

# RC LOG

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## Board of Fisheries - Statewide Finfish, Supplemental Issues, Subsistence Finding Standards, and Chitina Dipnet Fishery. March 16 - 21, 2010, Anchorage

Log #	Source	Description	Pgs.
1	ADF&G Boards Support	BOF Workbook	
2	ADF&G	Staff Comments on Statewide Finfish and Supplemental Proposals	51
3	University of Alaska - Gordon Kruse	Oral Report Slides on Bering Sea Tanner Crab Size Study	21
4	NPFMC - Diana Stram	Oral Report Slides on Crab Rebuilding	12
5	ADF&G - Stefanie Moreland	Oral Report Slides on Crab Rebuilding Options	6
6	ADF&G - Eric Volk and Bob Clark	Oral Report Slides on SSFP	17
7	ADF&G - Taube, Somerville	Oral Report Slides re Chitina Fishery	10
8	ADF&G - Taube	Written Report re Chitina Fishery	18
9	ADF&G - Fall	Eight Criteria Worksheet re Chitina	152
10	ADF&G - Fall	Chitina overview oral report slides	32
11	ADF&G - Fall	Chitina deliberation slides	51
12	ADF&G	Staff comments on Prop 200 & 201	6
13	Don Nagel	Mgmt of Yentna River sockeye petition	1
14	Ryan Kapp	CFEC report 10-N, Feb 2010	2
15	AK Sportfishing Assoc.	Mgmt of Yentna sockeye salmon	1
16	Ken Tarbox	Prop 166, 170, 171, 179	5
17	Glenn Hamar	Prop 195	2
18	Valhary Braz	Prop 195	2
19	Dennis Pollock	Prop 195	3
20	Philip Wiley	Chatham Strait black cod	1
21	City of Kasaan	Prop 195	2
22	Concerned residents of Kasaan	Prop 195	8
23	Dept of Economic Development	Analysis of Prop 168 – seine fishing vessel length	9

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Log #	Source	Description	Pgs.
24	Della Coburn	Prop 195	2
25	Saxman AC	AC minutes	3
26	ADF&G Moreland	Briefing on BSAI crab FMP	3
27	Pacific NW Crab AC	Crab rebuilding plan	2
28	Craig AC	AC minutes	1
29	Daniel Rinella	Prop 195	1
30	Gary Adkinson Jr	Prop 195	2
31	AK Scallop Assoc.	Annual catch limits on AK weathervane scallop fishery	1
32	ICEPAC	ACL – Bering Sea/Aleutian Island crab	1
33	AK Outdoor Council	UCI emergency petition	2
34	Mat Valley AC	Addendum to minutes Prop 165 & 166	5
35	Seward AC	AC minutes	3
36	SEAFA	Prop 200 – 201	1
37	Kevin Stack	Prop 200 – 201	1
38	Mike Adams	Prop 200 – 201	1
39	Stuart & Elaine Meyer	Prop 200 – 201	1
40	Chris Bourgeois	Chitina fishery	1
41	Kenneth Adams	Prop 200	2
42	Seafood Producers Coop	Comment PC 38 - Prop 182	1
43	Tracy Morphis	Prop 200 – 201	1
44	Simon Molodin	Prop 200 – 201	1
45	Chad Roberts	Prop 200 – 201	1
46	Robert Linville	Prop 200 – 201	1
47	Eastern Interior RAC	Yukon River Chinook	2

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Log #	Source	Description	Pgs.
48	Charles Deville	Prop 200 – 201	2
49	Mat Valley AC – Andy Couch	Letter re: petition	2
50	Mat Valley AC – Andy Couch	March 10, 2010 AC minutes	4
51	Richard Yamaha for Daiwa Corp	Electric reel proposals	1
52	Richard Yamaha for Seldovia Fishing Adventure	Electric reel proposals	1
53	Lloyd Gossman	Ketchikan Gateway Borough comments	3
54	Torie O’Connell for AK Longline Fisherman Assoc	Comments on proposals	3
55	Torie O’Connell for ALFA	Prop 175 & 180	1
56	Dianne Dubuc	CIAA – 2009 Salmon Sales request for bids	1
57	Bruce Knowles – Mayor’s Blue Ribbon Sportfishers	Letter supporting UCI emergency petition	3
58	Bruce Knowles – Mayor’s Blue Ribbon Sportfishers	Comments on proposals	4
59	ADF&G – CF	Prop 167 substitute language	1
60	ADF&G – CF	Prop 173 substitute language	1
61	Kurt & Karl Goetzinger	Prop 200 – 201	1
62	Phillip Clark	Prop 200-201	1
63	Susitna Valley AC	March 10, 2010 minutes	1
64	Jeane Brenig	Summer commercial crab opening	1
65	Ken Tarbox (via Dwight Kramer)	Slikok Creek closure	2
66	Ken Tarbox (via Dwight Kramer)	Prop 166	5
67	Paul Shadura – Kenai/Soldotna Fish & Game AC	March 12, 2010 letter	2
68	Paul Shadura – KPFA	Proposal comments	3
69	Kenai / Soldotna Fish & Game AC	Feb 10 & 18, 2010 minutes	4

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Log #	Source	Description	Pgs.
70	ADF&G – CF	RC 2 update	6
71	ADF&G / Boards	RC Index to date	2
72	ADF&G / Boards	Public testimony for SW/Supplemental portion of meeting	2
73	Tory O’Connell	Prop 175 & 182	1
74	Mike Peterson	Prop 177	1
75	Cambri & Luke Dallmann	Prop 200-201	2
76	Mark Kaelke	2008 AFS- Report on whirling disease	14
77	Travis Watkins	Prop 195	1
78	Sitka AC	Prop 175 & 182	4
79	Randy Nichols	Electric reels	1
80	Southcentral RAC, Ralph Lohse	Prop 200 & 201	1
81	Tory O’Connell (ALFA)	BOF allocation criteria re: sablefish	2
82	Paul Shadura – KPFA	Prop 169 & 172	2
83	Professional Guide Assoc.	Prop 184	4
84	ADF&G / CF	Dungeness soft shell issue	6
85	John Blair	Prop 180 substitute language	1
86	ADF&G	Prop 172 substitute language	1
87	ADF&G	Committee “A” Report	24
88	ADF&G	Committee “B” Report	46
89	Ron Leighton	Proposal 195 comment	1
90	Lloyd Gossman	Proposal 195 comment	1
91	Steve Vanek	Withdrawal of Proposal 165	1
92	Tad Fujioka – Sitka AC	Sablefish biomass statistics	1
93	Brian Kraft	Prop 184 support	1

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## Board of Fisheries - Statewide Finfish, Supplemental Issues, Subsistence Finding Standards, and Chitina Dipnet Fishery. March 16 - 21, 2010, Anchorage

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94	Mike Kramer	Chitina lawsuit papers	67
95	Tory O'Connell ALFA	Prop 180 & 182 substitute language	1
96	Mark Kaelke	Prop 184 substitute language	1
97	Virgil Umphenour	Prop 200 subsistence definition	1
98	Dwight Kramer	Prop 172	1
99	Ryan Kapp	Prop 168 substitute language	3
100	ADF&G	Map & subsistence data #195	3
101	Stanley Mack	Prop 168	1
102	Howard Delo	Mine site comments	3
103	KPFA – Joel Doner	Prop 172 substitute language	2
104	Karl Johnstone	1999 BOF transcript re: #201	82
105	Karl Johnstone	2003 BOF transcript re: #201	98
106	ADF&G/Boards	RC Index updated	5
107	John Blair – SEAGO	Prop 175 comments	1
108	Victoria O'Connell	Prop 175 & 177 comments	1
109	Ron Leighton	Prop 195 comments	1
110	Tad Fujioka	Committee B comments	1
111	ADF&G CF	Prop 195 substitute language	1
112	Rocky Littleton	Prop 195	1
113	KPFA	Committee A comments	2
114	ADF&G	Miscellaneous Business	5
115	David Farkas	Chitina dipnet	1
116	Edgar Shargin, Nicole Cabera	Maintain 58' vessel length	2
117	KAFC, Dwight Kramer	Emergency Petition for Slikok Creek	2

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## Board of Fisheries - Statewide Finfish, Supplemental Issues, Subsistence Finding Standards, and Chitina Dipnet Fishery. March 16 - 21, 2010, Anchorage

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118	BOF	Draft letter to NPFMC	2
119	Richard Yamada AK Charter Association	Prop 180 comments	1
120	ADF&G	Dept response to Slikok Creek petition	3
121	ADF&G / Boards	Draft Call for Proposals 2011	1
122	ADF&G / Boards	Miscellaneous Business	1
123	Boneta & Francis O'Conner	Prop 200 & 201 comments	1
124	Mr & Mrs. William Gould	Prop 200 & 201 comments	1
125	Native Village of Eyak	Summary data CR fisheries	1
126	Wrangell St Elias SRC	Prop 201 comments	2
127	Bruce Cain	Personal testimony	7
128	John Renner	Personal testimony – supporting documents	9
129	CDFU	PC 134 corrections	1
130	CDFU	Subsistence way of life language	1
131	Arleen Lenard	Personal testimony	3
132	Charles Dcerrick	Personal testimony	6
133	Kenneth Adams	Prop 200	1
134	Bob Martinson	Personal testimony	2
135	Jason Lee	Proposal comments	2
136	James Mykland	Prop 200 & 201	2
137	AK Troller's Assoc.	Prop 200 & 201 oppose	8
138	Mark Hem	Federal Subsistence Fishery permit, C&T worksheet	4
139	Curt Herschleb (for Lloyd Montgomery)	Personal testimony of Lloyd M	2
140	Mike Mahoney	Personal testimony	2

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## Board of Fisheries - Statewide Finfish, Supplemental Issues, Subsistence Finding Standards, and Chitina Dipnet Fishery. March 16 - 21, 2010, Anchorage

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141	James Burton	Oppose 201	1
142	Joe Hart	Personal testimony	2
143	Angella Vermillion	Personal testimony	2
144	John Sky Starkey – Ahtna, Inc	Prop 200 & 201	10
145	Ahtna, Inc	Court decision papers	3
146	James Mykland	Chcitina saving on fish purchase	1
147	Mark King	Personal testimony	2
148	ADF&G / Boards	Public testimony	2
149	Tom Haluska	What is subsistence?	1
150	Rochelle van den Broek	Personal testimony	1
151	Kenai/Soldotna AC	Prop 200 – 201	1
152	KPFA	Sustainability of fish	2
153	James Burton	Charter operator web pages	
154	Curt Herschleb	Board’s deliberation flaws	1
155	Robert Linville	Personal testimony	2
156	Mike Mahoney	Discussion of “reliance”	2
157	Virgil Umphenour	Fairbanks AC	10
158	Mark Hem	Chitina Dipnetters	8
159	CDFU	PC 134 & RC 129 corrections	1
160	CDFU	Respect for nature	1
161	Melvin Grove	Economic characteristics	8

**ALASKA DEPARTMENT OF FISH AND GAME**

**STAFF COMMENTS ON STATEWIDE FINFISH REGULATORY PROPOSALS  
AND SUPPLEMENTAL ISSUES**

**ALASKA BOARD OF FISHERIES MEETING  
ANCHORAGE, ALASKA**

**MARCH 16 – 20, 2010**



Regional Information Report No. 2A10-01

The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Fisheries meeting, March 16-20, 2010 in Anchorage, Alaska and are prepared to assist the public and Board. The stated staff comments should be considered preliminary and subject to change, if or when new information becomes available. Final department positions will be formulated after review of written and oral testimony presented to the board.

## ABSTRACT

This document contains Alaska Department of Fish and Game (department) staff comments on Statewide (General Provisions) subsistence, personal use, sport, and commercial finfish regulatory proposals. These comments were prepared by the department for use at the Alaska Board of Fisheries (board) meeting, March 16-20, 2010 in Anchorage, Alaska to assist the public and board. The stated staff comments should be considered preliminary and subject to change, if or when new information becomes available. Final department positions will be formulated after review of written and oral testimony presented to the board.

Key words: Alaska Board of Fisheries, staff comments, subsistence, personal use, sport, commercial, regulatory proposals, finfish, salmon.

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## SUMMARY OF DEPARTMENT POSITIONS

Proposal #	Dept. Position	Issue
164	O	Revise unlawful possession of subsistence finfish
165	O	Delay opening personal use fishery until escapement goal is met
166	O	Eliminate requirement of having a sport fishing license to fish in personal use fisheries
167	S	Modify definition of mechanical jigging machine
168	N	Repeal length limit on salmon seine vessels in Alaska
169	N	Amend criteria for the allocation of fishery resources
170	O	Clarify regulations establishing escapement goals
171	O	Clarify escapement goals and establish ranges
172	S	Provide definition for escapement goal threshold
173	S/N	Amend management plan for parallel groundfish fisheries
174	O/N	Amend lawful gear for groundfish
175	N/NP	Establish bag limit for sablefish
176	N	Increase bag limit for spiny dogfish
177	N	Establish bag limit for thornyhead rockfish
178	S	Clarify emergency order authority
179	O	Clarify emergency order authority
180	S	Define electric fishing reels
181	O	Clarify definition of fishing rod and electric reel
182	O/N	Prohibit use of electric reels
183	O/N	Prohibit use of electric reels
184	N	Prohibit use of felt sole wading boots
185	S	Clarify definition of underwater spear
186	O	Allow the use of underwater spear
187	O	Allow the use of bait by disabled anglers
188	S	Modify sport fishing regulations for halibut
189	O	Require a client-guide agreement for each client on a sport fishing charter trip
190	O	Allow crew members to retain fish when clients are onboard
191	O	Define official time for sport fisheries
192	O	Establish a definition of artificial fly
195	N	Close summer commercial Dungeness crab fishery in Southeast Alaska District 2
196	S	Adjust the total allowable catch for the Bering Sea <i>C. opilio</i> Tanner crab commercial fishery
197	NP	Reduce the minimum size limit for Tanner crab in the Bering Sea commercial fishery
198	S	Remove the minimum total allowable catch in the Saint Matthew Island blue king crab fishery

*Note:*

N = Neutral

S = Support

O = Oppose

O/N = Oppose but Neutral on Allocative Aspects

NP = No position

S/N = Support but Neutral on Allocative Aspects



**COMMITTEE A: COMMERCIAL FISHERIES, ALLOCATIONS  
CRITERIA, SUSTAINABLE SALMON POLICY, AND ESCAPEMENT  
GOAL POLICY**

**(12 PROPOSALS)**

**Commercial: (8 proposals)**

**PROPOSAL 167 – 5 AAC 39.105. Types of Legal Gear.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would clarify the statewide gear definition of mechanical jigging machine by specifying that lures or baited hooks are allowed.

**WHAT ARE THE CURRENT REGULATIONS?** A mechanical jigging machine is defined in 5 AAC 39.105(d)(25). This regulation states that a mechanical jigging machine is a device that deploys a line with hooks, and retrieves that line and hooks with electrical, hydraulic, or mechanically powered assistance; a mechanical jigging machine allows the line with hooks to be fished only in the water column; a mechanical jigging machine must be attached to a vessel registered to fish with a mechanical jigging machine and may not be anchored or operated off the vessel.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would clarify the mechanical jigging machine definition by clearly stating that mechanical jigging machines may use lures or bait. This proposal would not alter or influence any current groundfish management practices.

**BACKGROUND:** While the department has interpreted the definition of mechanical jigging machine to allow use of lures and bait with hooks, the current definition does not specify that and is inconsistent with other gear definitions in 5 AAC 39.105 that specifically allow baited hooks. For example, longline gear allows “lures or baited hooks attached,” 5 AAC 39.105(d)(13).

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal. The department considers this a housekeeping action that will clarify existing regulation.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 168 - 5 AAC 39.117. Vessel Length; bulbous bow.**

**PROPOSED BY:** Darrell Kapp

**WHAT WOULD THE PROPOSAL DO?** This proposal seeks to repeal the 58 foot maximum length restriction currently in place for salmon purse seine vessels statewide.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 39.117. **Vessel length; bulbous bow.** (a) Notwithstanding any other provision in 5 AAC 01-5 AAC 39, the addition of a bulbous bow may cause a vessel, other than a vessel engaged in the Bering Sea hair crab fishery, to exceed an established vessel overall length limitation. Only that portion of the vessel compromising the bulbous bow may cause the vessel to exceed a vessel overall length limitation.

(b) For the purposes of this section, “bulbous bow” means a bulbous extension of the bow, below or predominantly below the water line of a vessel, that is designed to increase stability or fuel efficiency and does not contain storage space or equipment that can be accessed from within the vessel.

**AS 16.05.835. Maximum length of salmon seine and certain hair crab vessels.** (a) Unless the Board of Fisheries has provided by regulation for the use of a longer vessel in a salmon seine fishery, a salmon seine vessel may not be longer than 58 feet overall length except vessels that have fished for salmon with seines in waters of the state before January 1, 1962, as 50-foot, official Coast Guard register length vessels.

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

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Fishing vessels larger than 58 feet would be available for salmon purse seine fisheries statewide. The department would have to account for these larger vessels when managing fisheries since the larger vessels could increase the fleet’s harvest potential. Larger vessels would spend more time fishing and less time running for delivery to tenders, floating processors, or shore-based processing plants. Larger vessels would be capable of fishing in more marginal weather conditions and could fish longer in offshore areas. With more larger-sized vessels, fewer tenders would be required since the primary advantage of a larger boat would be increased hold capacity. Hold capacity in the fishing fleet now ranges from approximately 5 net tons to 60 tons or more. Some limited processing of high value species could take place on board larger vessels.

Some pros and cons of removing the 58 foot limit on salmon seiners are as follows:

Pro:

- 1) The reason for the law, which was to prevent large out-of-state vessels from flooding into the seine fisheries and greatly increasing effort, no longer exists because of limited entry.
- 2) Larger vessels might be more fuel efficient when comparing the amount of fish they could pack over the entire season to the amount of fuel they use.
- 3) Larger vessels are likely safer, both in being able to safely fish in poor weather and being more stable for traveling to and from the fishing grounds.
- 4) Larger vessels might reduce the need for tenders and they would pack more fish, both of which could result in more money to fishermen.

- 5) Larger vessels would be more versatile for use in other fisheries like the halibut and sablefish fisheries, and the tanner and king crab fisheries.
- 6) Larger vessels could be used for custom onboard processing, which should produce an even higher quality product resulting in more money to fishermen.

Con:

- 1) Allowing larger vessels to seine might reduce the value of the existing vessels that are 58 feet and shorter.
- 2) Large vessels would be more efficient in harvesting salmon than smaller vessels in certain areas. This would happen on the outer coast of Dall and Noyes Islands in District 4 in Southeast Alaska and other seining locations areas where the weather is sometimes a factor which limits seining. The department would have to take any increased efficiency into account when managing those fisheries.
- 3) New regulations may be needed to ensure the department gets timely and accurate harvest reports and fish tickets for Chinook and sockeye salmon, or other species, if they are processed and retained onboard the vessel and not landed along with other species. The department will need to monitor all processors, whether shore-based or vessel-based, in order to comply with inseason management provisions of the Pacific Salmon Treaty.

**BACKGROUND:** The original 58-foot seine vessel limit was enacted to prevent larger out-of-state vessels, such as herring seiners, from moving into the salmon seine fishery and greatly increasing effort. The original 1960 statute specified that no seiner could be longer than 50 feet registered length. In 1962, this was changed to 58 feet overall length, exempting vessels that had fished before 1962 as 50-foot registered length vessels. The statute was changed on January 1, 2005 so the board would have the option to adopt a regulation changing the length of salmon seine vessels. The board did not adopt a proposal to change vessel length at its 2006 board meeting in Ketchikan. The board opposed Proposal 86 as it applied to Prince William Sound during its Cordova meeting in December 2008, and then tabled Proposal 253 during the Sitka meeting in February 2009.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this allocative proposal which may provide some advantages to individuals fishing and investing in larger vessels compared with those continuing to fish smaller vessels. This proposal may also allocate tending opportunity between vessels. Because the size of purse seine nets would be the same, catch rates between vessels would be roughly comparable. The department would continue to evaluate harvests and manage fisheries with consideration given to the different capabilities of larger vessels.

