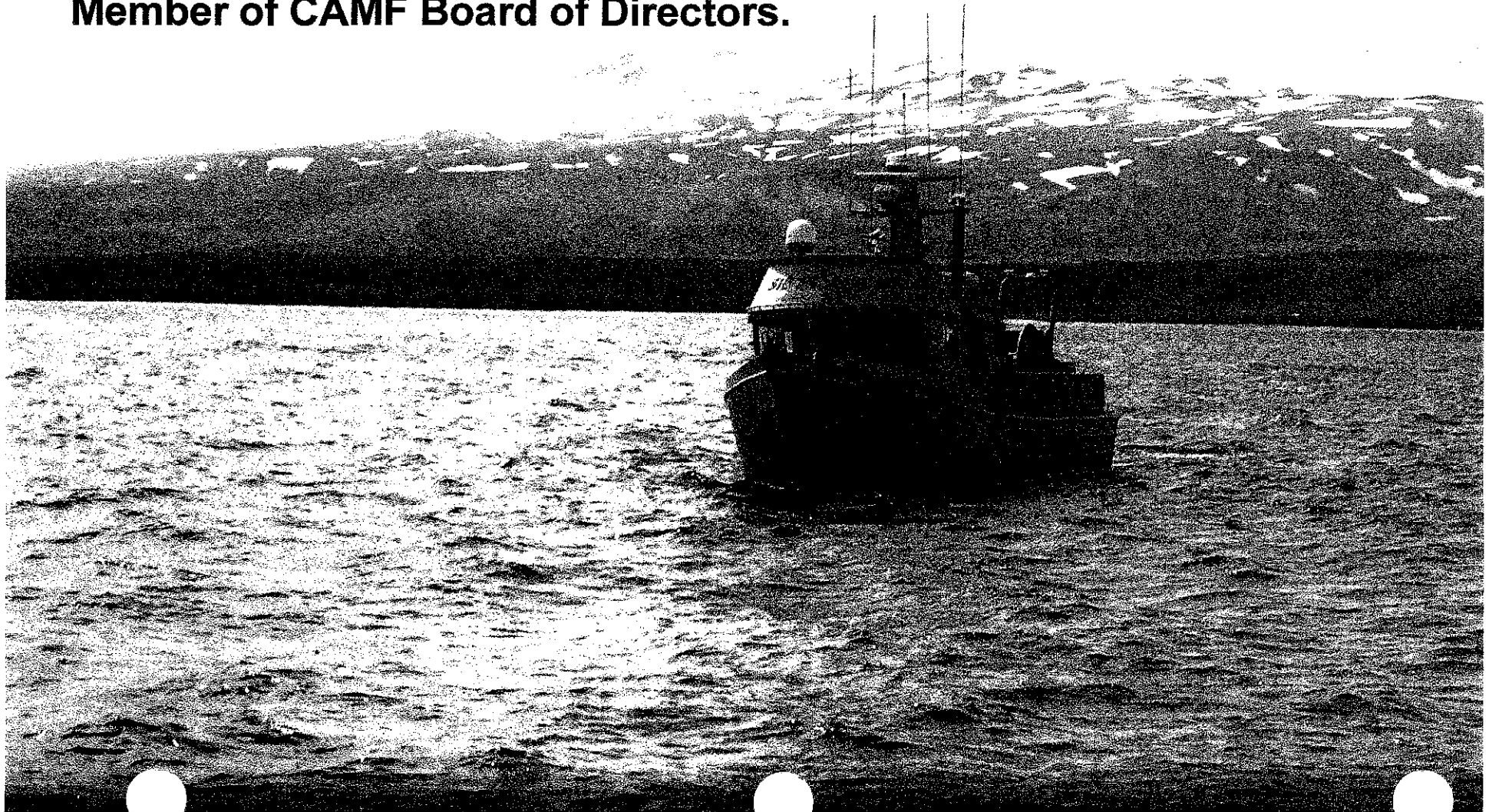
**RC 52**

**Fished in Area "M" for 32 years**

**Attended BOF meeting since 1982**

**Co-founded CAMF in 1984**

**Member of CAMF Board of Directors.**



stock contribution to the mixtures ranged from 70.0% to 89.1% in Nushagak District in different periods of 2008 (Appendix D12). The Nushagak stock contribution to the mixtures ranged from 5.2% to 23.6% and the Igushik stock contribution to the mixtures ranged from 0.1% to 12.4%. The Kuskokwim stock contribution estimate for the Nushagak June 26 to 30 mixture did not converge at 15,000 iterations (Gelman-Rubin shrink factor estimate = 1.23), so we reanalyzed the mixture with 30,000 iteration chains. The estimate converged after this reanalysis (Gelman-Rubin shrink factor estimate = 1.02). Similarly, the Igushik stock contribution estimate for the Nushagak July 8 to 9 mixture did not converge at 15,000 iterations (Gelman-Rubin shrink factor estimate = 1.23), so we reanalyzed the mixture with 30,000 iteration chains. The estimate converged after this reanalysis (Gelman-Rubin shrink factor estimate = 1.01).

### *Togiak District*

The Togiak District harvest in 2006 (626,441) was mostly comprised of sockeye salmon from the following stocks: Togiak (69.8%; 437,259) followed by Kuskokwim (27.8%; 174,206), Nushagak (2.2%; 13,707) and smaller percentages (<0.1%) of North Peninsula, Ugashik, Egegik, Naknek, Alagnak, Kvichak, and Nushagak (Table 11). There was only 1 sampling period in Togiak District. Therefore, we could not look at changes in stock composition in 2006 (Appendix D13).

The Togiak District harvest in 2007 (816,581) was mostly comprised of sockeye salmon from the following stocks: Togiak (86.2%; 703,604) followed by Kuskokwim (13.5%; 110,442) and much smaller percentages (<0.1%) of North Peninsula, Ugashik, Egegik, Naknek, Alagnak, Kvichak, Nushagak, Wood, and Togiak (Table 12). The Togiak stock contribution to the mixtures ranged from 70.0% to 99.5% in different periods of 2007 (Appendix D14).

The Togiak District harvest in 2008 (651,315) was mostly comprised of sockeye salmon from the following stocks: Togiak (74.2%; 483,497) followed by Kuskokwim (25.3%; 165,015), with much smaller percentages (<0.2%) of North Peninsula, Ugashik, Egegik, Naknek, Alagnak, Kvichak, Nushagak, Wood, and Togiak (Table 13). The Togiak stock contribution to the mixtures ranged from 58.6% to 81.9% while the Kuskokwim stock contribution to the mixtures ranged from 17.9% to 40.4% in different periods of 2008 (Appendix D15).

### *Bristol Bay*

The overall Bristol Bay harvest in 2006 (28,491,168) was comprised of sockeye salmon from the following stocks: Wood (28.3%; 8,064,728), Egegik (23.9%; 6,817,407), Naknek (10.7%; 3,051,306), Kvichak (9.7%; 2,766,502), Ugashik (9.7%; 2,755,129), Nushagak (9.3%; 2,641,842), Alagnak (3.1%; 1,462,546), Togiak (1.6%; 462,796), Igushik (0.9%; 248,660), Kuskokwim (0.7%; 209,233), and North Peninsula (~0.0%; 11,018) (Table 11).

The overall Bristol Bay harvest in 2007 (29,765,726) was comprised of sockeye salmon from the following stocks: Wood (20.7%; 6,168,894), Egegik (20.6%; 6,140,178), Naknek (18.0%; 5,370,224), Ugashik (15.0%; 4,451,672), Kvichak (8.4%; 2,511,706), Nushagak (6.6%; 1,961,778), Alagnak (6.6%; 1,954,946), Togiak (2.7%; 792,388), Igushik (0.8%; 251,686), Kuskokwim (0.5%; 142,831), and North Peninsula (1%; 19,423) (Table 12).

Appendix A1.—Page 2 of 2.

System: Ugashik River

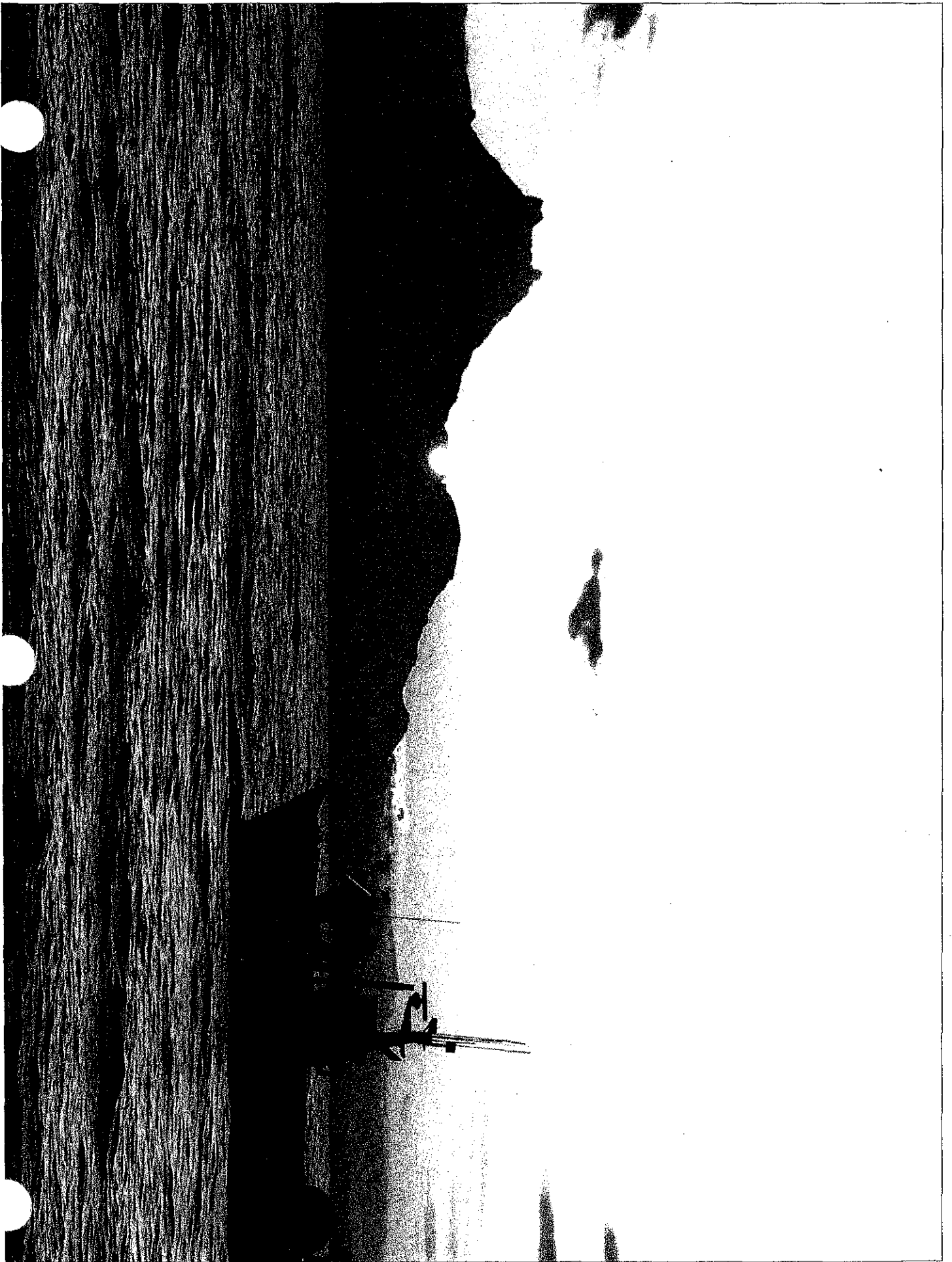
Species: sockeye salmon

Data available for analysis of escapement goals (in thousands of fish).