If the intended purpose of this proposal is to increase deck space to provide an area for fish processing, then vessels engaging in those activities will need to comply with ADF&G processing license requirements, Alaska Department of Environmental Conservation processing requirements, and pay salmon enhancement and raw fish taxes collected by Alaska Department of Revenue. In addition, the department will need to ensure compliance with fish ticket reporting requirements. Shore-based processing companies have always provided timely harvest

information to the department immediately following open fishing periods, so the department is able to track harvests of targeted species, as well as Chinook and sockeye salmon harvests to comply with provisions of the Pacific Salmon Treaty. With substantial numbers of catcher-freezers and direct-marketers in the pot shrimp fishery and significant numbers of frozen-at-sea salmon trollers, it has become necessary for the board and the department to develop new regulations to address inseason reporting, and to require additional fish ticket reporting requirements under 5AAC 39.130(c)(11). Since fish tickets are only required within seven days of landing when salmon are frozen and retained aboard the vessel indefinitely, inseason tracking of harvests could be less precise or there may be under-reporting of harvests.

**COST ANALYSIS:** Costs for upgrading to larger vessels could be substantial for those that choose to fish from larger vessels and develop processing capabilities. Fuel costs may increase. Increased tendering, custom processing, and/or alternate marketing by the larger class fishing vessels may provide offsetting income from increased dock deliveries and higher dock delivery or value-added prices.

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**PROPOSAL 173 – 5 AAC 28.086. Management Plan for Parallel Groundfish Fisheries.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This statewide proposal would extend the existing parallel groundfish fisheries management plan (5 AAC 28.086) for Pacific cod, walleye pollock, and Atka mackerel to all species of groundfish managed as parallel fisheries.

The commissioner would have authority to adopt, as necessary, the following federal management measures from the adjacent exclusive economic zone (EEZ; 3-200 nm) to manage parallel groundfish fisheries: open and close fishing seasons, area closures, gear restrictions, vessel size limits, reporting requirements, and monitoring and enforcement requirements.

This proposal would not supersede existing state regulations regarding parallel groundfish fisheries and this proposal is not expected to change the state’s practice of adopting most, but not all, federal rules to manage parallel groundfish fisheries.

**WHAT ARE THE CURRENT REGULATIONS?** Two statewide regulations describe parallel fishery management, 5 AAC 28.086. *Management Plan for Parallel Groundfish Fisheries* and 5 AAC 28.087. *Management Measures in Parallel Groundfish Fisheries for Protection of Steller Sea Lions*.

Regulation 5 AAC 28.087 gives the commissioner authority to adopt federal fishery rules for Pacific cod, walleye pollock, and Atka mackerel for the protection of endangered Steller sea lions, whereas 5 AAC 28.086, covering the same species as 5 AAC 28.087, is not based on

Steller sea lion protection. Under these regulations, the commissioner may impose, via emergency order, federal fishery management measures including area closures, gear restrictions, vessel size limits, reporting, monitoring, and enforcement requirements to correspond with federal fishery management measures.

Department staff implements federal rules for parallel fisheries via a global emergency order. A global emergency order aligns fishing seasons, closed waters, and unless otherwise specified, the allowable gear and bycatch levels in state and adjacent federal waters. Within the global emergency order, the state has adopted protection measures for Steller sea lions in the parallel Pacific cod, Atka mackerel, and walleye pollock fisheries as provided for in 5 AAC 28.087.

The board has also authorized the commissioner to open groundfish seasons by emergency order, during which bycatch limits, area closures, and gear restrictions may be specified (e.g., 5 AAC 28.070, .087, .467).

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The commissioner would have regulatory authority, for all species managed in a parallel groundfish fishery, to adopt fishing seasons, closed waters, allowable gear, vessel size limits, reporting, monitoring, and enforcement requirements by emergency order to provide for compatible management measures with the federal fisheries in adjacent waters of the EEZ.

**BACKGROUND:** Parallel groundfish fisheries occur in Prince William Sound, Cook Inlet, Kodiak, Chignik, South Alaska Peninsula, Bering Sea-Aleutian Islands, and Chukchi-Beaufort areas. Many groundfish fisheries in state waters are managed under a parallel fishery structure; however, the board has also established state-waters fisheries for some groundfish species, including state-waters Pacific cod, state-waters sablefish, and black and dark rockfish.

The department has managed parallel groundfish fisheries by adopting federal rules into state waters since the 1980s. The department does not have independent programs in place to ensure sustained-yield management for all groundfish species in Alaska's territorial waters. Groundfish fisheries in territorial waters often target the same stocks harvested under federal regulations in adjacent waters of the EEZ. To ensure conservation of groundfish resources located in territorial waters, the department has generally depended on fishing seasons, catch limits, and in some cases, allowable gear, established for adjacent waters of the EEZ as administered by National Marine Fisheries Service.

Participation in federal groundfish fisheries is restricted to vessels with a federal groundfish permit. Participation in a parallel groundfish fishery does not require a federal permit. Federal groundfish management areas have, or will soon have, specific allocations to gear/processing sectors. Based on Alaska Supreme Court's decision in Grunert, the department does not recognize federal sectors in state waters during parallel groundfish fisheries based on processing type. The state adopts gear sectors, but not processing sectors into parallel fisheries.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal; however, is **NEUTRAL** on the allocative aspects of the proposal.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 174 – 5 AAC 28.050. Lawful Gear for Groundfish.**

**PROPOSED BY:** Stanley Mack

**WHAT WOULD THE PROPOSAL DO?** This statewide proposal would allow gillnet gear, up to 200 fathoms in length, as a legal gear type for state-waters Pacific cod fisheries.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 28.050(a), the statewide gear regulation for groundfish, allows trawl, hand troll, seine, mechanical jigging machines, dinglebar troll gear, longlines, and pot gear to take groundfish.

State-waters Pacific cod fisheries occur in Prince William Sound, Cook Inlet, Kodiak, Chignik, South Alaska Peninsula, and Aleutian Islands District of the Bering Sea-Aleutian Islands Area (5 AAC 28.081(a)). Regulations for state-waters Pacific cod seasons are different in each registration area, but all areas specify legal gear and are generally limited to pot, mechanical jigging machines, and hand troll gear. The exceptions are Prince William Sound Pacific cod management plan (5 AAC 28.267(c)) which also permits longline gear, and Aleutian Islands District Pacific cod management plan (5 AAC 28.647(d)(2)) that also allows longline, and non-pelagic trawl gear.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, gillnet gear would be a legal gear type for taking groundfish. In addition, the board would need to decide if sunken gillnets should be allowed in each state-waters Pacific cod management plan, or in parallel Pacific cod fisheries. Sunken gillnet fisheries have been documented with significant bycatch of non-target, often high-value species, such as crab, halibut, and salmon, as well as birds and marine mammals. The board would also need to consider revising the allocation of Pacific cod for those management plans that have allocations of Pacific cod by gear type. The potential for gear conflict by tangling with pot and longline gear is another consideration in making gillnet a legal gear for Pacific cod.

**BACKGROUND:** Sunken gillnets are not currently legal fishing gear in Alaska, although they were legal in parts of Alaska until 1992. Sunken gillnet fisheries occurred in Southeast Alaska, Prince William Sound, Cook Inlet, and Westward Region. Logbook data from Southeast Alaska showed sunken gillnets to be nonselective with high mortality of non-target species (Funk 2003; *Overview of State-managed Marine Fisheries in Southwestern Alaska with Reference to the Southwest Stock of Sea Otters*). Observer data from Kodiak Area showed similar results (Table 1; Blackburn 1992. *Observations of Catch in the Sunken Gillnet Fishery for Pacific Cod in the*

*Kodiak Area, 1981*). Another issue associated with sunken gillnets is the ability of lost gillnets to persist and continue fishing (Takagi et al. 2007; *Evaluating the Impact of Gillnet Ghost Fishing Using a Computational Analysis of the Geometry of Fishing Gear*). In March 1992, the board prohibited use of sunken gillnets for groundfish. Proposals to allow gillnets were submitted to the board in 1999 and 2000, but were rejected due to bycatch concerns.

Table 174-1.—Average number of animals caught per metric ton of Pacific cod in the Kodiak Area sunken gillnet fishery, 1981 (as reported in Blackburn, 1992).

Species	Average No. of Animals
Great sculpin	24.7
Tanner crab	23.6
Halibut	18.3
Flathead sole	17.3
Red king crab	10.2
Yellowfin sole	6.4
Arrowtooth flounder	2.3
Dogfish	0.6
Rockfish	0.5
Pacific herring	0.5
Harbor porpoise	0.3
Starry flounder	0.2
Skates	0.1
Giant wrymouth	0.1
Salmon spp.	0.1
Hair crab	0.1

**DEPARTMENT COMMENTS:** The department **OPPOSES** development of sunken gillnet fisheries for groundfish because of the demonstrated high bycatch potential of this gear. The department is **NEUTRAL** on the allocative aspects of this proposal.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 195 - 5AAC 32.110(1). Fishing seasons for Registration Area A.**

**PROPOSED BY:** Richard Peterson, President of the Organized Village of Kasaan

**WHAT WOULD THE PROPOSAL DO?** This proposal would close portions of District 2 in Southeastern Alaska to commercial Dungeness crab fishing during the summer season.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 32.110. In Registration Area A, male Dungeness crab may be taken or possessed only as follows:

(1) in Section 13-B, except the waters of the Sitka Sound Special Use Area described in 5 AAC 32.150(10), and beginning February 29, 2012, in Districts 1 and 2, except the waters of Whale Passage described in (2) of this section, from 12:00 noon October 1 through 11:59 p.m. February 28;

(2) in the waters of Section 13-B that are in the Sitka Sound Special Use Area described in 5 AAC 32.150(10) , and in the waters of Whale Passage north and west of a line extending from 56° 05.65' N. lat., 133° 07.30' W. long. to 56° 05.85' N. lat., 133° 06.40' W. long., from 12:00 noon October 1 through 11:59 p.m. November 30;

(3) in all other waters of Registration Area A, from 12:00 noon June 15 through 11:59 p.m. August 15 and from 12:00 noon October 1 through 11:59 p.m. November 30.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** Portions of District 2 (Figure 195-1, District 2 is also referred to as District 102) would be closed to commercial Dungeness crab fishing during the summer season (June 15–August 15). It is unclear whether portions of District 2 closed to commercial Dungeness crab harvest in the summer would revert to the fall/winter season as previously described for District 2 prior to the 2009 board meeting on Southeast shellfish, and currently described for the waters of Section 13-B that are not in the Sitka Sound Special Use Area as described above in 5 AAC 32.110(1), or be limited to a fall only season similar to those described for the waters of Section 13-B that are in the Sitka Sound Special Use Area and the waters of Whale Passage as described above in 5 AAC 32.110(2).

**BACKGROUND:** Until the late 1950s, a summer soft-shell closure for the Southeast Dungeness crab fishery was in effect from May 1 through September 1. It was subsequently revoked and various fishing season closures have been introduced and modified to reduce fishing pressure during sensitive periods in the life history of the species. Beginning in 1985, the commercial fishery was closed between August 16 and September 30 because field studies indicated that this is the primary period when females molt and mate. In the briefing document for the board meeting held at that time, reasons for the proposed change included soft-shell and associated handling mortality concerns, as well as allocation problems between personal use and commercial users in Section 13-B. Research supports these field studies, indicating that peak timing of the female molt and mating period is late summer through early fall (August–September) and the primary male molt period is spring through early summer (March–June). In response to increasingly high effort levels and high harvest rates, the season was further shortened in 1989 by reducing the winter season in northern and central districts to October 1 through November 30. The season remained October 1 through February 28 in southern Districts 1, 2, and Section 13-B until changes were adopted during the 2009 Southeast shellfish board meeting.

At its 2009 meeting, the board changed the commercial fishing season description for Districts 1 and 2 to match the summer (June 15–August 15) and fall (October 1–November 30) commercial fishing seasons in place for the majority of Southeast Alaska. This action effectively eliminated the winter commercial fishing season (December 1 through February 28) previously described for Districts 1 and 2. The board included a sunset date for the season description change for Districts 1 and 2. In the absence of further regulatory change, Districts 1 and 2 will revert back to a fall and winter season on the sunset date of February 29, 2012.

A history of commercial Dungeness crab harvest throughout registration area A can be found in Table 195-2 and specific to District 2, by fishing season in Table 195-1. The majority of commercial harvest occurs in subdistrict 102-60 (Kasaan Bay). Over the last ten full seasons, harvest taken from 102-60, in comparison to total harvest taken in District 2, has averaged 89%.

In response to department concerns about adequacy of 3-S (size, sex, and season) management to deal with handling of soft-shell males during the summer season, high harvest rates and the intensity of the fishery, the *Southeast Alaska Dungeness Crab Management Plan* (5 AAC 32.146) was promulgated by the board at its 2000 meeting. This management plan obliges the department to estimate the season harvest 14 days after the start of the summer fishery and to reduce the season length if the estimate is below one of two thresholds. To date, no changes to season length have been triggered by this plan. Since Dungeness crab harvest has been below the upper threshold of 2.25 million pounds only 4 times, and never below the lower threshold of 1.5 million pounds in the 29 seasons since the fishery became fully exploited in the 1981/82 season, it is unknown whether anything short of large-scale recruitment failure would trigger this plan. Thus, concerns remain regarding the sufficiency of the current management regime to maximize production of hard-shelled crabs by the fishery, protect crabs during vulnerable life history periods, and maintain sufficient broodstock between seasons to provide for sustained yield.

There are currently two areas in District 2 closed to commercial Dungeness crab fishing. These waters include portions of Thorne Bay (5 AAC 32.150(5)) and Twelve Mile Arm (5 AAC 32.150(11)) and are shown for reference in Figure 195-1.

A portion of District 2 has a customary and traditional use finding (5 AAC 02.108(a)(3)(E)) for Dungeness crab (Figure 195-1). Although it is difficult to determine what portion comes from District 2, the Division of Subsistence estimated consumption of Dungeness crab in the community of Kasaan in 1998 to be roughly 1000 pounds harvested, with 85.7% of households surveyed participating in subsistence use of Dungeness crab. The current bag and possession limit is 20 crab per person. There is no closed season for those fishing under subsistence regulations.

District 2 also supports sport and personal use fisheries. The harvest from sport and personal use fisheries is difficult to gauge. No permitting system is in place for these fisheries. The Statewide Harvest Survey administered by the Division of Sport Fish does estimate Dungeness crab harvest in personal use and sport fisheries, but the estimates produced for Southeast Alaska are not district specific. The sport Dungeness crab fishery in the waters of District 2 is open year-round with bag and possession limits of 3 male Dungeness crab and male Tanner crab, in combination. The personal use Dungeness crab fishery in the waters of District 2 that do not

have positive customary and traditional use findings for subsistence are open year-round, with bag and possession limits of 20 male crab, except in the waters of Thorne Bay west of the longitude of the southernmost tip of Thorne Head, where the bag and possession limit is 5 crab per person. There is no closed season for those fishing under sport or personal use regulations.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this allocative proposal.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

**Table 195-1.** Commercial Dungeness crab harvest in District 2 in pounds by season, 1982/83 to present.

Season	Summer (June-Aug.)	Fall (Oct.-Nov.)	Winter (Dec.-Feb.)	Total
1982/83	*			*
1983/84	*	*		*
1984/85	9,900	*	*	11,188
1985/86	3,039	*	1,696	*
1986/87	CLOSED			
1987/88	CLOSED	5,850		5,850
1988/89	CLOSED	5,188		5,188
1989/90	CLOSED	*		*
1990/91	CLOSED	*	*	*
1991/92		*	*	*
1992/93	CLOSED	*		*
1993/94	CLOSED	*		*
1994/95	CLOSED			
1995/96	CLOSED	*		*
1996/97	CLOSED	*	18,927	*
1997/98	CLOSED	22,269	86,278	108,547
1998/99	CLOSED	64,049	18,379	82,428
1999/00	CLOSED	51,251	5,857	57,108
2000/01	CLOSED	56,621	6,536	63,157
2001/02	CLOSED	70,867	18,961	89,828
2002/03	CLOSED	107,307	8,744	116,051
2003/04	CLOSED	76,867	14,940	91,807
2004/05	CLOSED	67,490	17,763	85,253
2005/06	CLOSED	60,763	*	*
2006/07	CLOSED	67,714	*	*
2007/08	CLOSED	131,729	*	*
2008/09	CLOSED	66,406	*	*
2009/10	92,311	23,740	CLOSED	116,051

\* Where number of permits is less than three, the information is considered confidential.

**Table 195-2.** Southeast Alaska Registration Area A, Dungeness crab harvest in exvessel pounds by year and district, 2000/01–2009/10.

District	Year										Average
	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	
101	78,743	78,280	132,851	132,229	197,842	118,796	73,614	47,781	65,274	85,509	101,092
102	63,157	89,828	116,051	91,807	85,253	63,768	68,114	138,147	67,006	116,964	90,010
103	31,318	41,104	14,791	34,989	25,472	39,704	44,342	40,441	*	15,489	31,961
104	*	*						0	0	*	0
105	146,617	373,997	515,881	227,520	85,171	56,731	114,851	204,713	360,651	130,014	221,615
106	354,436	1,166,696	1,558,903	772,701	826,111	708,441	509,390	696,243	592,223	405,392	759,054
107	46,745	222,721	422,682	172,638	248,544	190,936	152,375	184,092	154,903	90,916	188,655
108	613,881	792,040	1,585,850	829,198	652,588	948,483	1,011,573	1,017,894	844,572	607,202	890,328
109	483,689	434,225	1,207,888	569,142	473,614	316,497	545,360	908,960	612,171	339,981	589,153
110	378,250	159,149	280,581	188,656	357,632	209,763	309,884	549,674	378,122	315,785	312,750
111	25,004	275,299	918,015	676,605	570,564	567,509	865,895	484,202	637,676	489,839	551,061
112	100,012	169,916	223,562	432,395	448,333	380,441	305,700	284,288	293,955	220,526	285,913
113	171,737	161,796	145,357	118,584	181,038	181,384	251,305	194,512	161,767	308,514	187,599
114	54,777	100,999	120,304	177,010	336,717	269,926	113,207	282,391	229,345	185,834	187,051
115	15,166	36,866	89,949	113,575	100,122	153,101	138,360	375,017	325,792	254,847	160,280
Total	2,565,410	4,104,128	7,332,665	4,537,049	4,589,001	4,205,480	4,503,970	5,408,355	4,731,668	3,569,697	4,554,742

\* Where number of permits is less than three, the information is considered confidential.