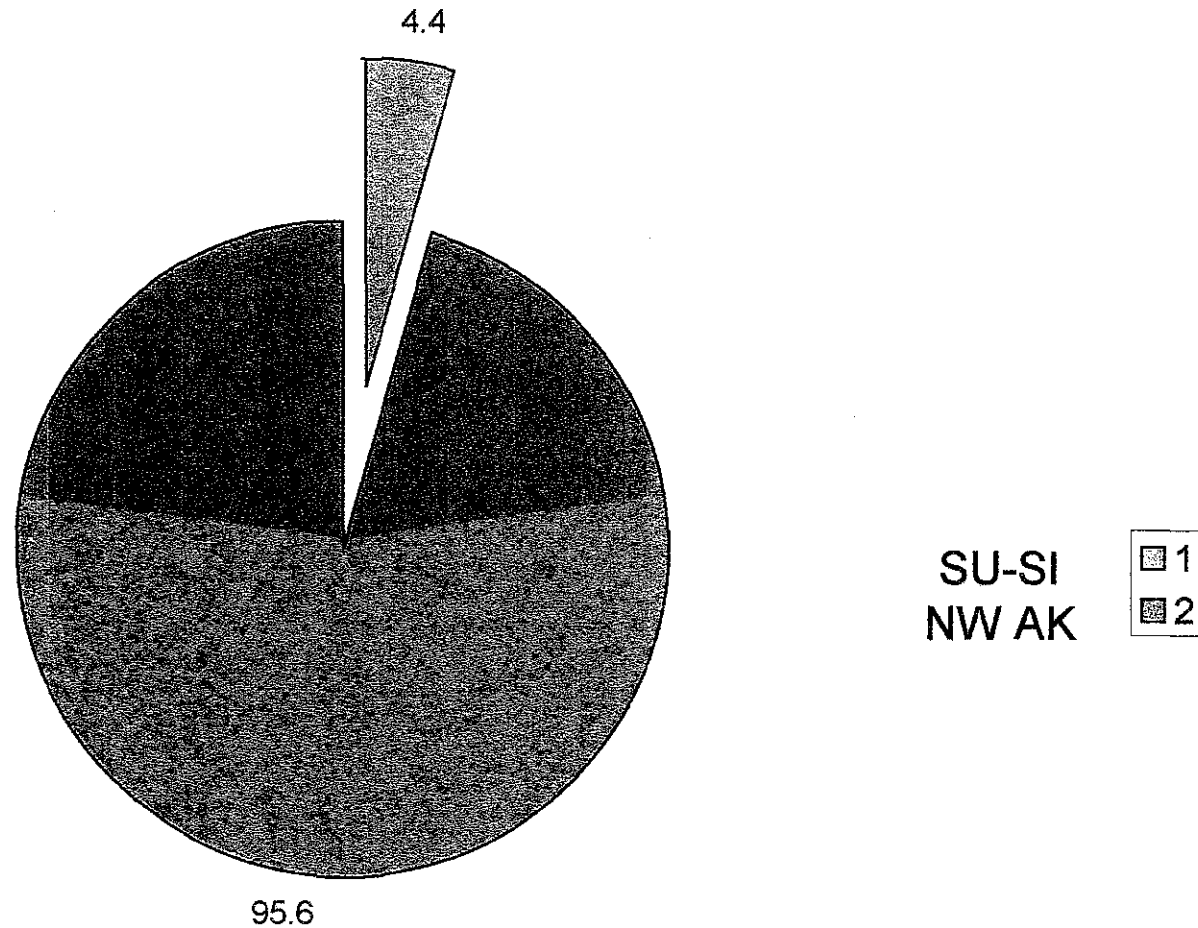
Year	Escapement	Total Return	Return per Spawner	Year	Escapement	Total Return	Return per Spawner
1949	0 <sup>a</sup>	2 <sup>b</sup>		1989	1,713	4,573	2.67
1950	0 <sup>a</sup>	49 <sup>b</sup>		1990	749	4,611	6.16
1951	0 <sup>a</sup>	343 <sup>b</sup>		1991	2,482	6,151	2.48
1952	0 <sup>a</sup>	1,189		1992	2,195	2,703	1.23
1953	0 <sup>a</sup>	1,108		1993	1,413	1,086	0.77
1954	0 <sup>a</sup>	511		1994	1,095	1,660	1.52
1955	0 <sup>a</sup>	178		1995	1,321	4,686	3.55
1956	425	4,132	9.72	1996	692	1,388	2.01
1957	215	603	2.80	1997	657	3,061	4.66
1958	280	678	2.42	1998	925	1,349	1.46
1959	219	499	2.28	1999	1,662	3,725	2.24
1960	2,304	3,031	1.32	2000	638	4,179	6.55
1961	349	1,114	3.19	2001	866	2,106	2.43
1962	255	423	1.66	2002	892	4,875	5.47
1963	388	148	0.38	2003	790	6,244 <sup>b</sup>	
1964	473	322	0.68	2004	815	1,456 <sup>b</sup>	
1965	997	539	0.54	2005	800	2 <sup>b</sup>	
1966	704	2,315	3.29	2006	1,003	0 <sup>b</sup>	
1967	239	184	0.77	2007	2,599	0 <sup>b</sup>	
1968	71	39	0.55	2008	596	0 <sup>b</sup>	
1969	160	92	0.58	1956–2002			
1970	735	295	0.40	Average	853	2,758	4.32
1971	530	835	1.58	No. of Years	47	47	47
1972	79	258	3.27				
1973	39	92	2.36				
1974	62	725	11.69				
1975	429	4,116	9.59				
1976	356	5,309	14.91				
1977	202	2,692	13.33				
1978	82	2,065	25.18				
1979	1,707	6,006	3.52				
1980	3,335	7,781	2.33				
1981	1,328	7,468	5.62				
1982	1,186	2,508	2.11				
1983	1,001	1,965	1.96				
1984	1,270	5,464	4.30				
1985	1,006	2,695	2.68				
1986	1,016	6,696	6.59				
1987	687	6,745	9.82				
1988	654	5,650	8.64				

<sup>a</sup>Escapement not available.

<sup>b</sup>Incomplete returns from brood year escapement.



**PERCENT NW AK SUMMER CHUM HARVESTED BY AREA  
M JUNE FISHERY. 2005-2009**

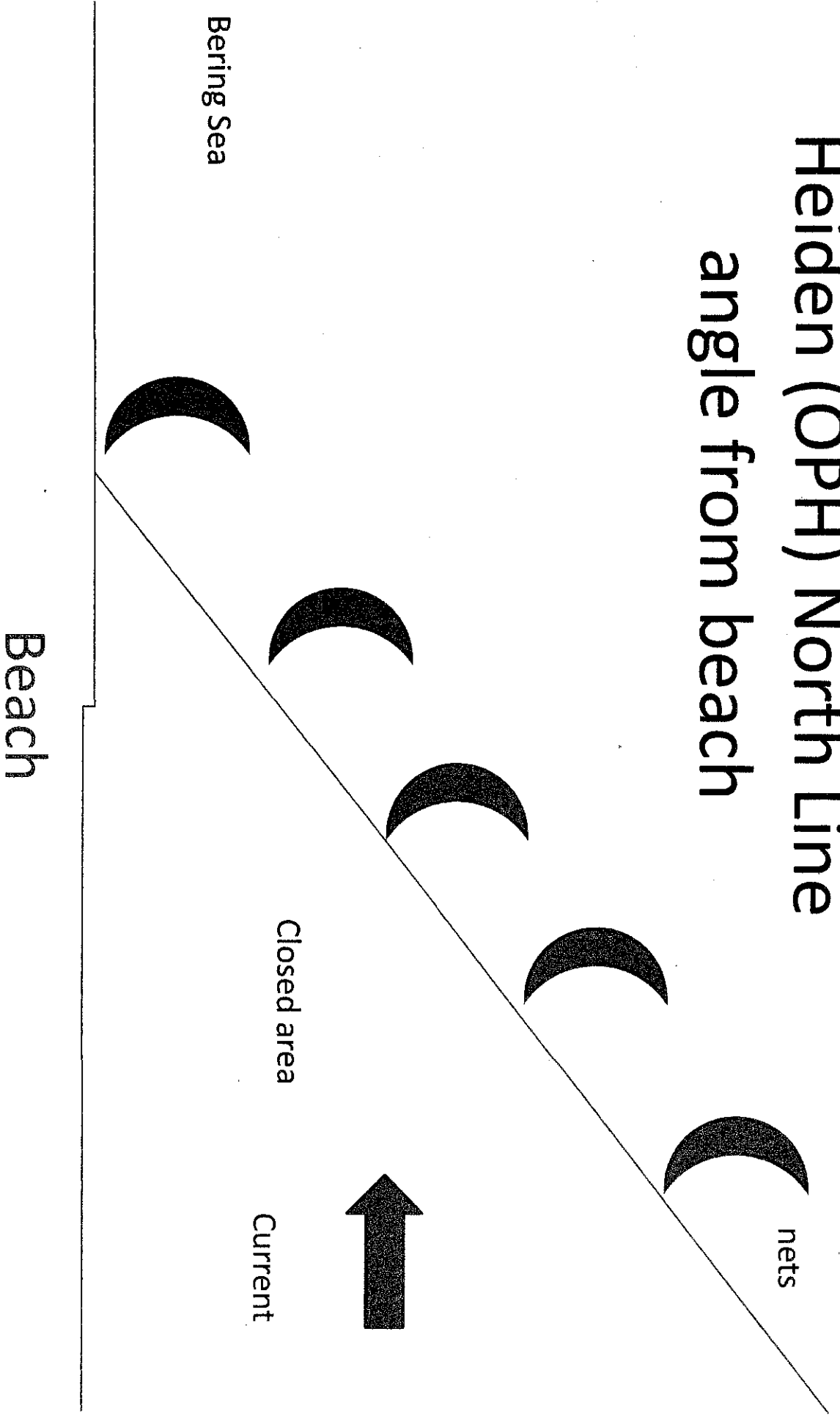