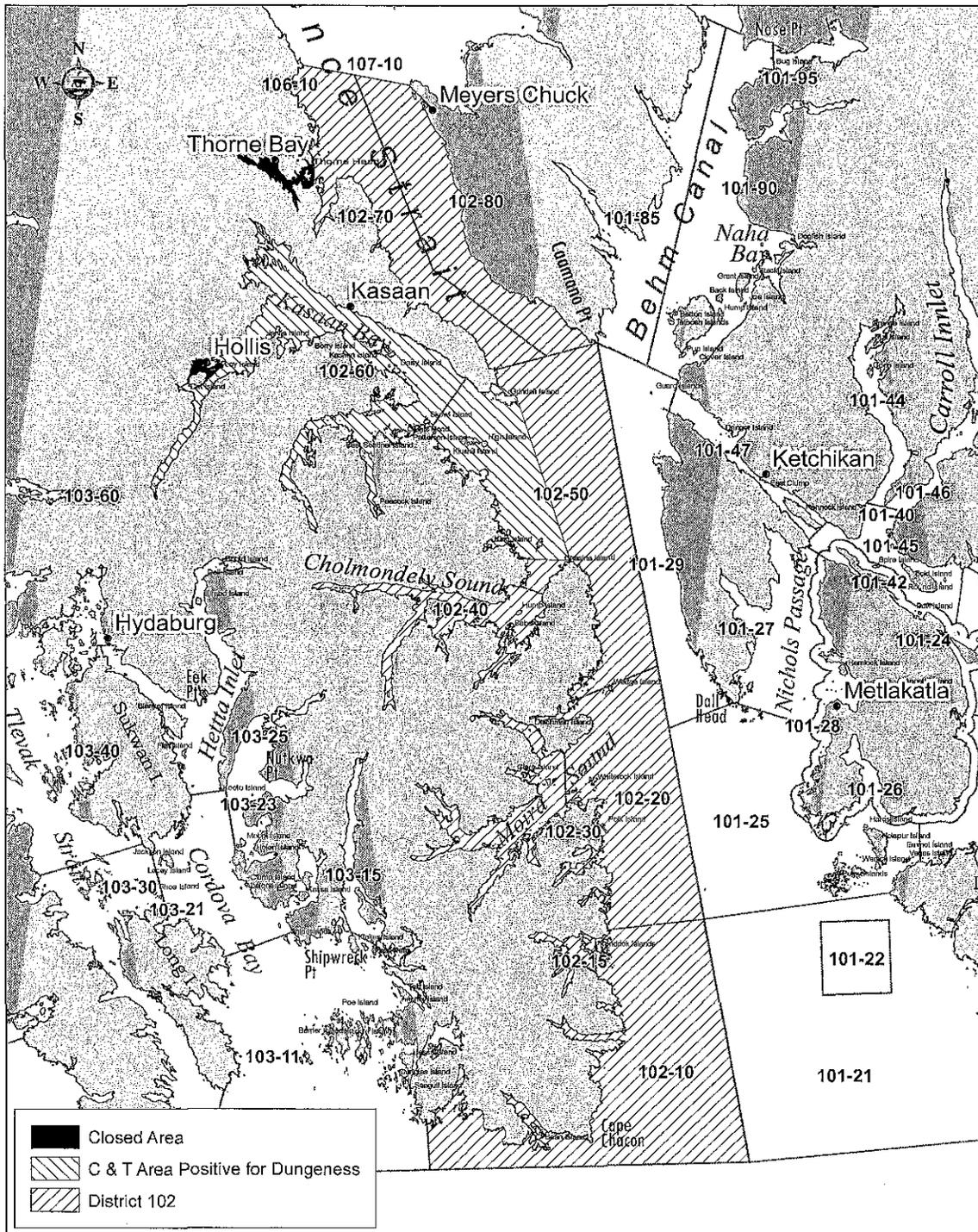


Figure 195-1. Map of District 2, referenced as District 102, including areas currently closed to commercial fishing for Dungeness crab and areas with a customary and traditional use finding.

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**PROPOSAL 196 – 5 AAC 35.517. Bering Sea *C. Opilio* Tanner Crab Harvest Strategy.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal seeks to eliminate the minimum total allowable catch (TAC) threshold in 5 AAC 35.517 *Bering Sea C. Opilio Tanner Crab Harvest Strategy*.

**WHAT ARE THE CURRENT REGULATIONS?** The *Bering Sea C. Opilio Tanner Crab Harvest Strategy* currently includes a minimum TAC threshold of 15 million pounds for the non-community development quota commercial fishery that must be met before the fishery may open (5 AAC 35.517(a)(2))

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, the department could open the Bering Sea snow crab fishery at TAC levels of less than 15 million pounds provided that other harvest strategy requirements are met and that the TAC is in compliance with federal overfishing requirements.

**BACKGROUND:** This proposal was formerly ACR# 7.

The federal *Fisheries Management Plan for the Bering Sea/Aleutian Islands King and Tanner Crabs* (FMP) establishes a state/federal cooperative management regime that defers management of the Bering Sea snow crab fishery to the State of Alaska with federal oversight.

Under the FMP, the State of Alaska establishes harvest levels for Bering Sea crab stocks. Harvest levels are a category two management measure in the FMP. Under category two, the state may change how harvest levels are set as long as the harvest level is in compliance with the FMP.

The Bering Sea snow crab fishery was declared overfished by National Marine Fisheries Service (NMFS) in 1999. In response to the overfishing declaration and as part of the snow crab rebuilding plan, the department developed a harvest strategy that was adopted by the board in 2000 (5 AAC 35.517). The harvest strategy contains a minimum TAC of 15 million pounds for the commercial fishery (not including the community development quota fishery). The minimum harvest level was utilized to reduce the risk of the fishery exceeding harvest targets when the competitive fishery was managed inseason. Since the 2005/06 fishing season, the snow crab fishery has been included in the federal Crab Rationalization Program and managed under a TAC with quota shares issued to individual fishermen. Under this system there is virtually no risk of exceeding the TAC.

As Bering Sea snow crab abundance levels fluctuate, and in order to comply with federal overfishing levels and rebuilding requirements, the department may need to adjust the Bering Sea snow crab TAC below levels determined by 5 AAC 35.517.

If, under 5 AAC 35.517, a harvestable surplus of Bering Sea snow crab is available at a level that is less than the current minimum TAC or if the department reduces the calculated TAC to a level below the current minimum TAC to achieve federal stock rebuilding requirements, then the fishery would remain closed. The department is requesting that the minimum TAC be removed from the snow crab management plan because it no longer serves the purpose for which it was originally developed, and now has the unforeseen potential effect of closing the fishery when a harvestable surplus could be taken without the risk of exceeding the harvest target.

A new rebuilding plan for snow crab is currently being developed through the council process and adoption of this proposal would provide the department maximum flexibility to work within that plan in setting harvest levels.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 197 – 5 AAC 35.520. Size Limits for Registration Area J; and 5 AAC 35.508. Bering Sea District C. *bairdi* Tanner Crab Harvest Strategy.**

**PROPOSED BY:** Arni Thomson, Alaska Crab Coalition

**WHAT WOULD THE PROPOSAL DO?** This proposal seeks to modify the legal size limit for Tanner crab in Bering Sea District.

**WHAT ARE THE CURRENT REGULATIONS?** The Bering Sea District Tanner crab legal size limit is 5.5” carapace width 5 AAC 35.520(b)(1). *Size Limits for Registration Area J.* The Tanner crab management plan for Bering Sea District, 5 AAC 35.508, defines threshold levels of abundance to consider a fishery opening, specifies separate harvest levels in the areas east and west of 166° W long., specifies harvest rates of mature and legal males, and defines the carapace width of exploitable legal males, mature females, and molting mature males.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The effect of this proposal cannot be determined because it does not provide an alternative Tanner crab size limit. A biological and economic analysis of changing the size limit is currently in progress by University of Alaska.

**BACKGROUND:** The federal *Fisheries Management Plan for the Bering Sea/Aleutian Islands King and Tanner Crabs* (FMP) establishes a state/federal cooperative management regime that defers management of Bering Sea Tanner crab fishery to State of Alaska with federal oversight.

Under the FMP, the State of Alaska has authority to establish minimum size limits for harvesting crab. Minimum size limits for crab are a category two management measure in the FMP. The state may change a minimum size limit as long as the size limit is in compliance with the FMP.

The current Tanner crab size limit is based on size-at-maturity data, and there is new scientific information suggesting that size-at-maturity for Bering Sea Tanner crabs has decreased since the current size limits were set (Zheng, J. 2008. *Temporal changes in size at maturity and their implications for fisheries management for eastern Bering Sea Tanner crab. J. Northw. Alt. Fish. Sci., 41: 137-149*). The Alaska Crab Coalition has contracted with University of Alaska to conduct an analysis of Bering Sea Tanner crab size limits.

When the board adopted agenda change request #9 (now proposal 197) in October 2009, the University's analysis of alternative size limits was not complete. Because Bering Sea Tanner crab stock is expected to be declared overfished in the spring of 2010, changes to an alternative size limit should be done in conjunction with the federal overfishing and rebuilding analysis. The department requests that the board take no action on this proposal at its March 2010 meeting. Researchers with University of Alaska are planning to brief the board on continuing analysis of alternative size limits at its March 2010 board meeting.

Delaying action on this proposal until March 2011, during the normal king and Tanner crab regulatory cycle, will allow the public, staff, and board to review with adequate notice and consider affects on federal rebuilding requirements.

**DEPARTMENT COMMENTS:** The department supports reviewing the legal size limit for Tanner crab in Bering Sea, but requests that the board table this proposal until the March 2011 meeting when a full analysis will be available with adequate time for public review. The department takes **NO POSITION** on this proposal given its incomplete analysis.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 198 – 5 AAC 34.917. Saint Matthew Island Section Blue King Crab Harvest Strategy.**

**PROPOSED BY:** Alaska Board of Fisheries.

**WHAT WOULD THE PROPOSAL DO?** This proposal seeks to eliminate the minimum total allowable catch (TAC) threshold in 5 AAC 34.917. *Saint Matthew Island Section Blue King Crab Harvest Strategy.*

Adoption of this proposal would make permanent the emergency regulation adopted by the board in September 2009 and signed by the Lieutenant Governor on October 5, 2009. That emergency regulation expired February 1, 2010.

**WHAT ARE THE CURRENT REGULATIONS?** The *Saint Matthew Island Section Blue King Crab Harvest Strategy* currently includes a minimum TAC threshold of 2.5 million pounds for the non-community development quota commercial fishery (5 AAC 34.917(a)(2)). The TAC must be met before the fishery may open.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal would allow the department to open Saint Matthew Island Section blue king crab fishery at a TAC level of less than 2.5 million pounds, provided that other harvest strategy requirements are met and that the TAC is in compliance with federal overfishing requirements.

**BACKGROUND:** The Saint Matthew Island Section blue king crab stock was declared overfished by NMFS in 1999. In response to the overfishing declaration, a rebuilding plan was developed in 2000. Part of that rebuilding plan is the state's harvest strategy (5 AAC 34.917). The harvest strategy contains a minimum TAC of 2.5 million pounds for the non-community development quota fishery that must be met prior to opening the fishery. The minimum harvest level was implemented to promote stock rebuilding and was also utilized as a management tool to reduce the risk of the fishery exceeding harvest targets when the competitive fishery was managed inseason.

Since the 2005/06 fishing season, the Saint Matthew Island Section blue king crab fishery has been included in federal Crab Rationalization Program and managed under a TAC. Inseason management of a competitive fishery is no longer conducted by the department. As blue king crab abundance levels fluctuate, and in order to comply with federal overfishing levels and rebuilding requirements, the department may need to adjust Saint Matthew Island Section blue king crab TAC below levels determined by 5 AAC 34.917 and below the current minimum TAC.

If, under 5 AAC 34.917, a harvestable surplus of blue king crab is available at a level that is less than the minimum TAC or if the department reduces the calculated TAC to a level below the minimum TAC to achieve federal overfishing requirements, then the fishery would remain closed.

The stock was declared rebuilt by National NMFS on September 21, 2009. The department is requesting that the minimum TAC be removed from *Saint Matthew Island Section Blue King Crab Harvest Strategy* because it no longer serves the purpose for which it was originally developed, and now has the unforeseen potential effect of closing the fishery when a harvestable surplus could be taken without risk of exceeding the harvest target.

**DEPARTMENT COMMENTS:** The department submitted this proposal on behalf of the board and **SUPPORTS** this proposal.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**Allocation Criteria, Sustainable Salmon Policy and Escapement Goal Policy**

**(4 proposals)**

**PROPOSAL 169 - 5 AAC 77.010. Methods, means and general restrictions.**

**PROPOSED BY:** Kenai Peninsula Fisherman's Association

**WHAT WOULD THE PROPOSAL DO?** This proposal requests a definition of why the board and State of Alaska can deny an individual or group of individuals' reasonable opportunity to harvest a state managed resource.

**WHAT ARE THE CURRENT REGULATIONS?** In AS 16.05.251(e), the Alaska Legislature gave the Alaska Board of Fisheries allocative authority:

(e) The Board of Fisheries may allocate fishery resources among personal use, sport, guided sport, and commercial fisheries. The board shall adopt criteria for the allocation of fishery resources and shall use the criteria as appropriate to particular allocation decisions. The criteria may include factors such as

- (1) the history of each personal use, sport, guided sport, and commercial fishery;
- (2) the number of residents and nonresidents who have participated in each fishery in the past and the number of residents and nonresidents who can reasonably be expected to participate in the future;
- (3) the importance of each fishery for providing residents the opportunity to obtain fish for personal and family consumption;
- (4) the availability of alternative fisheries resources;
- (5) the importance of each fishery to the economy of the state;
- (6) the importance of each fishery to the economy of the region and local area in which the fishery is located;
- (7) the importance of each fishery in providing recreational opportunities for residents and nonresidents.

5 AAC 39.205. Before adopting regulations that allocate fish among personal use, sport, and commercial fisheries, the board will, as appropriate to particular allocation decisions, consider factors such as those set out in AS 16.05.251(e).

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?**

Unknown; the proposal appears to request allocation criteria that are already listed in statute.

**BACKGROUND:** The Alaska Legislature authorized the Alaska Board of Fisheries to allocate fishery resources among user groups. This authority has been in existence for many years.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. It is unclear what the benefit of passing this proposal would bring and it appears that the intention of the proposal is already addressed in statute.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 170 – 5 AAC 39.222. Policy for the management of sustainable salmon fisheries.**

**PROPOSED BY:** Ken Tarbox

**WHAT WOULD THE PROPOSAL DO?** This proposal would require the department and the board to express all escapement goals, except sustainable escapement thresholds, as a range. No escapement goals would be established as thresholds.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 39.222.(f)(3) "biological escapement goal" or "(BEG)" means the escapement that provides the greatest potential for maximum sustained yield; BEG will be the primary management objective for the escapement unless an optimal escapement or inriver run goal has been adopted; BEG will be developed from the best available biological information, and should be scientifically defensible on the basis of available biological information; BEG will be determined by the department and will be expressed as a range based on factors such as salmon stock productivity and data uncertainty; the department will seek to maintain evenly distributed salmon escapements within the bounds of a BEG.

5 AAC 39.222.(f)(19) "inriver run goal" means a specific management objective for salmon stocks that are subject to harvest upstream of the point where escapement is estimated; the inriver run goal will be set in regulation by the board and is comprised of the SEG, BEG, or OEG, plus specific allocations to inriver fisheries.

5 AAC 39.222.(f)(25) "optimal escapement goal" or "(OEG)" means a specific management objective for salmon escapement that considers biological and allocative factors and may differ from the SEG or BEG; an OEG will be sustainable and may be expressed as a range with the lower bound above the level of SET, and will be adopted as a regulation by the board; the department will seek to maintain evenly distributed escapements within the bounds of the OEG.

5 AAC 39.222.(f)(36) "sustainable escapement goal" or "(SEG)" means a level of escapement, indicated by an index or an escapement estimate, that is known to provide for sustained yield over a 5 to 10 year period, used in situations where a BEG cannot be estimated due to the absence of a stock specific catch estimate; the SEG is the primary management objective for the escapement, unless an optimal escapement or inriver run goal has been adopted by the board, and will be developed from the best available

biological information; the SEG will be determined by the department and will be stated as a range that takes into account data uncertainty; the department will seek to maintain escapements within the bounds of the SEG.

5 AAC 39.222.(f)(39) "sustained escapement threshold" or "(SET)" means a threshold level of escapement, below which the ability of the salmon stock to sustain itself is jeopardized; in practice, SET can be estimated based on lower ranges of historical escapement levels, for which the salmon stock has consistently demonstrated the ability to sustain itself; the SET is lower than the lower bound of the BEG and lower than the lower bound of the SEG; the SET is established by the department in consultation with the board, as needed, for salmon stocks of management or conservation concern.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The department would be unable to establish sustainable escapement goals (SEG) as lower bound SEGs rather than SEG ranges when deemed necessary due to data limitations, low harvest rates in fisheries, lack of fishing power either currently or in the future, or for stocks harvested incidentally with targeted stocks. Depending on the stock being considered, adoption of this proposal would result in either no goal being established due to lack of data or a goal range with a defensible lower bound and an upper bound that is either not scientifically defensible or possibly not sustainable. The 43 SEGs statewide that are currently expressed as a lower bound would have to be revisited, and deleted or redefined.

**BACKGROUND:** The *Policy for the Management of Sustainable Salmon Fisheries*, established in 2001 (5 AAC 39.222), defines two primary escapement goals: biological escapement goals (BEG) and sustainable escapement goals (SEG). Although policy directs that goals be established as ranges, department experience with establishing, implementing, and reviewing escapement goals from around the state suggests that SEGs should be viewed more broadly in the context of available data and the needs of fishery management. The department believes that SEGs should be more flexibly established as ranges or lower bounds as needed for maintaining sustainable yields. For example, SEGs as lower bounds may be advisable when (1) there are low or unknown harvest rates, (2) there is limited data and there is a concern about changes to fishing power that might be occurring, (3) a stock is harvested in fisheries that are managed based on abundance of another stock(s), or (4) there is a lack of available fishing power. Lower bound SEGs are considered to be scientifically defensible and aligned with the overall principles of the policy and the Alaska Constitution in that they provide for sustained yields, are practical from a management standpoint, but are precautionary to data uncertainty. As of February 2010, there were 288 established escapement goals. Of these 288 goals, 225 are SEGs, of which 182 are SEGs expressed as range and 43 are SEGs expressed as a lower bound. Lower bound SEGs have been established in all four management regions and for all five species of Pacific salmon (Table 170-1).

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal because it limits flexibility to use the best and most defensible data to manage for sustainable fisheries. SEGs as lower bounds provide for sustained yields of stocks where an escapement goal range is neither necessary for rational management of the fishery nor scientifically defensible on the basis of the available data.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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Table 170-1. Pacific salmon stocks that have an established Lower Bound SEG escapement goal in Alaska.

Area	System/Stock	Species	Lower Bound	Escapement Data	Method of Analysis <sup>a</sup>
SEAK	Lost River	Sockeye	1,000	Peak Foot Survey	LB of SRA & Percentile
SEAK	Taku River	Coho	38,000	Mark - Recapture	Negotiated - PSC Treaty
SEAK	Lost River	Coho	2,200	Peak Foot Survey	LB of SRA
SEAK	Southern Southeast Summer	Chum	68,000	Aerial Survey	LB of Percentile, Risk
SEAK	Northern Southeast Inside Summer	Chum	149,000	Aerial Survey	LB of Percentile, Risk
SEAK	Northern Southeast Outside Summer	Chum	19,000	Aerial Survey	LB of Percentile, Risk
BBay	Alagnak	Sockeye	320,000	Tower Count	Risk
BBay	Kukukak Bay	Sockeye	8,000	Aerial Survey	Risk
BBay	Togiak	Chinook	9,300	Aerial Survey	Risk
BBay	Naknek	Chinook	5,000	Aerial Survey	Risk
BBay	Alagnak	Chinook	2,700	Aerial Survey	Risk
BBay	Egegik	Chinook	450	Aerial Survey	Risk
BBay	Nushagak	Chum	190,000	Sonar count	Risk
LCI	Anchor River	Chinook	5,000	Sonar/weir	LB of SRA (Smsy)
PWS/CR	Copper River	Chinook	24,000	Mark Recapture	LB from Past Escapements
PWS/CR	Coghill	Chum	8,000	Aerial Survey	Risk
PWS/CR	Eastern	Chum	50,000	Aerial Survey	Risk
PWS/CR	Northern/Unakwik	Chum	20,000	Aerial Survey	Risk
PWS/CR	Northwestern	Chum	5,000	Aerial Survey	Risk
PWS/CR	Southeastern	Chum	8,000	Aerial Survey	Risk
Kusko	Kanektok River	Chum	5,200	Aerial Survey	LB of Percentile
Kusko	Middle Fork Goodnews River	Chum	12,000	Weir	LB of Percentile
Kusko	Middle Fork Goodnews River	Coho	12,000	Weir	LB of Percentile
Kusko	Kwethluk	Coho	19,000	Weir	LB of Percentile
Yukon	East Fork Andreafsky River	Chum	40,000	Weir	LB of SRA
Norton	Fish R./Boston Cr.	Chinook	100	Aerial Survey	LB of Percentile
Norton	Niukluk River (Fish R.)	Chum	23,000	Tower	Risk
Norton	Kwiniuk River (all years)	Pink	8,400	Tower	LB of Observed Escapement
Norton	Niukluk River (all years)	Pink	10,500	Tower	LB of Observed Escapement
Norton	Nome River (even year)	Pink	13,000	Weir	LB of Average Escapement
Norton	Nome River (odd year)	Pink	3,200	Weir	LB of Observed Escapement
Norton	North River (Unalakleet R. all years)	Pink	25,000	Tower	LB of Observed Escapement

- continued -

Table 170-1. Page 2 of 2.