SOURCE: COMPILED FROM WESTERN AK CHUM SALMON STOCK STATUS, 2009. ADF&G Report to NPFMC

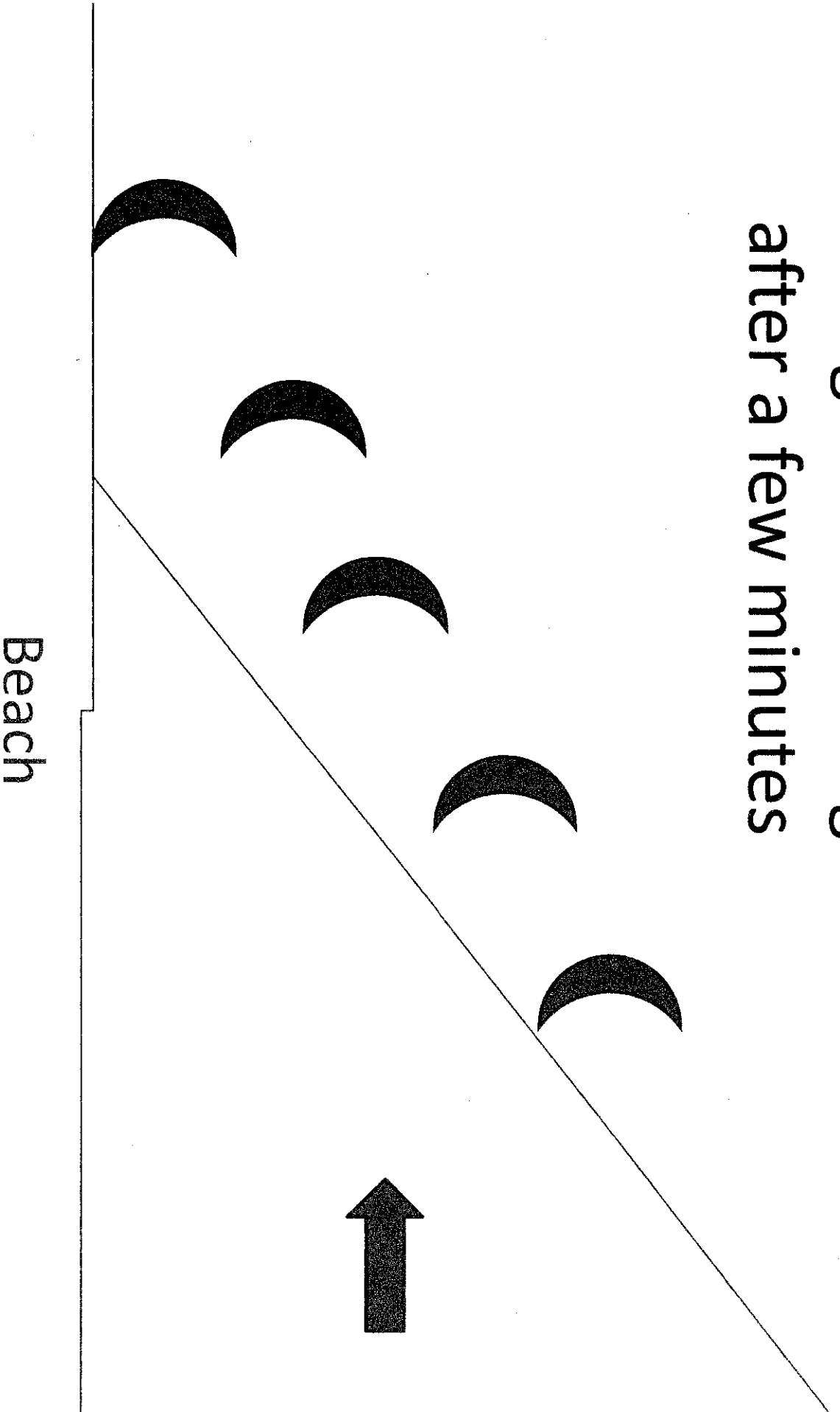




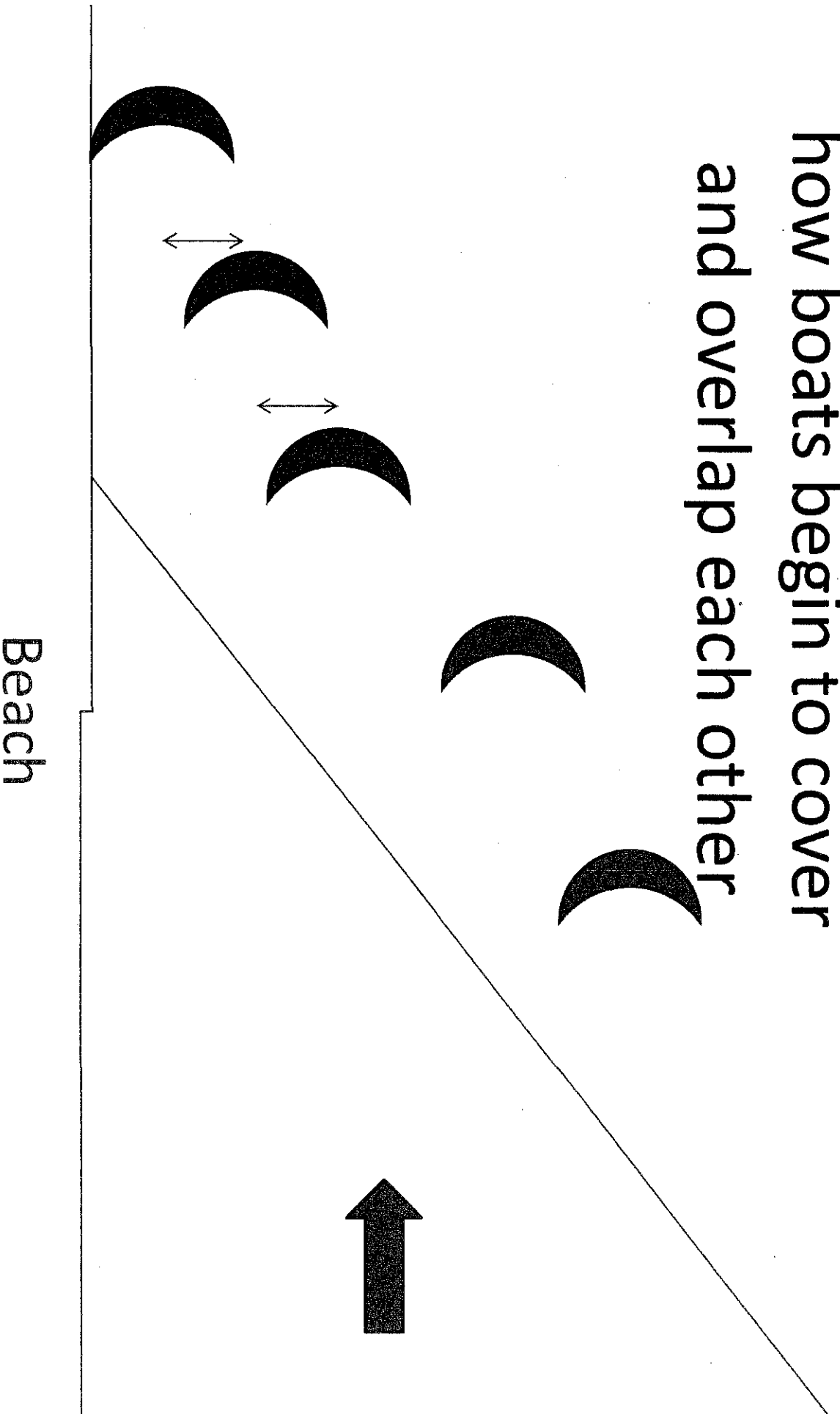
# Existing Outer Port Heiden (OPH) North Line angle from beach