Area	System/Stock	Species	Lower Bound	Escapement Data	Method of Analysis <sup>a</sup>
AK Pen	Thin Point Lake	Coho	3,000	Aerial Survey	LB of Average * 0.8
AK Pen	Nelson River	Coho	18,000	Aerial Survey	Risk, LB of Average * 0.8
AK Pen	Ilnik River	Coho	9,000	Aerial Survey	Risk
AK Pen	Bechevin Bay Section-even years	Pink	31,000	Aerial Survey	Risk
AK Pen	Bechevin Bay Section-odd years	Pink	1,600	Aerial Survey	Risk
AK Pen	Unimak District	Chum	800	Aerial Survey	Risk
Chignik	Chignik Area	Chum	57,400	Aerial Survey	Risk
Kodiak	Little River	Sockeye	3,000	Aerial Survey	Risk
Kodiak	Uganik Lake	Sockeye	24,000	Aerial Survey	LB of Percentile
Kodiak	Kodiak Archipelago	Chum	151,000	Aerial Survey	LB of Percentile
Kodiak	Mainland District	Chum	104,000	Aerial Survey	Risk, LB of Percentile

<sup>a</sup> LB = lower bound; SRA = stock-recruit analysis; Percentile = the percentile approach of Bue and Hasbrouck (Unpublished); PSC = Pacific Salmon Commission; Risk = the risk-based approach of Bernard et al. (2009).

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Literature Cited

Bue, B. G., and J. J. Hasbrouck. Unpublished. Escapement goal review of salmon stocks of Upper Cook Inlet. Alaska Department of Fish and Game, Report to the Alaska Board of Fisheries, November 2001 (and February 2002), Anchorage.

Bernard, D. R., J. J. Hasbrouck, B. G. Bue, and R. A. Clark. 2009. Estimating risk of management error from precautionary reference points (PRPs) for non-targeted salmon stocks. Alaska Department of Fish and Game, Special Publication No. 09-09, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/SP09-09.pdf>.

**PROPOSAL 171 – 5 AAC 39.223. Policy for statewide salmon escapement goals.**

**PROPOSED BY:** Ken Tarbox

**WHAT WOULD THE PROPOSAL DO?** This proposal would require the department and the board to express all escapement goals, except sustainable escapement thresholds, as a range. No escapement goals would be established as thresholds.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 39.223 specifies that the currently defined escapement goal types in 5 AAC 39.222(f) are as follows:

5 AAC 39.222.(f)(3) "biological escapement goal" or "(BEG)" means the escapement that provides the greatest potential for maximum sustained yield; BEG will be the primary management objective for the escapement unless an optimal escapement or inriver run goal has been adopted; BEG will be developed from the best available biological information, and should be scientifically defensible on the basis of available biological information; BEG will be determined by the department and will be expressed as a range based on factors such as salmon stock productivity and data uncertainty; the department will seek to maintain evenly distributed salmon escapements within the bounds of a BEG.

5 AAC 39.222.(f)(19) "inriver run goal" means a specific management objective for salmon stocks that are subject to harvest upstream of the point where escapement is estimated; the inriver run goal will be set in regulation by the board and is comprised of the SEG, BEG, or OEG, plus specific allocations to inriver fisheries.

5 AAC 39.222.(f)(25) "optimal escapement goal" or "(OEG)" means a specific management objective for salmon escapement that considers biological and allocative factors and may differ from the SEG or BEG; an OEG will be sustainable and may be expressed as a range with the lower bound above the level of SET, and will be adopted as a regulation by the board; the department will seek to maintain evenly distributed escapements within the bounds of the OEG.

5 AAC 39.222.(f)(36) "sustainable escapement goal" or "(SEG)" means a level of escapement, indicated by an index or an escapement estimate, that is known to provide for sustained yield over a 5 to 10 year period, used in situations where a BEG cannot be estimated due to the absence of a stock specific catch estimate; the SEG is the primary management objective for the escapement, unless an optimal escapement or inriver run goal has been adopted by the board, and will be developed from the best available biological information; the SEG will be determined by the department and will be stated as a range that takes into account data uncertainty; the department will seek to maintain escapements within the bounds of the SEG.

5 AAC 39.222.(f)(39) "sustained escapement threshold" or "(SET)" means a threshold level of escapement, below which the ability of the salmon stock to sustain itself is jeopardized; in practice, SET can be estimated based on lower ranges of historical escapement levels, for which the salmon stock has consistently demonstrated the ability to sustain itself; the SET is lower than the lower bound of the BEG and lower than the lower bound of the SEG; the SET is established by the department in consultation with the board, as needed, for salmon stocks of management or conservation concern.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The department would be unable to establish sustainable escapement goals (SEG) as lower bound SEGs rather than SEG ranges when deemed necessary due to data limitations, low harvest rates in fisheries, lack of fishing power either currently or in the future, or for stocks harvested incidentally with targeted stocks. Depending on the stock being considered, adoption of this proposal would result in either no goal being established due to lack of data or a goal range with a defensible lower bound and an upper bound that is either not scientifically defensible or possibly not sustainable. The 43 SEGs statewide that are currently expressed as a lower bound would have to be revisited, and deleted or redefined.

**BACKGROUND:** The *Policy for the Management of Sustainable Salmon Fisheries*, established in 2001 (5 AAC 39.222), defines two primary escapement goals: biological escapement goals (BEG) and sustainable escapement goals (SEG). Although policy directs that goals be established as ranges, department experience with establishing, implementing, and reviewing escapement goals from around the state suggests that SEGs should be viewed more broadly in the context of available data and the needs of fishery management. The department believes that SEGs should be more flexibly established as ranges or lower bounds as needed for maintaining sustainable yields. For example, SEGs as lower bounds may be advisable when (1) there are low or unknown harvest rates, (2) there is limited data and there is a concern about changes to fishing power that might be occurring, (3) a stock is harvested in fisheries that are managed based on abundance of another stock(s), or (4) there is a lack of available fishing power. Lower bound SEGs are considered to be scientifically defensible and aligned with the overall principles of the policy and the Alaska Constitution in that they provide for sustained yields, are practical from a management standpoint, but are precautionary to data uncertainty. As of February 2010, there were 288 established escapement goals. Of these 288 goals, 225 are SEGs, of which 182 are SEGs expressed as range and 43 are SEGs expressed as a lower bound. Lower Bound SEGs have been established in all four management regions and for all five species of Pacific salmon (Table 170-1).

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal because it limits our flexibility to use the best and most defensible data to manage for sustainable fisheries. SEGs as lower bounds provide for sustained yields of stocks where an escapement goal range is neither necessary for rationale management of the fishery nor scientifically defensible on the basis of the available data.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 172 – 5 AAC 39.222. Policy for the management of sustainable salmon fisheries; and 5 AAC 39.223. Policy for statewide salmon escapement goals.**

**PROPOSED BY:** Kenai Peninsula Fishermen’s Association

**WHAT WOULD THE PROPOSAL DO?** If adopted, this proposal would add a definition for “sustainable escapement goal threshold” to 5 AAC 39.222(f). However, no definition for sustainable escapement goal threshold was proffered by the proposer.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 39.222(f)(36) states that: "sustainable escapement goal" or "(SEG)" means a level of escapement, indicated by an index or an escapement estimate, that is known to provide for sustained yield over a 5 to 10 year period, used in situations where a BEG cannot be estimated due to the absence of a stock specific catch estimate; the SEG is the primary management objective for the escapement, unless an optimal escapement or inriver run goal has been adopted by the board, and will be developed from the best available biological information; the SEG will be determined by the department and will be stated as a range that takes into account data uncertainty; the department will seek to maintain escapements within the bounds of the SEG.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The effect of this proposal would be minimal to department staff because the department has been establishing SEG thresholds or what we refer to as “lower bound SEGs” since the policy was first promulgated in 2001. However, addition of this definition to 5 AAC 39.222 could potentially aid the public in understanding the department’s use of this type of escapement goal.

**BACKGROUND:** The *Policy for the Management of Sustainable Salmon Fisheries*, established in 2001 (5 AAC 39.222), defines two primary escapement goals: biological escapement goals (BEG) and sustainable escapement goals (SEG). Although policy directs that goals be established as ranges, department experience with establishing, implementing, and reviewing escapement goals from around the state suggests that SEGs should be viewed more broadly in the context of available data and the needs of fishery management. The department believes that SEGs should be more flexibly established as ranges or lower bounds as needed for maintaining sustainable yields. For example, SEGs as lower bounds may be advisable when, (1) there are low or unknown harvest rates, (2) there is limited data and there is a concern about changes to fishing power that might be occurring, (3) a stock is harvested in fisheries that are managed based on abundance of another stock(s), or (4) there is a lack of available fishing power. Lower bound SEGs are considered to be scientifically defensible and aligned with the overall principles of the policy and the Alaska Constitution in that they provide for sustained yields, are practical from a management standpoint, but are precautionary to data uncertainty. As of February 2010, there were 288 established escapement goals. Of these 288 goals, 225 are SEGs, of which 182 are SEGs expressed as range and 43 are SEGs expressed as a lower bound. Lower bound SEGs have been established in all four management regions and for all five species of Pacific salmon (Table 170-1).

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal as a way to clarify establishment of lower bound sustainable escapement goals that is already occurring. We suggest that instead of a separate definition for sustainable escapement goal threshold, current regulatory language be amended in 5 AAC 39.222(f)(36) to distinguish between a SEG range and a lower bound SEG.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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## **COMMITTEE B: SUBSISTENCE, PERSONAL USE, SPORT**

### **(21 PROPOSALS)**

#### **Subsistence/Personal Use (3 proposals)**

#### **PROPOSAL 164 - 5 AAC 01.030. Unlawful possession of subsistence fish.**

**PROPOSED BY:** Fairbanks AC

**WHAT WOULD THE PROPOSAL DO?** The proposal would classify salmon that are retained from lawfully taken commercial catch for the permit holder's own use under 5 AAC 39.010 *Retention of fish taken in a commercial fishery*, as subsistence harvested fish and place restrictions on how many salmon may be retained, when these fish may change hands, and the number of proxy permits per commercial vessel. Additionally, this proposal would prohibit commercially-caught salmon and salmon caught for subsistence from occupying the same storage or processing area.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 39.010. *Retention of fish taken in a commercial fishery.* (a) A person engaged in commercial fishing may retain finfish from lawfully taken commercial catch for that person's own use, including for the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, salmon retained in a commercial fishery would be reclassified as subsistence harvested salmon and limited to 40 salmon of which only two could be Chinook salmon. Nonresident commercial fishermen may be prohibited from retaining fish for their own use from their commercial harvest.

**BACKGROUND:** Commercial fishermen, both Alaska resident and nonresident are permitted to retain finfish (including salmon) from lawfully taken commercial loads for either personal use or as bait. These fish are reported on fish tickets at the time of delivery as "Harvest Code-95, Not Sold/Personal Use."

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. According to the Department of Law, reclassifying commercially-caught fish as subsistence fish is outside the board's authority because it would be inconsistent with current statutory standards. Moreover, it is unnecessary to reclassify finfish retained for a person's own use as subsistence fish. If the board wants to address restrictions on the use of commercial 'homepacks,' it can do so in the context of 5 AAC 39.010. as that is the regulation governing the use of commercially-caught fish retained for a person's own use.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 165- 5 AAC 77.xxx. New Section.**

**PROPOSED BY:** Steve Vanek

**WHAT WOULD THE PROPOSAL DO?** This proposal would not allow a personal use dip net fishery to open until the biological escapement goal (BEG) has been met.

**WHAT ARE THE CURRENT REGULATIONS?** "Personal use fishing" means the taking, attempting to take or possession of finfish, shellfish or aquatic plants by an individual for consumption as food or use as bait by that individual or his immediate family.

*Naknek River Personal Use Sockeye Salmon Fishery Management Plan (5 AAC 77.285)* states the department shall allow the taking of salmon by dip nets and gillnets in the Naknek River from its terminus upstream to ADF&G regulatory markers located near Savonski when the department has estimated that 900,000 sockeye salmon are in the river through July 25.

*Kenai River Late-Run Sockeye Salmon Management Plan (5 AAC 21.360)* states that subject to the requirement of achieving the lower end of the optimal escapement goal, the department shall provide for a personal use dip net fishery in the lower Kenai River as specified in 5 AAC 77.540.

*Upper Cook Inlet Personal Use Salmon Fishery Management Plan (5 AAC 77.540)* states salmon may be taken by dip net in the Kasilof River from June 25 through August 7, 24-hours per day.

*Kachemak Bay Personal Use Dip Net Fishery Management Plan (5 AAC 77.545)* states that in China Poot Creek, upstream from ADF&G regulatory markers, sockeye salmon may be taken by dip net from July 1 through August 7, with a bag and possession limit of six fish. King, pink, chum, and coho salmon may not be retained or possessed. All king, pink, chum, and coho salmon caught must be released immediately and returned to the water unharmed.

*Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.591) states that salmon may be taken from June 1 through September 30. The commissioner shall establish a preseason schedule, including fishing times, for the period June 1 through August 31, based on daily projected sonar counts at the sonar counter located near Miles Lake. This abundance-based preseason schedule will distribute the harvest throughout the season. The commissioner may close, by an emergency order effective June 1, the Chitina Subdistrict personal use salmon fishing season and shall reopen the season, by emergency order, on or before June 11 depending on the run strength and timing of the sockeye salmon run. Adjustments shall be made to the preseason schedule based on actual sonar counts compared to projected counts.

Southeast Alaska personal use salmon fishery regulations (5 AAC 77.628 and 5 AAC 77.682) state that salmon may only be taken under the authority of a personal use permit, and that these permits will be issued for places and times when resource abundance will allow a harvest without jeopardizing the sustained yield of the stock and in a manner which provides for an orderly fishery. Additional specific regulations apply to the Chilkat River, Taku River, Shipley Bay, Yes Bay, Sitkoh Bay and river, Klawock Inlet and river, and Lynn Canal.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** If this proposal was adopted it would decrease the harvest of salmon in these personal use fisheries. Participation and harvests in these fisheries would be concentrated on the later portion of the run rather than distributed throughout the season. There may also be an increased risk of exceeding an escapement goal.

**BACKGROUND:** Personal use regulations were created in 1982 in response to State of Alaska subsistence laws. There are areas of the state with harvestable surpluses of fish in excess of both spawning escapement needs and present levels of subsistence, commercial, and sport uses. To provide residents who were precluded from participation in subsistence fisheries with the passage of the subsistence law access to these surplus fish for their personal use it is necessary to establish a fishery classified as "personal use." This fishery could not be classified as a commercial fishery since the sale of fish was not appropriate or permissible. Without a customary and traditional use finding, this fishery could not be classified as subsistence. In addition, since the gear for this fishery is often different from that historically associated with sport fishing and to prevent confusion among the public, this fishery could not be classified as a sport fishery. The intent of the board is that the taking of fish under 5 AAC 77 will be allowed when that taking does not jeopardize the sustained yield of a resource and either does not negatively impact an existing resource use or is in the broad public interest.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The department uses its emergency order authority to modify personal use dip net fisheries to meet the established escapement goals and harvest objectives.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 166 - 5 AAC 77.010. Methods, means and general restrictions.**

**PROPOSED BY:** Ken Tarbox

**WHAT WOULD THE PROPOSAL DO?** This proposal would eliminate the requirement for Alaskan residents to purchase a sport fishing license to participate in personal use fisheries.

**WHAT ARE THE CURRENT REGULATIONS?** Finfish, shellfish, and aquatic plants may be taken for personal use only by a holder of a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing under AS 16.05.400.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** The sport fishing license requirement subjects the individual to regulations and penalties governing proof of residency. Without the sport fish license requirement, it would be more difficult to enforce and prosecute illegal participation in personal use fisheries. Without the license requirement, funds currently provided by license sales would not be available to manage personal use fisheries.

**BACKGROUND:** Personal use regulations were created in 1982 in response to State of Alaska subsistence laws. Personal use was always intended to be for Alaska residents only, so the resident sport fishing license was adopted as a way to demonstrate eligibility. Since the gear for the personal use fishery is often different from that historically associated with sport fishing, the board determined this fishery should not be classified as a sport fishery in order to avoid confusion among the public. Funds generated from the sale of sport fishing licenses provide the Division of Sport Fish with the only source of revenue available to manage these fisheries. The cost of a resident sport fishing license is \$24.

The sport fish license requirement is a vital tool for enforcement. Department of Public Safety is able to issue citations for illegal participation in the Kenai and Kasilof personal use fisheries by comparing the sport fishing license database to the driver's license and Alaska Permanent Fund application databases.

**DEPARTMENT COMMENTS:** Both the Department of Fish and Game and Department of Public Safety **OPPOSE** this proposal. The sport fish license requirement provides the state with a means of prosecuting offenders and funding for management of personal use fisheries. The department works closely with vendors and Department of Public Safety to ensure personal use permits are distributed only to qualified applicants.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**Sport (18 proposals)**

**PROPOSAL 175 - 5 AAC 75.XXX. New section.**

**PROPOSED BY:** Sitka Advisory Committee.

**WHAT WOULD THE PROPOSAL DO?** This proposal would establish a year-round sablefish bag limit of 2 fish and a possession limit of 4 fish, with an annual limit of 4 fish for nonresidents.

**WHAT ARE THE CURRENT REGULATIONS?** In Southeast Alaska (5 AAC 47.020 (17)), the bag and possession limit is 4 fish, and annual limit of 8 fish for nonresidents. In the remainder of Alaska, there are no bag, possession, or annual limits.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal could reduce the sport harvest of sablefish by some unknown amount.

**BACKGROUND:** Prior to the February 2009 Southeast Finfish meeting in Sitka, sablefish bag, possession, or annual limits had not been established for any sport fishery in the state. During this meeting, staff stated that survey and biomass data for the Chatham Strait sablefish stock suggest that the stock is in a period of significant decline and the department has taken conservative management actions in the commercial fishery as a result. The board established a sport fishing sablefish limit of 2 per day and 4 in possession, and an annual limit of 8 for all participants. In April 2009, the board acted on a board generated proposal by increasing the bag limit from 2 to 4 fish and rescinding the resident annual limit.

Sablefish are believed to comprise a single northern stock extending from British Columbia throughout the Gulf of Alaska to the Bering Sea. Relative abundance has been assessed by a NMFS longline survey since 1978. The relative abundance in 2009 is about what it was in 2000 and is near the lower limit of observed abundance. Gulfwide, estimates from the federal stock assessment for sablefish have declined 36% since 2005.

Declines in British Columbia, the Gulf of Alaska and portions of Southeast Alaska's internal waters are indicative of an overall decline of this stock. This decline is believed to be due, in part, to reductions in recruitment.

Sablefish harvest is not estimated by the Statewide Harvest Survey (SWHS). In an effort to determine charter harvest, the Division of Sport Fish sent letters in February 2009 to charter operators instructing them to record only sablefish in the saltwater charter logbook field previously used for reporting miscellaneous species. Logbook data as of January 5, 2010 indicated a sablefish harvest of 3,844 fish in Southeast Alaska and 1,763 fish in Southcentral Alaska. In each region, the majority of harvest was taken by a small number of businesses. For example, 81% of the Southeast harvest and 53% of the Southcentral harvest was taken by four businesses in each region. Twelve businesses in Southeast and 17 businesses in Southcentral reported harvesting more than 20 sablefish each.

Some operators did not follow these instructions, so it is likely that reported harvests are inflated by the inclusion of other species. On the other hand it is also possible that some harvest of sablefish went unreported by guides that did not follow the instructions. In an effort to gather reliable sablefish harvest information, the 2010 saltwater charter logbook will require reporting of sablefish harvest information specifically, and sablefish harvest estimates will be obtained through the SWHS for all anglers starting in 2010.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocative aspects and takes **NO POSITION** on this proposal.

**COST ANALYSIS:** The department does not believe that approval of this proposal would result in an additional direct cost for a private person to participate in the fishery.

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**PROPOSAL 176 - 5 AAC 75.xxx. New Section.**

**PROPOSED BY:** Thomas E. Pitts

**WHAT WOULD THE PROPOSAL DO?** This proposal would increase the bag and possession limit of spiny dogfish to 5 per day and 5 in possession and the annual limit to 10 per year.