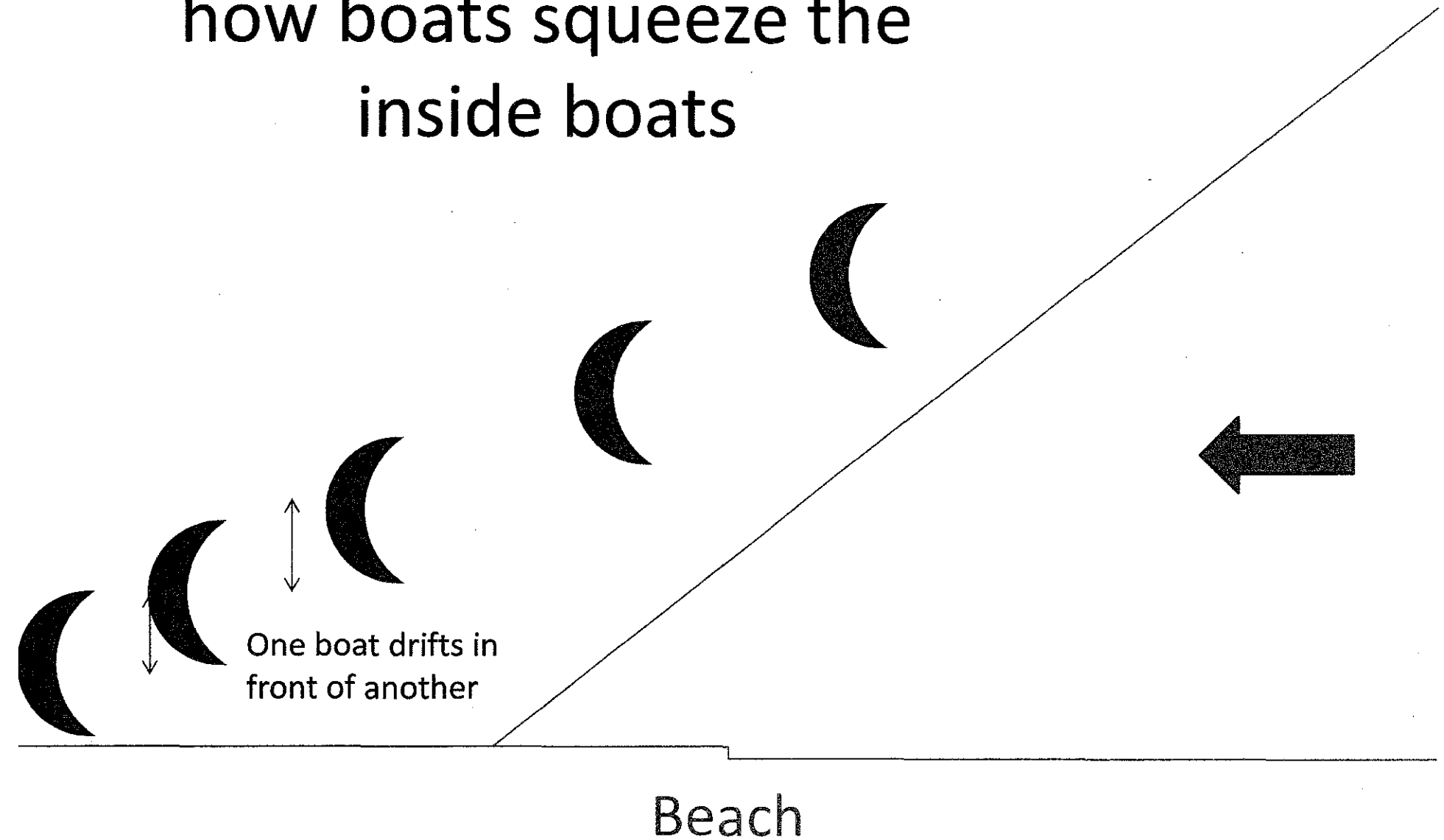
Existing OPH Line angle  
after a few minutes