**WHAT ARE THE CURRENT REGULATIONS?** Spiny dogfish are included in the statewide *Sport Shark Fishery Management Plan* (5 AAC 75.012), with a year-round open season, bag limit of 1 fish, and annual limit of 2 fish.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** A liberalization of the bag limit would provide increased harvest opportunity for a few anglers, but is unlikely to harm the stock because there is little recreational demand for dogfish.

**BACKGROUND:** Spiny dogfish are a long-lived, slow to mature species that require long recovery times when stocks are overexploited. Large and abrupt increases in the spiny dogfish population are unlikely because of their low reproductive rate. That, along with the wide diversity of ages in the population, suggests that high catch rates in recent years are a result of shifts in the spatial distribution of spiny dogfish. Spiny dogfish are highly migratory.

The statewide shark plan was originally proposed in 1998 for large pelagic sharks only (salmon shark, blue shark, etc.), but was expanded to cover spiny dogfish and sleeper sharks at the desire of the board, "given the lack of stock status information, potential for rapid growth in the sport shark fishery, and the potential for over-exploitation". Spiny dogfish can be regionally abundant and pose a nuisance in other fisheries.

Spiny dogfish harvest or release information is not reported in the charter logbook or estimated by the Statewide Harvest Survey. Catch information is collected via port sampling interviews in Southcentral Alaska only (Kodiak to Valdez). These interview data indicate little recreational demand for spiny dogfish; during the years 2007-2009, only about 0.5% of dogfish caught by anglers were retained. Catch and release mortality is unknown, but is potentially high due to poor handling.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. Unless demand increases, a liberalization of the bag limit is unlikely to harm the stock. The department is bound to manage for sustained yield, but could support a bag and possession limit in line with the life history limitations of this species (long lifespan, high age at maturity, and long gestation period). Given low angler demand, we do not see a need for an annual limit at this time.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 177 - 5 AAC 75.XXX. New section.**

**PROPOSED BY:** Alaska Department of Fish and Game at the request of the Alaska Board of Fisheries

**WHAT WOULD THE PROPOSAL DO?** This proposal would establish a statewide, year-round shortspined and longspined thornyhead rockfish bag and possession limit of one fish for the sport fishery.

**WHAT ARE THE CURRENT REGULATIONS?** Thornyhead rockfish may be taken year-round and there are no bag, possession, size, or annual limits in the sport fishery.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** Because sport harvest data for shortspined and longspined thornyhead rockfish is not collected, the effect of this proposal cannot be specifically evaluated.

**BACKGROUND:** Shortspine thornyhead (*Sebastolobus alascanus*) are long-lived, with a maximum recorded age of 89 years in Alaska. Female longspined thornyheads (*Sebastolobus altivelis*) mature by 25 years and can live up to 45 years.

Thornyheads (genus *Sebastolobus*) are not included in the state definition of "rockfish" (only includes the genus *Sebastes*). Thornyheads are typically found in 50-5,000 feet of water along the continental shelf, with adults concentrated between 500 and 1,500 feet of water. They are rarely taken in the sport fishery. Thornyheads have not been recorded in the Southeast Marine Creel Program in at least five years, and port sampling staff do not recall ever receiving a report of a thornyhead harvested in Southcentral Alaska (program in effect since 1991).

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. Implementing a thornyhead bag and possession limit of one thornyhead rockfish would have little effect on sport harvest since they are rarely taken in the sport fishery.

Many, if not all, anglers would have trouble distinguishing a thornyhead from some other rockfish. If a bag limit is implemented, one potential approach might be to redefine rockfish to include the genus *Sebastolobus* and include thornyheads in the non-pelagic category, for which conservative regulations are already in place.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 178 - 5AAC 75.003. Emergency order authority.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would clarify the department's emergency order authority for sport fisheries in which some, but not all, provisions for increasing or decreasing bag and possession limits or changing methods and means are established in management plans.

**WHAT ARE THE CURRENT REGULATIONS?** The commissioner may, by emergency order, change bag and possession limits and annual limits and alter methods and means in sport fisheries. These changes may not reduce the allocation of harvest among other user groups. An emergency order may not supersede bag and possession limits or methods and means established in regulatory management plans established by the Board of Fisheries. The commissioner will use emergency order authority to manage sport fishing opportunity in the following circumstances:

(1) The commissioner or an authorized designee may decrease sport fish bag and possession limits and annual limits and restrict methods and means of harvest by emergency order when

(A) the total escapement of a species of anadromous fish is projected to be less than the escapement goal for that species listed in management plans that have been adopted by the Board of Fisheries or established by the department; or

(B) the recreational harvest must be curtailed in any fishery for conservation reasons; the department may issue a "catch and release only" emergency order when the estimated hooking mortality is not projected to reduce the population of fish below the number required for spawning escapement or, in the case of resident species, below the level required for maintenance of the desired age and size distribution of the population; "catch and release" as a tool to address conservation under this section shall be labeled "conservation catch and release" to differentiate from catch and release regulations adopted by the Board of Fisheries for special management to create diversity in sport fisheries.

(2) The commissioner or an authorized designee may increase sport fish bag and possession limits and annual limits and liberalize methods and means of harvest by emergency order when

(A) the total escapement of a species of anadromous fish is projected to exceed the escapement goal for that species listed in management plans that have been adopted by the Board of Fisheries or established by the department, if the total harvest under the increased bag and possession limit will not reduce the escapement below the escapement goal;

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would clarify to the public the department's interpretation of the emergency order authority regulation.

**BACKGROUND:** The regulatory sport fish emergency order authority provision (5 AAC 75.003) is not clearly written, but there is good justification for the department to adjust methods, means, and bag limits to meet escapement goals.

The emergency order authority provision is internally inconsistent. The introductory paragraph, read in isolation, would seem to prohibit changing a bag limit or methods and means any time that the bag limit or methods and means is stated in a regulation designated as a management plan. However, provisions in 5 AAC 75.003.(1) and (2) clearly indicate that the commissioner may use changes to bag limits, methods, and means to manage for escapement goals in management plans. Salmon management in Alaska is based on achieving escapement goals and it makes little sense to ignore the two provisions that clearly give the department the tools necessary to meet this objective.

These internal inconsistencies can be resolved by clarifying that language in the introductory paragraph only prohibits an emergency order under this section where there are explicit provisions in the plan for increasing or decreasing a bag limit or changing methods and means.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this housekeeping proposal to resolve internal inconsistencies in emergency order authority and prevent future uncertainty in department actions.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 179 – 5 AAC 75.003. Emergency order authority.**

**PROPOSED BY:** Ken Tarbox

**WHAT WOULD THE PROPOSAL DO?** This proposal would prohibit the department from issuing emergency orders that close fisheries to the retention of a salmon species when the total escapement is projected to be less than the escapement goal. The proposal would also clarify the

department's authority to reduce bag and possession limits by emergency order in order to achieve established escapement goals.

**WHAT ARE THE CURRENT REGULATIONS?** The commissioner may, by emergency order, change bag and possession limits and annual limits and alter methods and means in sport fisheries. These changes may not reduce the allocation of harvest among other user groups. An emergency order may not supersede bag and possession limits or methods and means established in regulatory management plans established by the Board of Fisheries. The commissioner will use emergency order authority to manage sport fishing opportunity in the following circumstances:

(1) The commissioner or an authorized designee may decrease sport fish bag and possession limits and annual limits and restrict methods and means of harvest by emergency order when

(A) the total escapement of a species of anadromous fish is projected to be less than the escapement goal for that species listed in management plans that have been adopted by the Board of Fisheries or established by the department; or

(B) the recreational harvest must be curtailed in any fishery for conservation reasons; the department may issue a "catch and release only" emergency order when the estimated hooking mortality is not projected to reduce the population of fish below the number required for spawning escapement or, in the case of resident species, below the level required for maintenance of the desired age and size distribution of the population; "catch and release" as a tool to address conservation under this section shall be labeled "conservation catch and release" to differentiate from catch and release regulations adopted by the Board of Fisheries for special management to create diversity in sport fisheries.

(2) The commissioner or an authorized designee may increase sport fish bag and possession limits and annual limits and liberalize methods and means of harvest by emergency order when

(A) the total escapement of a species of anadromous fish is projected to exceed the escapement goal for that species listed in management plans that have been adopted by the Board of Fisheries or established by the department, if the total harvest under the increased bag and possession limit will not reduce the escapement below the escapement goal;

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal is designed to restrict the department's use of emergency order authority to reduce bag and possession limits when specific direction is provided in management plans. In addition, it would prohibit catch and release fishing when escapement goals are not expected to be met, which would decrease flexibility for the area manager to adapt to unique system specific situations when they arise.

**BACKGROUND:** Background on issuing emergency orders that close fisheries to the retention of a salmon species when the total escapement is projected to be less than the escapement goal:

Within each sport fish management region, emergency orders have been issued to either close a fishery for a certain species, or to close a fishery to retention for a certain species based on unique circumstances for each fishery. Sport fish managers recently reviewed emergency orders issued within the last five years and evaluated why they chose a fishing closure for a certain species or closed a fishery to retention of the species: Region I (Southeast) issued nine EOs closing a fishery and 10 EOs prohibiting retention; Region II (Southcentral) issued 24 EOs closing a fishery and 15 EOs prohibiting retention; and Region III (Arctic-Yukon-Kuskokwim) issued two closing a fishery and eight prohibiting retention.

Justifications for choosing prohibition to retention for a certain species were:

- 1) Action was taken either preseason or early in the run when the department was unsure that the final escapement would be below the lower end of the escapement goal range, but wanted to curtail harvest until escapement projections were finalized. Usually the use of bait was prohibited in conjunction with this action; and
- 2) When terminal gear used and/or fishing techniques for the species with conservation concerns were very similar to that used for other species present (coho, sockeye, pink, and chum salmon) that had no conservation issues to insure the restriction was enforceable. For example, prohibiting coho salmon fishing in waters that support a rainbow trout fishery is difficult to enforce. Prohibiting retention of coho salmon is not.

Primary reasons for choosing a closure to fishing for a certain species were:

- 1) When it was certain that the escapement would fall below the lower end of the escapement goal range;
- 2) When terminal gear used and/or fishing techniques for the species with conservation concerns were very different from that used for other species present (king salmon) that had no conservation issues; and
- 3) When other fisheries (subsistence, commercial, or personal use) were closed owing to weak runs or to ensure broodstock requirements.

Background on clarifying the department's authority to reduce bag and possession limits by emergency order in order to achieve established escapement goals:

The regulatory sport fish emergency order authority provision (5 AAC 75.003) is not clearly written, but there is good justification for the department adjusting methods, means, and bag limits to meet escapement goals.

The emergency order authority provision is internally inconsistent. The introductory paragraph, read in isolation, would seem to prohibit changing a bag limit or methods and means any time that the bag limit or methods and means is stated in a regulation designated as a management plan. However, provisions in 5 AAC 75.003(1) and (2) clearly indicate that the commissioner may use changes to bag limits, methods, and means to manage for escapement goals. Salmon management in Alaska is based on achieving escapement goals and it makes little sense to ignore the two provisions that clearly give the department the tools necessary to meet this objective.

These internal inconsistencies can be resolved by clarifying that language in the introductory paragraph only prohibits an emergency order under this section where there are explicit provisions in the plan for increasing or decreasing a bag limit or changing methods and means.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The department believes in adapting management through emergency order authority to addresses conservation issues unique to each fishery. In many circumstances, issuing emergency orders that prohibit the retention of certain species rather than complete closures appropriately addresses a conservation issue. In addition, unlike Proposal 178, this proposal only clarifies the department’s authority to reduce bag and possession limits by emergency order and does not address liberalizing fisheries in which some, but not all, provisions for increasing bag and possession limits or changing methods and means are established in management plans.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 180 - 5 AAC 75.020. Sport Fishing gear.**

**PROPOSED BY:** Alaska Department of Fish and Game at the request of the Alaska Board of Fisheries

**WHAT WOULD THE PROPOSAL DO?** This proposal would further define allowable sport fishing gear by specifying requirements for the use of power assisted fishing reels in the sport fishery and provides specific definitions for a power assisted fishing reel, fishing rod, and a reel seat. This proposal would allow the use of power assisted reels mounted on fishing rods currently being used by some in sport fisheries, but exclude the use of commercial jigging machines.

**WHAT ARE THE CURRENT REGULATIONS?** AS 16.05.940 (30): "sport fishing" means the taking of or attempting to take for personal use and not for sale or barter, any freshwater, marine, or anadromous fish by hook and line held in the hand, or by hook and line with the line attached to a pole or rod which is held in the hand or closely attended, or by other means defined by the Board of Fisheries.

5 AAC 75.020(a). Unless otherwise provided in 5 AAC 47 – 5 AAC 75: sport fishing may only be conducted by the use of a single line having attached to it not more than one plug, spoon, spinner, or series of spinners, or two flies, or two hooks. The line must be closely attended.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** The department does not collect information on the gear types used to retrieve sport fish; therefore, the effect of this proposal cannot be quantified.

**BACKGROUND:** In 2007, the legality of powered reels in the sport fishery in Southeast Alaska was questioned. The Department of Law reviewed the issue and found that current statutes and regulations are sufficiently broad to allow the use of powered reels in a sport fishery. Various proposals, both pro and con, were discussed last year during Alaska Board of Fisheries meetings in Prince William Sound and Southeast Alaska concerning the use of powered reels. The board did not take action in local areas and directed the department to submit a statewide proposal as a starting point to address this topic. This proposal was designed to start at some middle ground by allowing pole mounted power reels currently being used by some in the sport fishery and excluding the use of commercial jigging machines.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** clarification of sport fish rod and reel regulations within this proposal.

It should be noted that proposals 181, 182, and 183 also address the use of electric reels in the sport fishery. The suggested language in proposal 181 would define a rod and specify that electric reels may be used, but does not contain a specific definition of an electric reel. Commercial gear, such as jigging machines would still be allowed. Proposals 183 and 184 would both prohibit the use of power to retrieve sport fish (finfish and shellfish) and limit the use of electric reels in the sport fishery to anglers with a documented disability. If the board does limit the use of electric reels to anglers with a disability, the department suggests that this accommodation be administered under the provisions of 5 AAC 75.038.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 181 - 5 AAC 75.995. Definitions.**

**PROPOSED BY:** Mike Bethers

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a definition for a sport fishing rod and specify that an electric or hand powered reel can be used to deploy and retrieve the fishing line.

**WHAT ARE THE CURRENT REGULATIONS?** Upon review by the Department of Law, it has been determined that current regulations are broad and do not prohibit use of electric or power-assisted reels, or any reel type, to retrieve fish in a sport fishery.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** This proposal would not change the type of rod and reel gear allowed in the sport fishery since electric reels are currently allowed.

**BACKGROUND:** In 2007, the legality of powered reels in the sport fishery in Southeast Alaska was questioned. The Department of Law reviewed the issue and found that current statutes and regulations are sufficiently broad to allow the use of powered reels in a sport fishery. Various proposals, pro and con, were discussed last year during Alaska Board of Fisheries meetings in Prince William Sound and Southeast Alaska concerning the use of powered reels. The board did not take action in local areas and directed the department to submit proposal 180 as a starting point to address this topic on a statewide basis. Proposal 180 was designed to start at some middle ground by allowing pole mounted power reels currently being used by some in the sport fishery and excluding the use of commercial jigging machines.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal, but supports clarification of regulations defining allowable rod and reel gear under proposal 180. This proposal would clarify that electric reels may be used in the sport fishery, but not to the extent needed to reduce ambiguity over what type of rod and reel gear should be used in the sport fishery.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 182 - 5 AAC 75.xxx. New Section.**

**PROPOSED BY:** Sitka Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would prohibit power assisted retrieval of sport fish (finfish and shellfish) unless, anglers have in their possession a copy of an approved official certification of disability from a government agency.

**WHAT ARE THE CURRENT REGULATIONS?** AS 16.05.940(30): "sport fishing" means the taking of or attempting to take for personal use and not for sale or barter, any freshwater, marine, or anadromous fish by hook and line held in the hand, or by hook and line with the line attached to a pole or rod which is held in the hand or closely attended, or by other means defined by the Board of Fisheries.

5 AAC 75.020(a). Unless otherwise provided in 5 AAC 47 – 5 AAC 75: sport fishing may only be conducted by the use of a single line having attached to it not more than one plug, spoon, spinner, or series of spinners, or two flies, or two hooks. The line must be closely attended.

The department may provide an exemption from a method and means requirement specified in 5 AAC 47 – 75 for individuals with a disability under the provisions of 5 AAC 75.038. In considering whether to grant the exemption, the department may consider, among other factors, whether the exemption would:

- 1) fundamentally alter a program, service, or benefit of the department;
- 2) place an undue administrative burden or expense on the department;
- 3) have an unreasonable impact on the conservation, development, or utilization of fish; or
- 4) constitute an unreasonable risk to public health or safety.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** Since the department does not collect information on gear types used to retrieve sport fish or physical condition of anglers, the effect of this proposal cannot be quantified, but harvest in the sport fishery is likely to decrease by some unknown amount.

**BACKGROUND:** In 2007, the legality of powered reels in the sport fishery in Southeast Alaska was questioned. The Department of Law reviewed the issue and found that current statutes and regulations are sufficiently broad to allow the use of powered reels in the sport fishery. Various proposals, both pro and con, were discussed last year during Alaska Board of Fisheries meetings in Prince William Sound and Southeast Alaska concerning the use of powered reels. The board did not take action in local areas and directed the department to submit proposal 180 as a starting point to address this topic on a statewide basis. Proposal 180 was designed to start at some middle ground by allowing pole mounted power reels currently being used by some in the sport fishery and excluding the use of commercial jigging machines.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The aspects of this proposal that address power retrieval of sport fish and the use of electric reels are addressed under proposal 180 which was submitted by the department at the request of the board. The department is **NEUTRAL** towards the social aspects of this proposal that address the prohibition of power retrieval of sport fish and determining who should be allowed to use electric reels. If the board chooses to limit the use of electric reels to people with disabilities, the department suggests that this be administered under existing regulations in 5 AAC 75.038.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 183 - 5 AAC 75.xxx. New Section.**

**PROPOSED BY:** Tad Fujioka

**WHAT WOULD THE PROPOSAL DO?** This proposal would prohibit the use of power to retrieve sport fish, except that an electric reel may be used by an angler with a documented disability. Disabled anglers would be required to possess a certificate from the department stating that the specific model of reel being used does not provide the user any advantage over a typical able-bodied angler using conventional tackle. This proposal further requires that criteria for electric reels be established by the department that identifies electric reels that do not exceed the capability of a typical able-bodied angler using conventional gear.

**WHAT ARE THE CURRENT REGULATIONS?** AS 16.05.940(30): "sport fishing" means the taking of or attempting to take for personal use and not for sale or barter, any freshwater, marine, or anadromous fish by hook and line held in the hand, or by hook and line with the line attached to a pole or rod which is held in the hand or closely attended, or by other means defined by the Board of Fisheries.

5 AAC 75.020(a). Unless otherwise provided in 5 AAC 47 – 5 AAC 75: sport fishing may only be conducted by the use of a single line having attached to it not more than one plug, spoon, spinner, or series of spinners, or two flies, or two hooks. The line must be closely attended.

The department may provide an exemption from a method and means requirement specified in 5 AAC 47 – 75 for individuals with a disability under the provisions of 5 AAC 75.038. In considering whether to grant the exemption, the department may consider, among other factors, whether the exemption would:

- 1) fundamentally alter a program, service, or benefit of the department;
- 2) place an undue administrative burden or expense on the department;
- 3) have an unreasonable impact on the conservation, development, or utilization of fish; or
- 4) constitute an unreasonable risk to public health or safety.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** The department does not collect information on gear types used to retrieve sport fish or physical condition of anglers; therefore, the effect of this proposal cannot be quantified.

**BACKGROUND:** In 2007, the legality of powered reels in the sport fishery in Southeast Alaska was questioned. The Department of Law reviewed the issue and found that current statutes and regulations are sufficiently broad to allow the use of powered reels in a sport fishery. Various proposals, both pro and con, were discussed last year during Alaska Board of Fisheries meetings in Prince William Sound and Southeast Alaska concerning the use of powered reels. The board did not take action in local areas and directed the department to submit proposal 180 as a starting point to deal with this topic on a statewide basis. Proposal 180 was designed to start at some middle ground by allowing pole mounted power reels currently being used by some in the sport fishery and excluding the use of commercial jigging machines.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The aspects of this proposal that address power retrieval of sport fish and the use of electric reels should be addressed under proposal 180 which was submitted by the department upon request of the board. The department is **NEUTRAL** towards the social aspects of this proposal that address the prohibition of power retrieval of sport fish and determining who should be allowed to use electric reels. If the board chooses to limit the use of electric reels to people with disabilities the department suggests that this be administered under existing regulations in 5 AAC 75.038. Criteria for the type of electric reels used in the sport fishery should be simple and enforceable, such as those outlined in proposal 180.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 184 - 5 AAC 75.XXX. New Section.**

**PROPOSED BY:** Trout Unlimited

**WHAT WOULD THE PROPOSAL DO?** Prohibit sport anglers from using felt-soled wading shoes in freshwaters of Alaska. This proposal would not prohibit the use of felt-felt soled wading shoes by other users.

**WHAT ARE THE CURRENT REGULATIONS?** Beginning in 2011, sport anglers in Southeast Alaska will be prohibited from using felt-soled shoes.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED?** Anglers who have used felt-soled wading shoes would be required to replace them with non-felt-soled footwear. It is possible that this footwear change could reduce the introduction of harmful invasive organisms into Alaska waters. Invasive organisms could still be transferred by other equipment that has been in infested waters. Felt-soled wading shoes would still be allowed by people not participating in a sport fishery. Alaska waters would still be at risk to invasive organisms transmitted by vectors not addressed by this proposal.

**BACKGROUND:** The spread of invasive aquatic species to Alaska's fresh water systems can occur from any fishing, boating and/or recreational equipment used in infested waters unless it is properly cleaned, dried and/or disinfected after use.

The use of felt-soled wading footwear by anglers has been identified as one of the vectors responsible for introducing invasive species such as Didymo (*Didymosphenia geminata*), New Zealand mudsnails (*Potamopyrgus antipodarum*), Zebra and Quagga mussels, and whirling disease pathogens (*Myxobolus cerebralis*) to freshwater systems.

The New Zealand government has banned the use of felt-soled footwear in its waters to fight the spread of invasive organisms. Other government agencies have taken the following measures:

British Columbia, California, Washington, Oregon, and Montana recommend disinfection procedures for angler gear, including boats and trailers; Iceland requires disinfection of all used sport fishing gear before the gear is allowed in the country; and U.S. federal agencies have jointly developed the "Stop Aquatic Hitchhikers!" campaign, which includes educational materials and disinfection procedures. Some angler footwear manufacturers plan to cease production of felt-soled wading boots and are developing alternative sole materials, with debated results.

Recommended protocols for treating fishing gear to eliminate the spread of these invasive organisms are: cleaning and removing organic material from waders, boots, clothing, and equipment; eliminating water from boats, live wells, coolers, and other gear; treating all fishing gear either with hot water, freezing, bleach, or detergent solution; and drying gear completely before bringing it to a different waterway.

**DEPARTMENT COMMENTS:** The department **NEUTRAL** on this proposal. The protection of Alaska’s aquatic environments from invasive species cannot be accomplished exclusively by prohibiting the use of felt-soled shoes by anglers. Although felt-soled shoes have been identified as one of the vectors for introducing invasive species, all equipment used in infested waters is a potential vector for transmission of invasive species.

The department supports protection of Alaska’s aquatic environments from invasive species though a collaborative approach with anglers, hunters, and anyone who spends time in aquatic environments by educating them about the risk of spreading invasive organisms and effective disinfection procedures.

**COST ANALYSIS:** This proposal would require most wading anglers to purchase replacement wading shoes without felt soles.

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**PROPOSAL 185 – 5 AAC 75.028. Use of underwater spear. (repeal and readopt).**

**PROPOSED BY:** Alaska Department of Fish and Game at the request of the Board of Fisheries

**WHAT WOULD THE PROPOSAL DO?** This proposal would define “spear” and “speargun” for use underwater.

**WHAT ARE THE CURRENT REGULATIONS?** In saltwater, spears may be used to take fish, subject to applicable seasons and bag limits, by persons who are completely submerged.

There is no definition in regulation for “spear” or “speargun” in sport fisheries.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Public, department staff, and enforcement officers will have a clear understanding of how the use of spearguns may be applied in sport fishing underwater.

**BACKGROUND:** For many years there has been public confusion about the use of spearguns for sport fishing. Current language in 5 AAC 75.028 authorizes the use of “spears” to take fish by persons completely submerged in salt water. However, the term “spear” is not currently defined in 5AAC 75. There have been disputes over the years whether or not this includes spearguns, “bang sticks,” or pole spears.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this housekeeping proposal. The proposed language defines needed terms and clearly describes what may and may not be used. These terms are generated to align with the current interpretation by department managers and Wildlife Troopers who enforce the regulations. Adoption of the new language will clarify an issue that has been vague for many years.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 186 – 5 AAC 75.028. Use of underwater spear.**

**PROPOSED BY:** Howard Teas

**WHAT WOULD THE PROPOSAL DO?** This proposal would add the use of spearguns to the allowable gear used in underwater spear fishing.

**WHAT ARE THE CURRENT REGULATIONS?** In saltwater, spears may be used to take fish, subject to applicable seasons and bag limits, by persons who are completely submerged.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Spearguns would be identified as allowable gear in underwater sport fishing but without defining spearguns and spears, there would continue to be difficulty with enforcement of the regulation.

**BACKGROUND:** For many years there has been public confusion about the use of spearguns for sport fishing. Current language in 5 AAC 75.028 authorizes the use of “spears” to take fish by persons completely submerged in salt water. However, the term “spear” is not currently defined in 5AAC 75. There have been disputes over the years whether or not this includes spearguns, “bang sticks,” or pole spears.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The department believes Proposal 185 is a better solution to the problem because it provides definitions necessary for enforcement and the public.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 187 – 5 AAC 75.038. Authorization for methods and means disability exemptions.**

**PROPOSED BY:** Gus Lamoureux

**WHAT WOULD THE PROPOSAL DO?** This proposal would allow use of bait for salmon fishing by people who are mentally and or physically handicapped/disabled.

**WHAT ARE THE CURRENT REGULATIONS?** A person with a disability, or the personal representative of a person with a disability, may submit an application on a form available from the department for an exemption from a method and means requirement specified in 5 AAC 47-75.

A person with physical disabilities is defined by state law AS 16.05.940(26) as a person who is at least 70% physically disabled. Additionally, the department would not authorize methods and means exemptions if existing regulations do not prohibit the person from meaningful access to the program, service, or benefit.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** A person with a disability would not be required to submit an application requesting an exemption of using bait in areas where bait is prohibited while fishing for salmon, and the department would be unable to deny the use of bait even if existing regulations do not prohibit the person from meaningful access to the program, service, or benefit. It is unlikely this proposal would have a measurable impact on sustainability of salmon stocks. Social conflicts and calls to enforcement officers may increase due to public perception that someone may illegally be using bait.

**BACKGROUND:** In February of 2002, the board adopted an Authorization for Methods and Means Disability Exemption for anglers on the Kenai River. In November of 2003, the exemption regulation was expanded to apply statewide. Since its adoption in 2002, the department has issued two or three exemptions annually, although none of the requests have been specifically to allow for the use of bait.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. Existing regulations provide a reasonable and enforceable avenue for persons with a disability to seek exemptions to existing regulations which prohibit the person from meaningful access to the program, service, or benefit.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 188 – 5 AAC 75.XXX. New Section.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would make state halibut regulations consistent with federal regulations and ensure that future federal changes are mirrored in state regulations.

**WHAT ARE THE CURRENT REGULATIONS?** 5 AAC 75.067. A person may not take or possess halibut for sport or guided sport purposes in a manner inconsistent with the regulations of the International Pacific Halibut Commission or the National Marine Fisheries Service.

5 AAC 75.070.(b) Until brought to shore and offloaded, no person may fillet, mutilate, or otherwise disfigure a halibut in any manner that prevents the determination of the number of fish caught or possessed.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would help prevent confusion and unwarranted citations for fishermen.

**BACKGROUND:** Halibut are managed by the federal government under an international treaty. All regulations pertaining to halibut must be adopted by federal agencies. The State of Alaska cannot have regulations for halibut unless they mirror existing federal regulations.

Federal regulations, especially those for guided sport anglers, have been modified frequently by federal agencies in recent years to stay within harvest limits adopted by the North Pacific Fishery Management Council (council). Each time federal regulations are changed, state regulations become inconsistent and incorrect, leading to confusion and citations for fishermen.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this housekeeping proposal. The changes recommended in this proposal will make state halibut regulations consistent with federal regulations and ensure that future federal changes are mirrored in state regulations without having to continually make regulatory changes through the board process.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 189 - 5 AAC 75.075. Sport fishing services and sport fishing guide services; license requirements; regulations of activities.**

**PROPOSED BY:** Mel Erickson

**WHAT WOULD THE PROPOSAL DO?** Require an agreement between a client and a sport fishing guide who provides the client with sport fishing guide services.

**WHAT ARE THE CURRENT REGULATIONS?** There is no requirement for a written agreement between a client and sport fishing guide.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** There would be no effect on the sustainability of fishery resources.

**BACKGROUND:** Although there are no requirements for sport fishing guides to enter into a written contract before providing sport fishing guide services, state statutes regulating big game guides and transporters do require contracts between clients and guide-outfitters or transporters. The statutory language describing the contract requirement is as follows:

**Sec. 08.54.680. Financial responsibility and other requirements for guides and transporters.**

(c) On or after January 1, 2006, a registered guide-outfitter may not provide big game hunting services and a transporter may not provide transportation services unless the registered guide-outfitter or transporter has entered into a written contract with the client for the provision of those services. A contract to provide big game hunting services must include at least the following information: the name and guide license number of the registered guide-outfitter, the name of the client, a listing of the big game to be hunted, the approximate time and dates that the client will be in the field, a statement as to what transportation is provided by the registered guide-outfitter, a statement as to whether accommodations and meals in the field are provided by the registered guide-outfitter, and a statement of the amount to be paid for the big game hunting services provided. A contract to provide transportation services must include at least the following information: the name and transporter license number of the transporter, the name of the client, a listing of the big game to be hunted, the approximate time and dates that the client will be in the field, and a statement of the amount to be paid for the transportation services provided. A registered guide-outfitter or transporter shall provide a copy of contracts to provide big game hunting services or transportation services, as appropriate, to the department upon the request of the department. Except as necessary for disciplinary proceedings conducted by the board and as necessary for law enforcement purposes by the Department of Public Safety and the Department of Law, a copy of a contract provided to the department is confidential. The department may provide a copy of contracts in the possession of the department to the Department of Fish and Game or the Department of Natural Resources upon the request of that department if the department receiving the copy agrees to maintain the confidentiality of the contracts.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal because it appears to intend to require a written agreement between a licensed guide (rather than, or in addition to, a sport fishing operator) and each client, presumably before guided angling takes place. This requirement would be in conflict with the sport fishing guide license statute, AS 16.40.270(d), which states:

A sport fishing guide may provide sport fishing guide services only to persons who have engaged the services of the sport fishing operator by whom the sport fishing guide is employed. A sport fishing guide may not contract directly with a person to provide sport fishing guide services to a person unless the sport fishing guide also holds a current sport fishing operator license.

Board regulations must be consistent with applicable statutes AS 44.62.020-.030. The board may not legally adopt Proposal 189.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 190 - 5 AAC 75.003. Emergency order authority.**

**PROPOSED BY:** Matanuska Valley Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would remove the commissioner’s authority to issue an emergency order prohibiting the retention of fish by a sport fishing guide and sport fishing guide crew members while clients are on board a charter vessel in salt waters.

**WHAT ARE THE CURRENT REGULATIONS?** The Board of Fisheries recognizes that harvest regulations may need to be modified to attain guideline harvest levels or allocations, or to address conservation concerns, within the salt water guided fisheries in various areas of the state; if the commissioner determines that the regulations must be modified to attain the salt water guided fishery guideline harvest level or allocation, or to address conservation concerns, the commissioner may, by emergency order, open, or close and immediately reopen, a sport fishing season during which;

- (A) a sport fishing guide and sport fishing guide crew member working on a charter vessel in salt waters may not retain fish or certain species of fish while clients are on board the vessel; and
- (B) the maximum number of fishing lines that may be fished from a vessel engaged in guided sport fishing in salt waters is equal to the number of paying clients on board the vessel.

Several other regulations prohibit guides from fishing during all or part of the year (e.g. 5 AAC 47.030(g), 58.055(c)), or authorize the use of emergency orders to prohibit guides from retaining fish to achieve specific allocations (e.g., 5 AAC 47.065(3)).

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Without the ability to restrict harvest by guides and crew members, sport fisheries that lack management plans with additional control measures may exceed allocations or guideline harvest levels.

**BACKGROUND:** In February 2000, the council approved guideline harvest level management measures for the harvest of halibut by sport charter fisheries in International Pacific Halibut Commission areas 2C (Southeast Alaska) and 3A (Gulf of Alaska). The charter halibut guideline harvest level (GHL) for area 2C was exceeded by 22% in 2004. The GHL for Area 3A was also exceeded, but by slightly less than 1% in 2004.

During the December 2005 council meeting, the Commissioner of Fish and Game told other council members that he would request the Board of Fisheries to consider proposals at its March 2006 Statewide meeting to reduce the halibut harvest within the charter sectors of 2C and 3A. It was decided by the commissioner that it would be more effective to implement restrictions by

emergency order rather than by permanent regulations adopted by the board. The board approved the current regulation at its March 2006 Statewide meeting.

The department issued emergency orders to prohibit retention of fish by sport fishing guides and crew members while clients were on board a charter vessel in Area 2C in 2006 and 2007, and in Area 3A annually since 2007. In 2006, the last year in which they were allowed to retain fish all year, guides and crew members in Area 3A retained 381,000 lbs of halibut, or 10.4% of the total charter harvest.

In 2008, the Area 3A halibut harvest was 7.5% under the GHL, but would likely have exceeded the GHL without the restriction on guide and crew harvest. The commissioner's commitment to issuing a similar emergency order for Area 3A in 2009 helped prevent adoption of more stringent management measures by the council. Limiting the effective dates of the emergency order to Memorial Day to Labor Day allowed retention of fish during the shoulder seasons.

Guides and crew in Southeast Alaska were also prohibited from retaining lingcod while clients were on board in 2008 and 2009 under an emergency order issued to modify regulations to achieve lingcod allocations.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. Restricting the retention of fish by sport fishing guides and sport fishing guide crew members has been a flexible and effective tool for managing fisheries within GHLs or allocations.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 191 - 5 AAC 75.995. Definitions.**

**PROPOSED BY:** Mel Erickson

**WHAT WOULD THE PROPOSAL DO?** This proposal would add a definition of "official time" to apply to fisheries which have established fishing times. The proposer suggests that GPS time be the official time.

**WHAT ARE THE CURRENT REGULATIONS?** There is no definition of "official time" in regulation.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** It is unlikely that any change would occur in enforcement activities. There would be no effect on the sustainability of fishery resources.

**BACKGROUND:** The recognized source of time for any violation is Universal Coordinated Time (UTC). This is a time standard that must be proven in court by enforcement authorities for any violation involving time. Since this is the accepted source of time in the courts, there is no reason to refer to it in the numerous regulations that affix time requirements to the taking of fish.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal and defers to the Board Enforcement Specialist for further comment.

**COST ANALYSIS:** Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

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**PROPOSAL 192 – 5 AAC 75.995. Definitions.**

**PROPOSED BY:** Mark Sisinyak

**WHAT WOULD THE PROPOSAL DO?** This proposal would modify the definition of “artificial fly” by requiring fly material to be attached to the hook by fly tying thread, or by material other than the fishing line attached to the artificial fly. Fly material attached to the hook using an “egg loop” or fixed to the fishing line above the hook would be prohibited.

**WHAT ARE THE CURRENT REGULATIONS?** “Artificial fly” means a fly that is constructed by common methods known as fly tying, including a dry fly, wet fly, and nymph, and that is free of bait as defined in (36) of this section; materials and chemicals designed and produced primarily to cause flies to float or sink may be used on artificial flies;

5 AAC 75.020. Sport fishing gear. (a) Unless otherwise provided in 5 AAC 47 – 5 AAC 75, sport fishing may only be conducted by the use of a single line having attached to it not more than one plug, spoon, spinner, or series of spinners, or two flies, or two hooks. The line must be closely attended.

(b) An attractor (bead), when used with a fly, lure, or bare hook, must be either fixed within two inches of the bare hook, fly, or lure, or be free sliding on the line or leader. For the purposes of this subsection, a bead not attached to the hook is an attractor, not a fly.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal would further define “artificial fly” which may result in the prohibition of some terminal gear that is currently fished as a legal “artificial fly.”

**BACKGROUND:** The Random House Dictionary defines “fly tying” as the art or hobby of making artificial lures for fly fishing. “Fly” is defined as a fishing lure simulating a fly, made by attaching materials such as feathers, tinsel, and colored thread to a fishhook; or a fishhook dressed with hair, feathers, silk, tinsel, etc., so as to resemble an insect or small fish, for use as a lure or bait.

Throughout Alaska (Kenai River, Bristol Bay, Alaska Peninsula, West Cook Inlet, and Gulkana River) fly-fishing-only areas or unbaited, single-hook, artificial fly only areas have been established in portions of drainages to provide unique fishing opportunities, provide protection to

fish species in non-retention waters, reduce potential injury to non-target species, or for conservation. In these waters, a bead fished on the line above a bare hook is not legal gear. There are no other special provisions in these areas refining the definition of “artificial fly”.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. The existing definition of “artificial fly” provides sufficient criteria to encompass the wide variety of artificial flies sold commercially and manufactured by individual anglers. Modifying the definition may lead to future modifications of the definition whenever an artificial fly is created that does not specifically meet the existing criteria.

**COST ANALYSIS:** Adoption of this proposal may result in additional costs for private individuals to participate in sport fisheries as they may have to replace existing “flies” that no longer meet the definition of “artificial fly”.