Existing OPH Line: notice how boats begin to cover and overlap each other



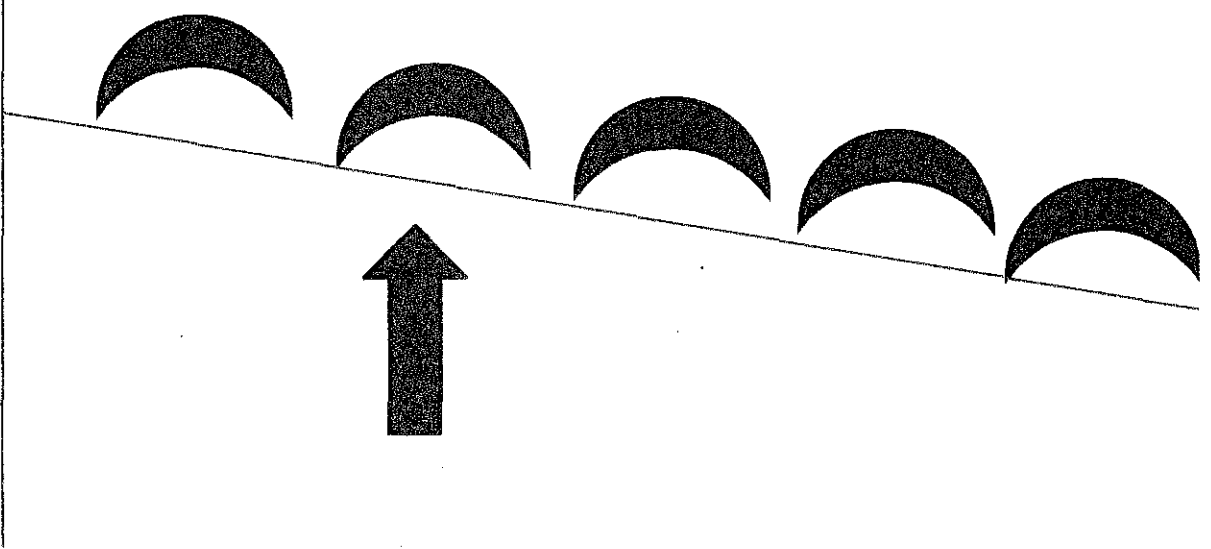
Existing OPH Line: notice  
how boats squeeze the  
inside boats