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## RC 3

### Analysis of Minimum Size Limit for Eastern Bering Sea Tanner Crab Fisheries: Presentation to the Alaska Board of Fisheries

David Bechtol<sup>1</sup>, Gordon Kluse<sup>2</sup>, Joshua  
Greenberg<sup>3</sup>, and Hans Gerer<sup>3</sup>

<sup>1</sup>Bechtol Research, Homer, AK

<sup>2</sup>Alaska Fisheries & Ocean Sci., UAF, Juneau, AK

<sup>3</sup>Wild Resources and Agricultural Sciences, UAF,  
Fairbanks, AK

## Goal & Support

Goal – Analyze merits  
of reduced minimum  
size limits for the

Tanner crab fishery in the eastern Bering Sea

Project funded by the Bering Sea Fisheries  
Research Foundation

BOF travel paid by the Alaska Crab Coalition

Data provided by ADF&G and NMFS



## Background

Females stop molting at maturity (terminal molt)

Many males stop molting once mature

Minimum size limits traditionally set at 1 molt increment larger than size of maturity

Minimum size limit = 138 mm CW (5.5 inches) statewide, except for Prince William Sound, where it is 135 mm CW (5.3 inches)

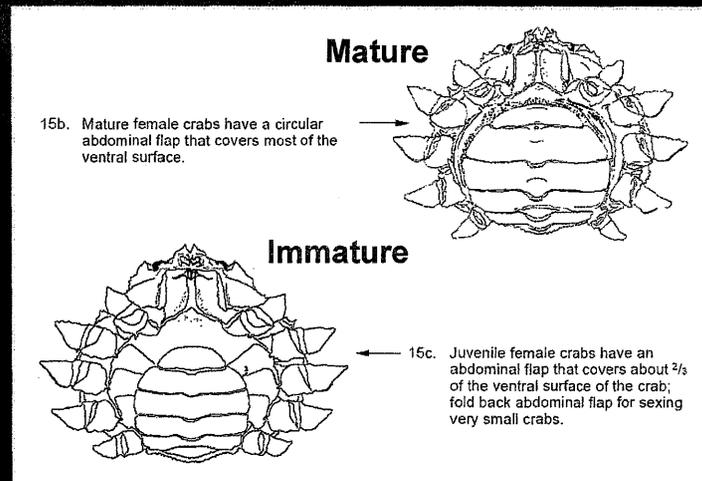


Photo: C. Botelho, ADF&G

## Maturity Determination: Females

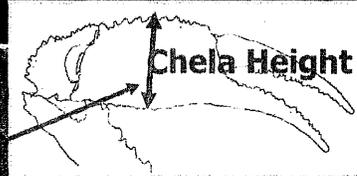
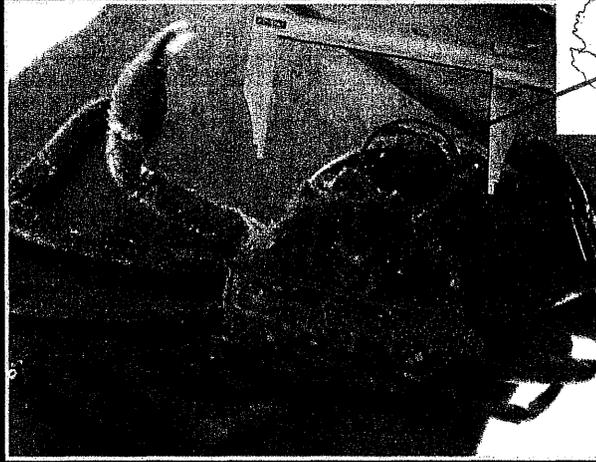
Presence of egg clutch

Prominent increase in width of abdomen

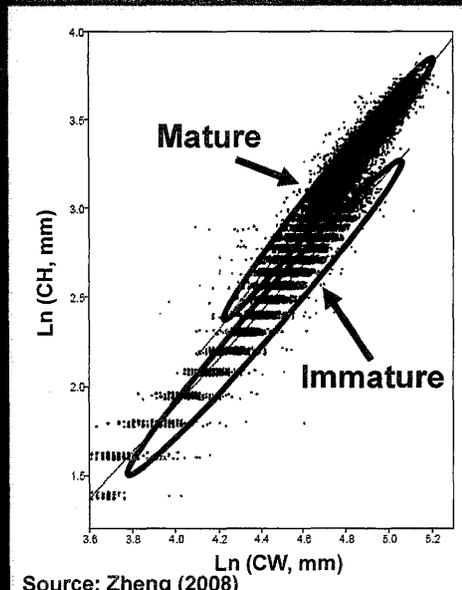


## Maturity Determination: Males

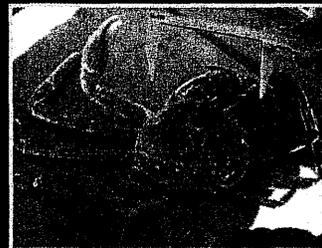
Increase in chela (claw) height (CH) for a given carapace width (CW)



## Maturity Determination: Males

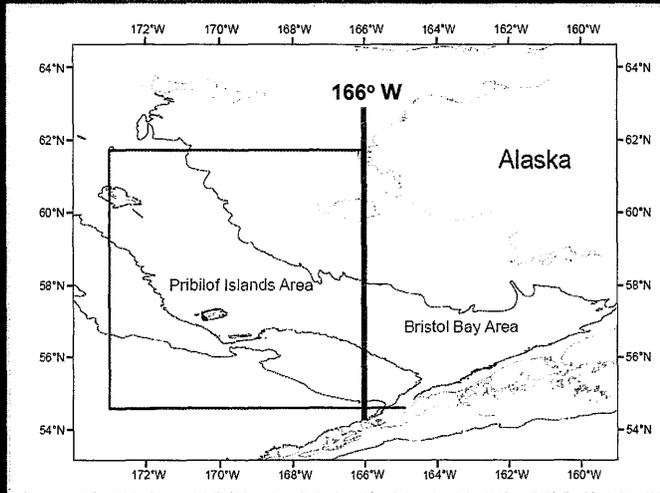


Mature and immature male Tanner crabs determined by regression of CH on CW



## Fishery Management Areas: EBS

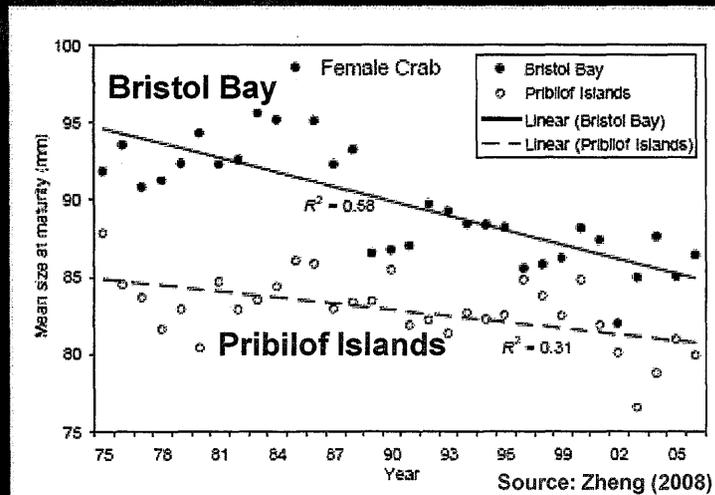
Separate quotas set for Bristol Bay and Pribilof Islands areas, separated at 166° W



Source: Zheng (2008)

## Issue: Decline in Size of Maturity

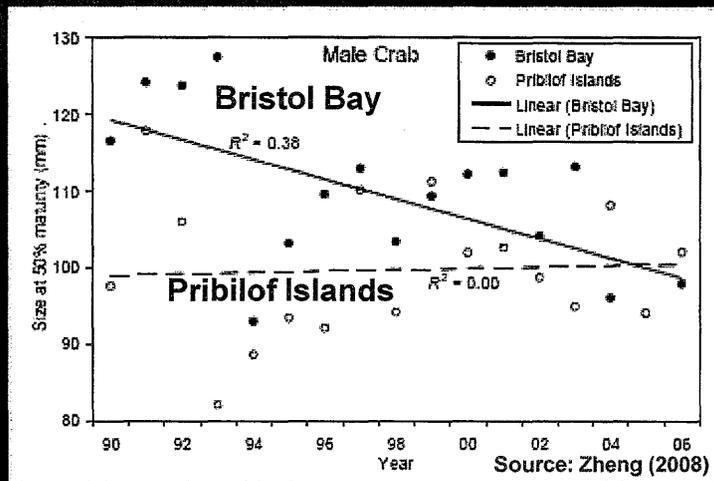
Mean sizes of maturity have declined for females in both areas since 1975



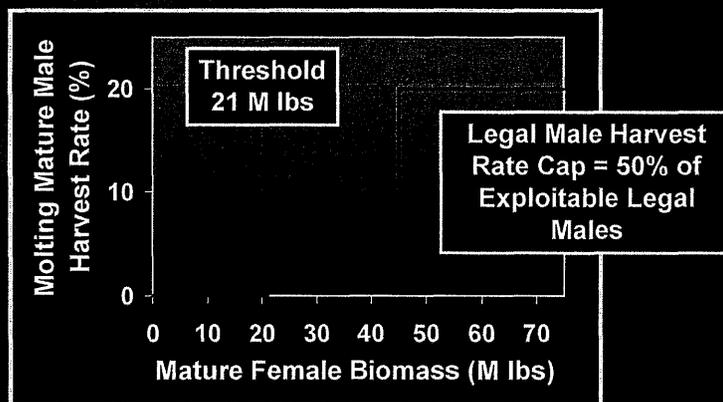
Source: Zheng (2008)

## Issue: Decline in Size of Maturity

Sizes of 50% maturity have declined for males in Bristol Bay since 1990 (no data prior to 1990)



## Tanner Crab Harvest Strategy



Mature females = females > 79 mm CW

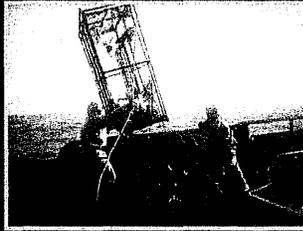
Molting mature males = 100% newshell + 15% oldshell males > 112 mm CW

Exploitable legal males ( $TAC_{cap}$ ) = 100% newshell + 32% oldshell legal ( $\geq 138$  mm CW) males

## Tanner Crab Harvest Strategy

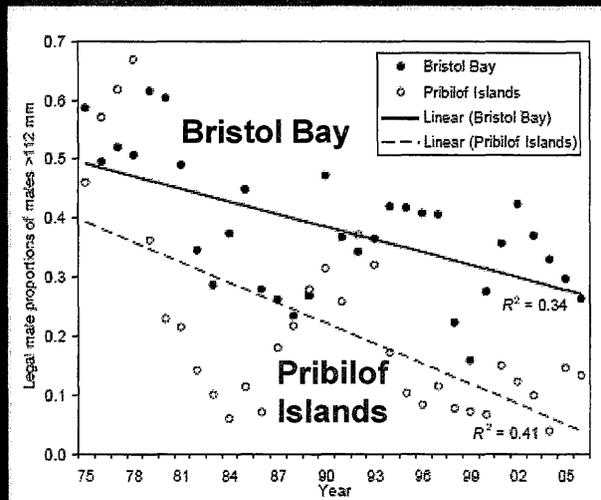
Total Allowable Catch (TAC, M crabs) =  
Smaller of: harvest rate X molting  
mature male abundance, or  
50% exploitable legal males

TAC (M lbs) = TAC (M crabs) X average  
weight of legal males



## Issue: Fewer Crabs Reaching Legal Size

Decline in proportions of large (>112 mm CW)  
males that are of legal size ( $\geq 138$  mm CW)



Source: Zheng (2008)

## Data Analyzed

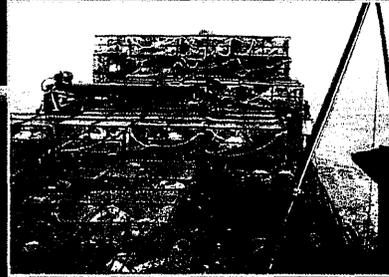
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### Biological

Annual NMFS trawl surveys  
Recent ADF&G pot surveys  
Commercial fishery landings  
Onboard observers

### Economic

Exvessel & wholesale prices  
Fishery revenues  
Fishing fleet performance  
Quota share lease rates and prices  
Interviews of selected fishery participants



## Findings

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Under reduced size limit, there is no change in:

Mature female abundance

Fishery threshold

Harvest rate

Molting mature male abundance

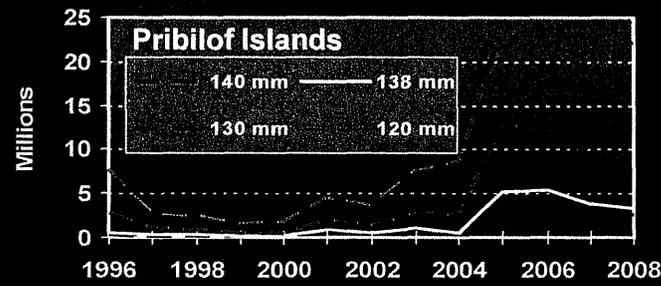
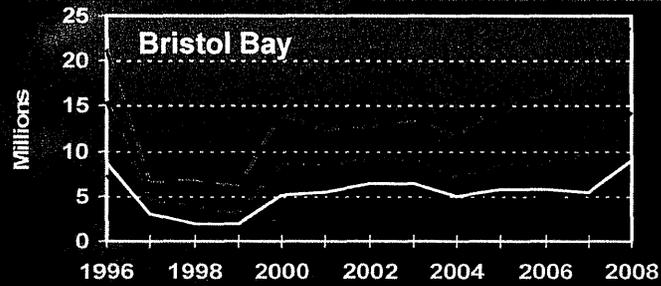
Under reduced size limit:

Abundance of legal males increases

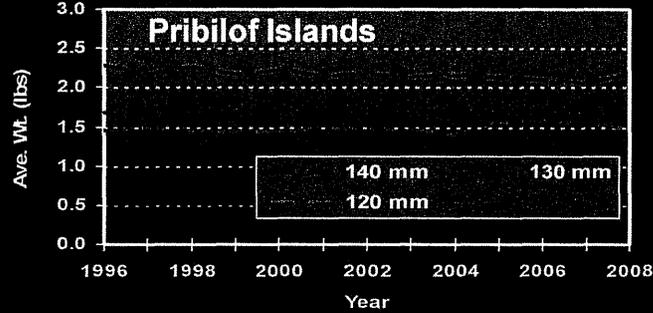
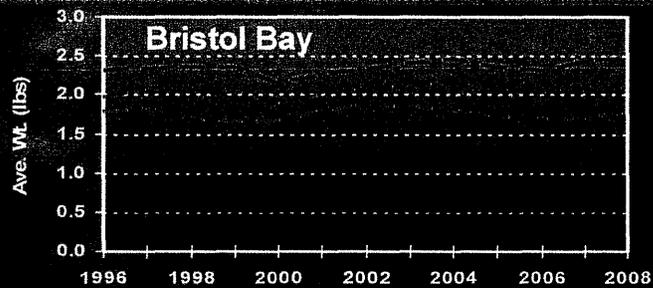
Abundance of exploitable legal males  
increases

Average weight of legal males declines

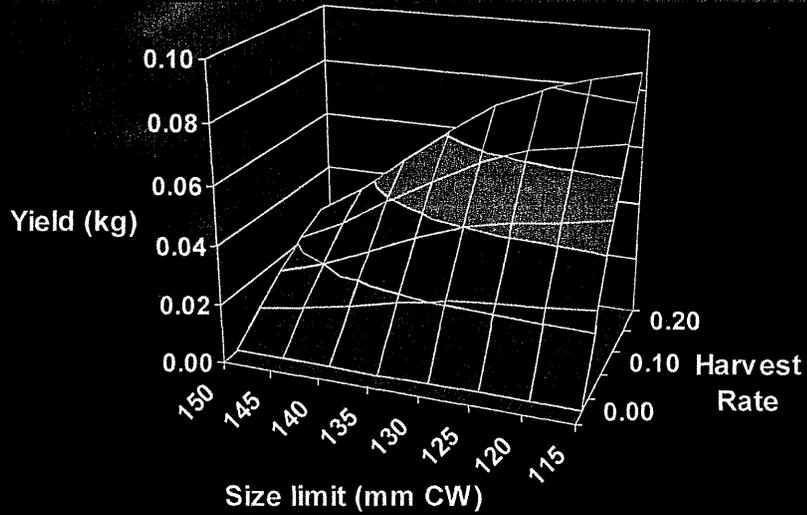
## Legal Male Abundance at Alternative Size Limits at Bristol Bay



## Average Weight of Legal Males Under Alternative Size Limits

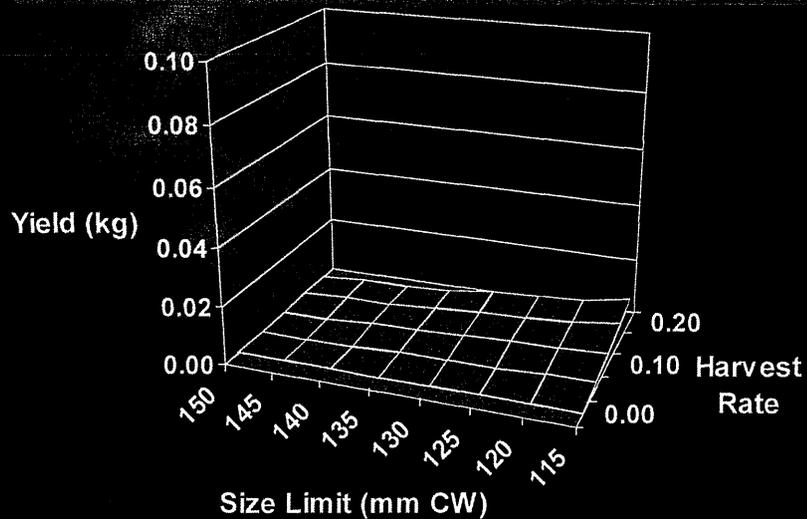


### Yield per Recruit: Bristol Bay (1997-2006)



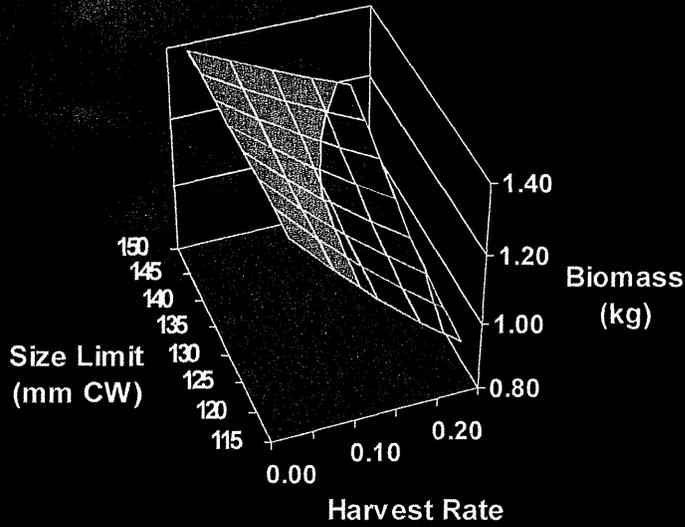
Y/R is maximized at the lowest size limit and highest harvest rate

### Yield per Recruit: Pribilof Islands (1997-2006)



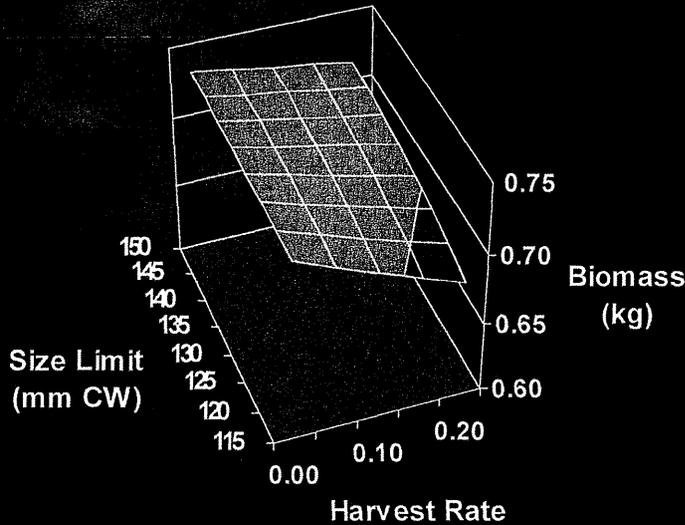
Y/R is very low at Pribilof Islands because of preponderance of males maturing at sublegal sizes

### Spawning Stock Biomass per Recruit: Bristol Bay (1997-2006)



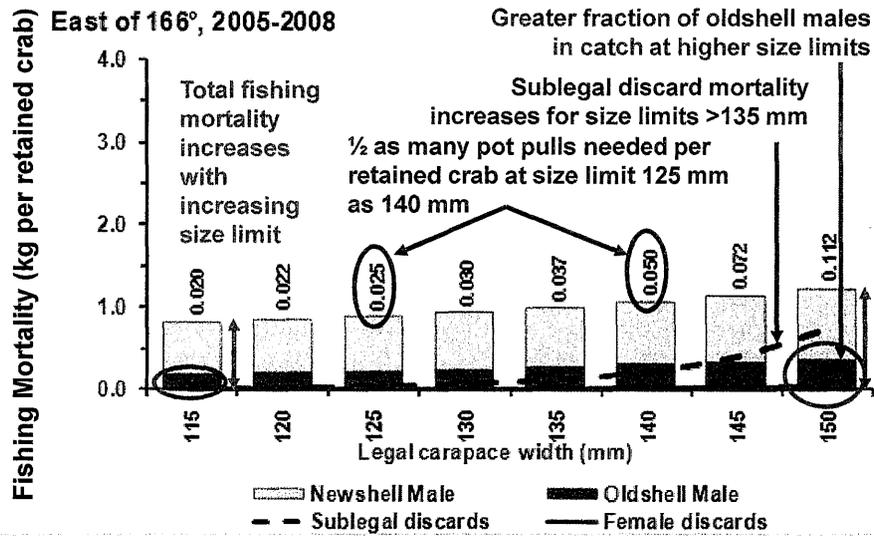
SSB/R is maximized at the highest size limit and lowest harvest rate