# Proposal # 157 OPH

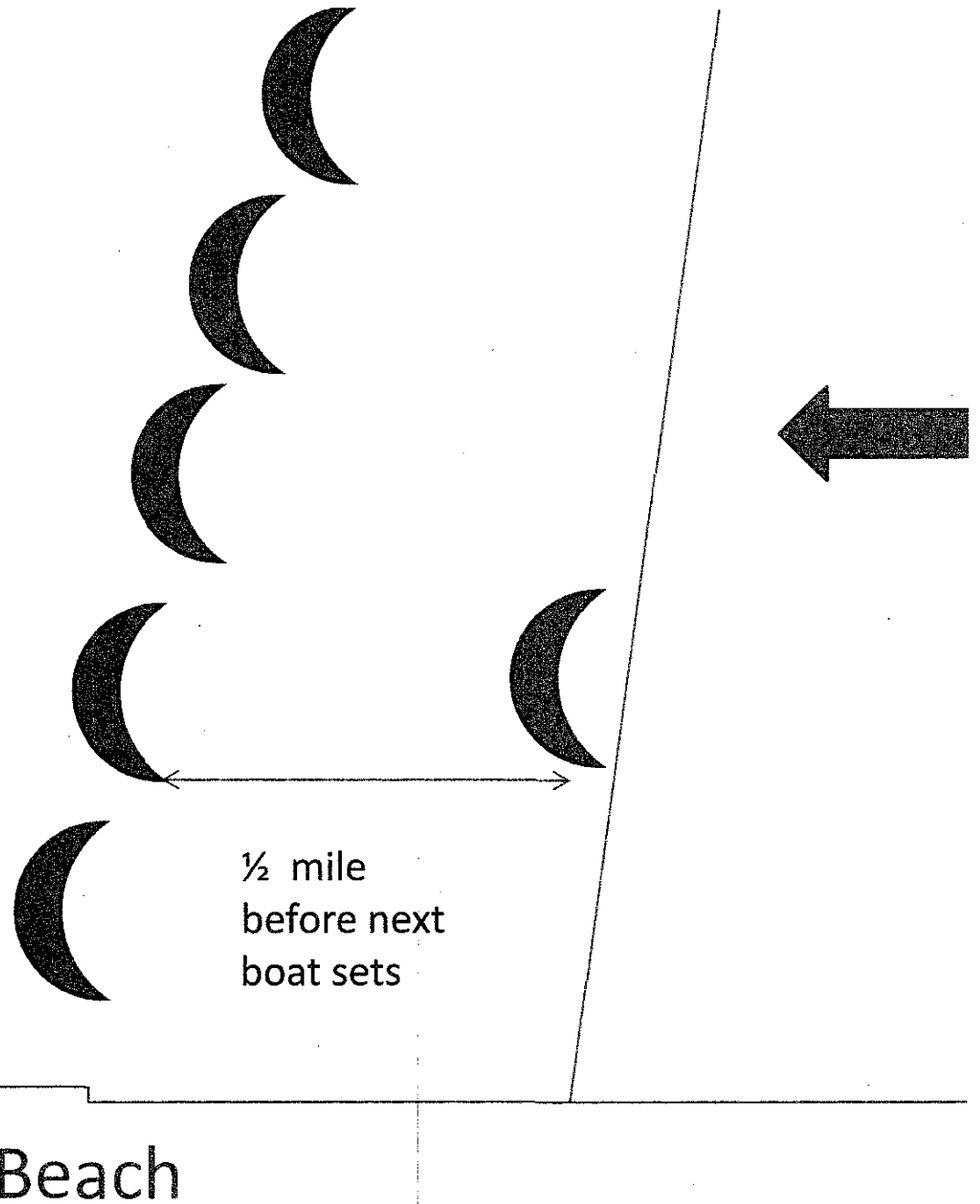
## Line angle

Beach



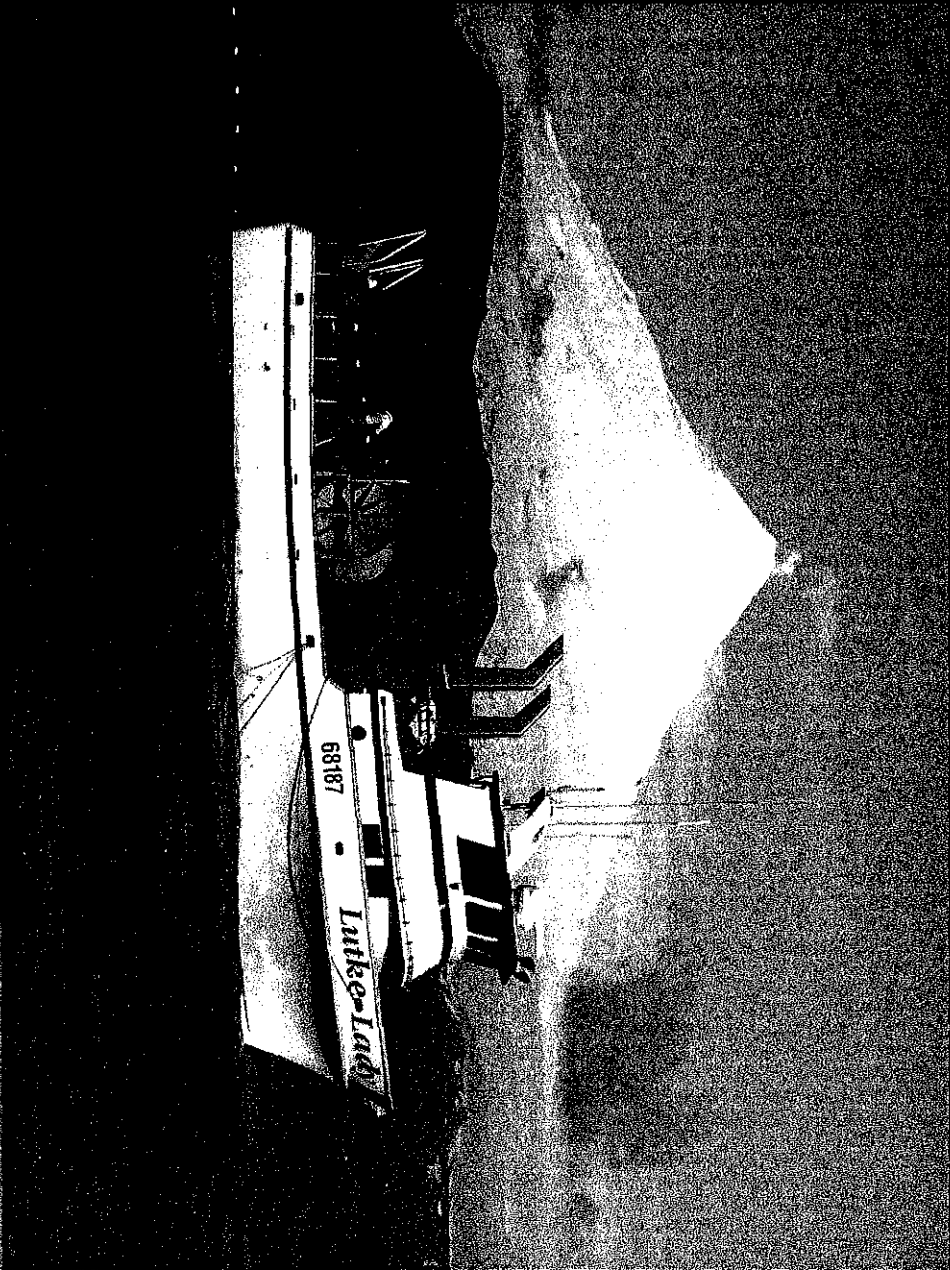
# Proposal # 157

OPH Line:  
each boat  
drifts back  
maintaining its  
distance from  
the beach



MIKE WOODING

RCSS



NUMBER MESHES	NUMBER BOATS	TOTAL CATCH		BOATS CATCH BY % BY %	CATCH BY %		CATCH PER BOAT		CATCH PER B
		SOCKEYE	CHUM		SOCKEYE	CHUM	SOCKEYE	CHUM	
90-120	66	172922	36680	67.3	62.1	59.1	2620	55	
>120	32	105757	25352	32.7	37.9	40.9	3305	79	
	98	278,679	62,032	100	100	100			





# LUTKE

3 - Lutke

False Pass, AK

2 - Pankof

1 - Ikatan

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Image © 2010 TerraMetrics

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Eye alt: 12 km

Please consider proposal 117 to change  
gillnet depth to 120mesh .