### Spawning Stock Biomass per Recruit: Pribilof Islands (1997-2006)

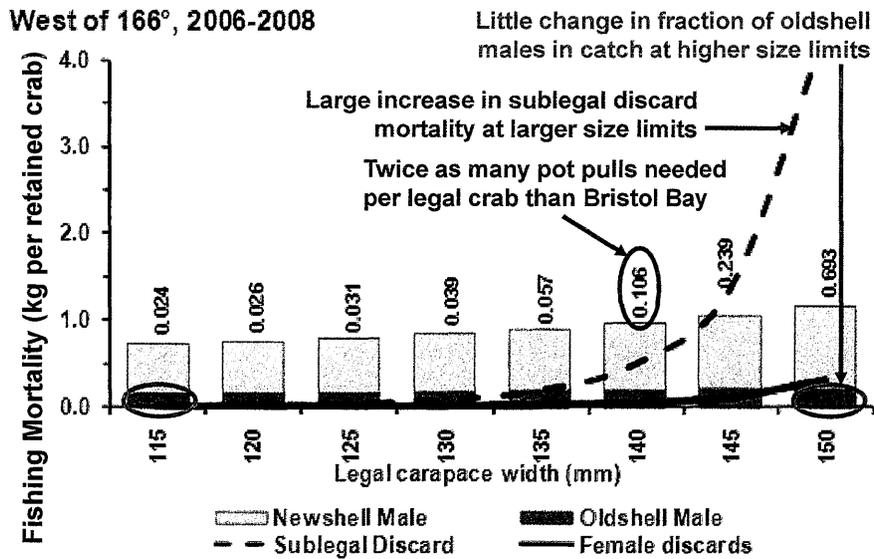


SSB/R is relatively flat w.r.t. harvest rate and size limit at Pribilofs

## Findings: Fishing Mortality (Bristol Bay)



## Findings: Fishing Mortality (Pribilof Is.)



## Findings

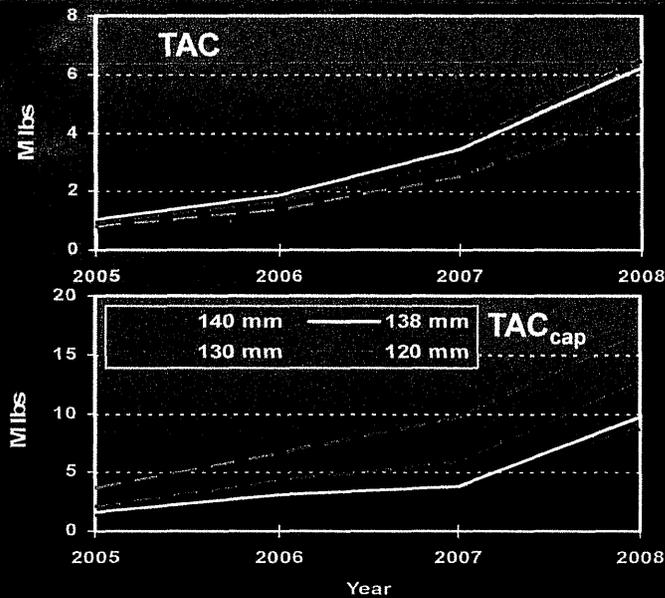
### Under reduced size limit:

TAC declines owing to reduced average weight of legal males

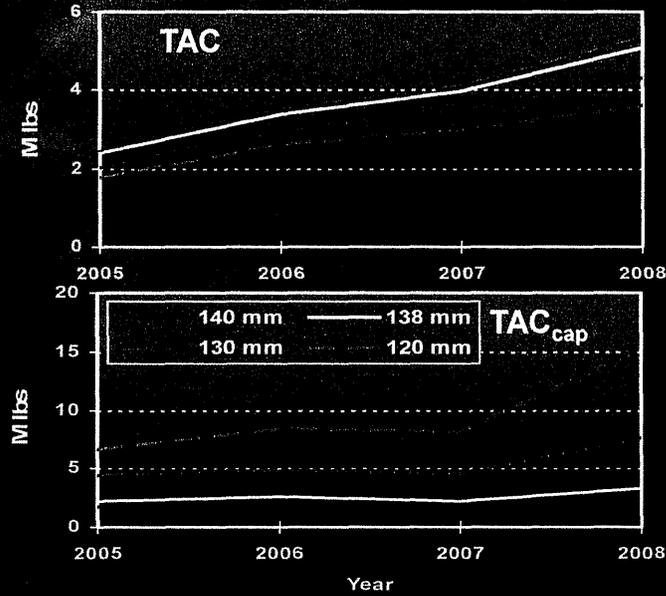
TAC<sub>cap</sub> increases owing to large increase in legal male abundance

At lowered size limits, TAC<sub>cap</sub> no longer becomes constraining

### TAC (top) & TAC<sub>cap</sub> (bottom) Under Alternative Size Limits for Bristol Bay

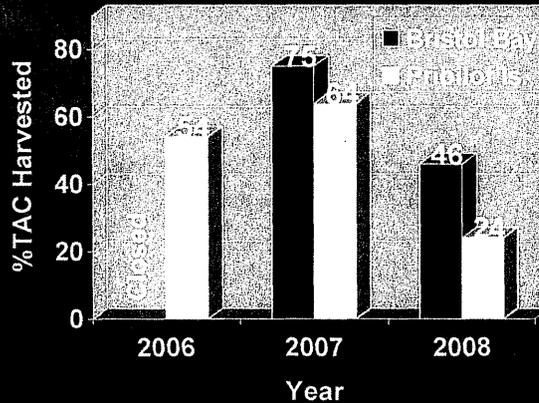


## TAC (top) & TAC<sub>cap</sub> (bottom) Under Alternative Size Limits for Pribilof Islands



## Economic Considerations

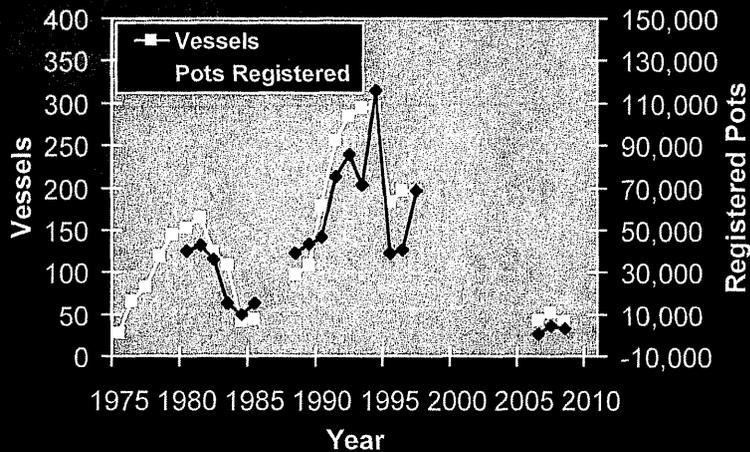
TACs have not been fully harvested in recent years, indicating that the fishery is not economically profitable



Efficiency gains from fleet consolidation have been overwhelmed by low fishery productivity

## Economic Considerations

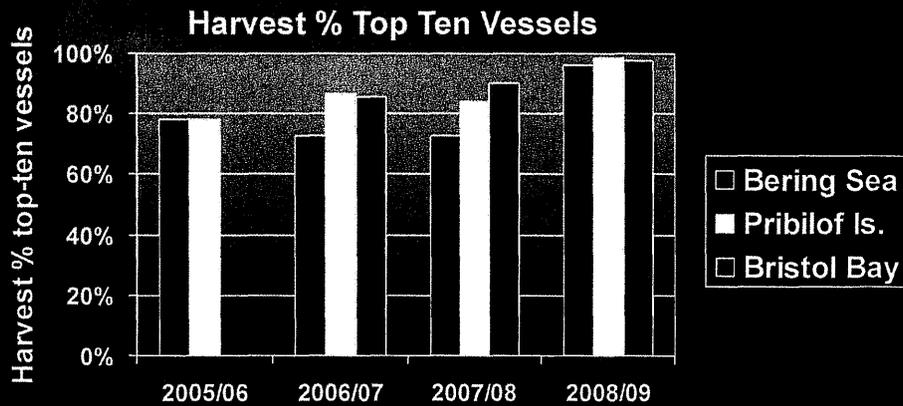
Low productivity is reflected by low levels of effort not seen since early in the fishery



Decline in fishing effort for Tanner crabs exceeds declines for other major BSAI fisheries

## Economic Considerations

Few vessels actively involved in the Bering Sea Tanner crab fishery



Many vessels only catch Tanner crab incidentally

## **Economic Considerations**

### **Potential benefits of reduced size limits :**

#### **Productivity of effort**

Harvest per pot lift may increase in both number and weight of catch

Fewer pot lifts may be required to catch the TAC

Increases in legal male CPUE could offset affect of lower TAC on fishery profitability

Bycatch and discard mortality may be lowered

## **Economic Considerations**

### **Potential benefits of reduced size limits**

#### **(cont):**

#### **Marginal costs of effort**

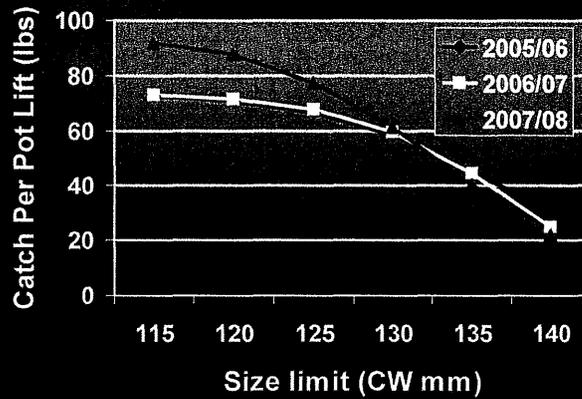
Lower sorting, handling and other costs associated with elevated bycatch and discards

Increase likelihood that TAC will be taken

## Economic Considerations

Projected fishery performance based on extrapolated observer data

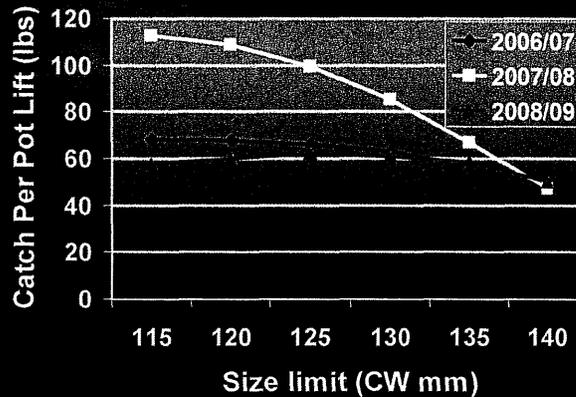
Catch weight per pot lift, Pribilof Islands area



## Economic Considerations

Projected fishery performance based on extrapolated observer data

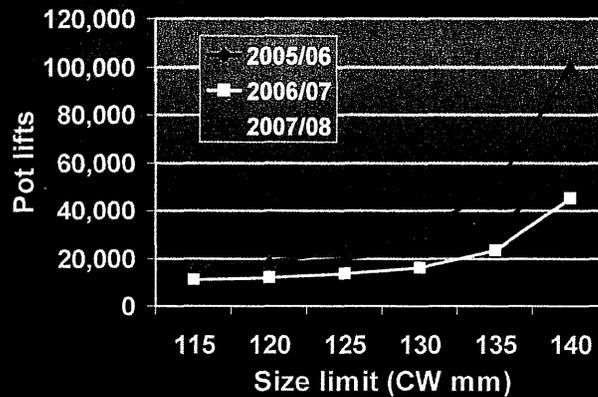
Catch weight per pot lift, Bristol Bay area



## Economic Considerations

Projected fishery performance at various size limits based on extrapolated observer data

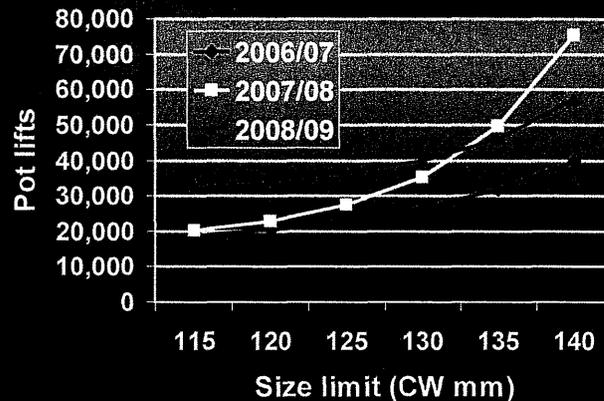
Pot lifts, Pribilof Islands area



## Economic Considerations

Projected fishery performance based on extrapolated observer data

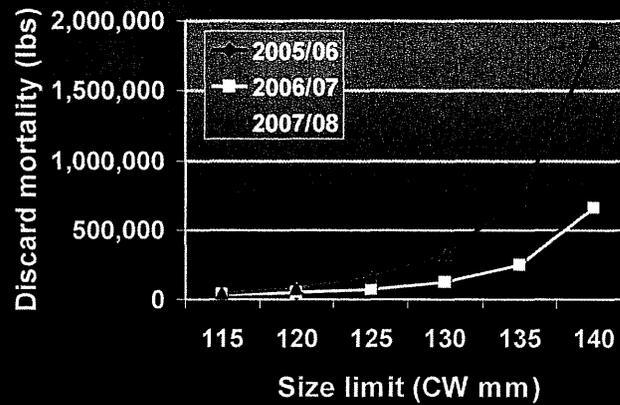
Potlifts, Bristol Bay area



## Economic Considerations

Projected fishery performance at various size limits based on extrapolated observer data

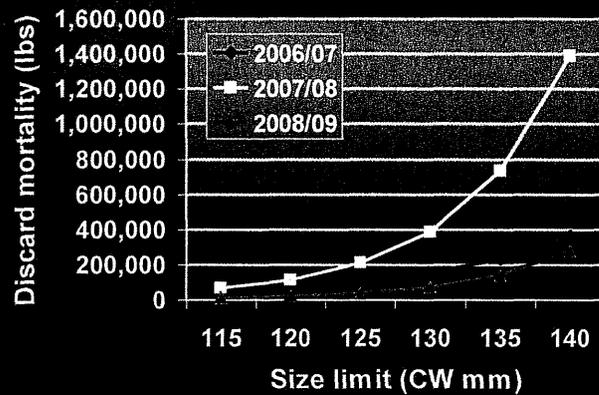
### Discard Mortality, Pribilof Islands area



## Economic Considerations

Projected fishery performance at various size limits based on extrapolated observer data

### Discard Mortality, Bristol Bay area



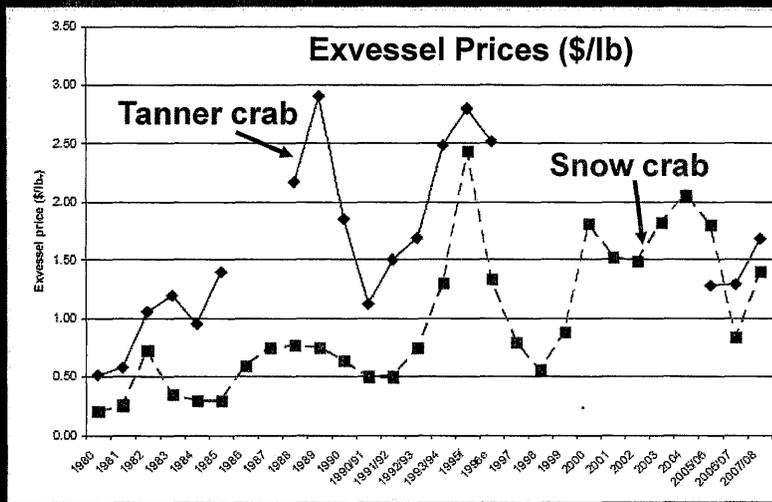
## Economic Considerations

Limited economic value of the Bering Sea Tanner crab fishery reflected by low lease rates compared to other major BSAI crab fisheries

Fishery	Lease rates	
	% to lessor	% to lessee
Bristol Bay Red King Crab	70-80	30
Bering Sea Snow Crab	45-50	50-55
Bering Sea Tanner	20-25	75-80

## Economic Considerations

Former price advantages of Tanner crabs over snow crabs in Japanese markets have been lost



## **Economic Considerations**

---

**Currently, Tanner crabs enter domestic market as large snow crab**

**Because of low volume of Tanner crabs relative to snow crabs, reductions in size limit are unlikely to affect prices in current markets**

**Consistency in crab supply is more important to maintaining market share and price**

## **Conclusions**

---

**A reduced size limit appears to convey the following benefits: reduced discard mortality of sublegal males, higher legal CPUE, higher yield per recruit, more consistent product supply, higher revenue per pot lift, lower marginal fishing costs**

**One tradeoff is a slight reduction in spawning stock biomass per recruit, especially for Bristol Bay**

**Choice of size limit depends on particular weighting of management objectives, but it seems that a reduction in size limit is warranted**

## **Other Considerations**

---

**New federal rebuilding plan is being developed**

**EBS Tanner crabs recently determined to be *approaching* the “overfished condition”**

**Should new state harvest strategy be developed?**

**Re-evaluate operational definition of mature females to reflect changes in size of maturity?**

**Re-evaluate molting mature males (112 mm CW) to better match changes in size of maturity?**

**Consider change in  $TAC_{cap}$  calculation, if lower size limit adopted**

**Should Bristol Bay and Pribilof Islands areas be managed as separate stocks?**



RC4

# **BSAI Crab FMP: Annual Catch Limits and rebuilding plan revisions**

Diana L. Stram, NPFMC  
Board of Fisheries meeting  
March 16, 2010

RC4

## **Review of State/Federal management for Crab under FMP**

- FMP establishes State/Federal cooperative management regime
  - defers crab mgt to State with Federal oversight
- Three categories of management measures
  - 1-fixed in FMP, req amd to change
    - E.g. OFLs, limited access, Observer requirements, EFH
  - 2-frameworked measures, State can change following established criteria
    - E.g., minimum size limits, GHs, Fishing seasons
  - 3- discretion of State (neither specified nor frameworked)
    - E.g., reporting requirements, gear modifications

RC4



## **Federal requirements**

- Annual Catch Limits (ACLs) and Accountability Measures (AMs) to prevent overfishing required provision of revised MSA in 2006
- Rebuilding plans required for overfished stocks, stocks approaching an overfished condition, stocks which did not rebuild in the time frame of the current rebuilding plan

RC4

## **Main changes to FMPs (and deadline for final action)**

- Crab FMP (October 2010)
  - ABC control rules
  - SSC recommendation on ABCs annually
  - Rebuilding plans
    - Snow crab
    - Tanner crab
    - PIBKC
- Scallop FMP (October 2010)
  - ABC control rule
  - SSC recommendation on ABCs annually
  - Define stocks in fishery (weathervane only)

RC4

## Crab FMP actions to comply with Annual Catch Limit (ACL) requirements

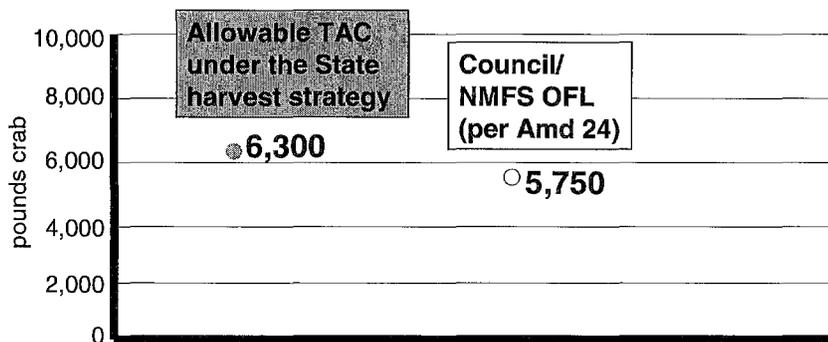
-by 2011/2012 fishing year-

- ABC control rule which accounts for scientific uncertainty
- $ABC \leq OFL$
- Currently State harvest strategy can be constrained by OFL requirements (per amd 24)
  - If State harvest strategy would allow for catch  $> OFL$  then TAC must be decreased until all catch (directed + bycatch) is estimated to be below the OFL *to avoid overfishing*
- New requirements will mean that ACL(ABC) cannot be deliberately exceeded

➔ So 2011/2012 TAC must be *at or below* ACLs

RC4

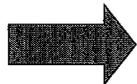
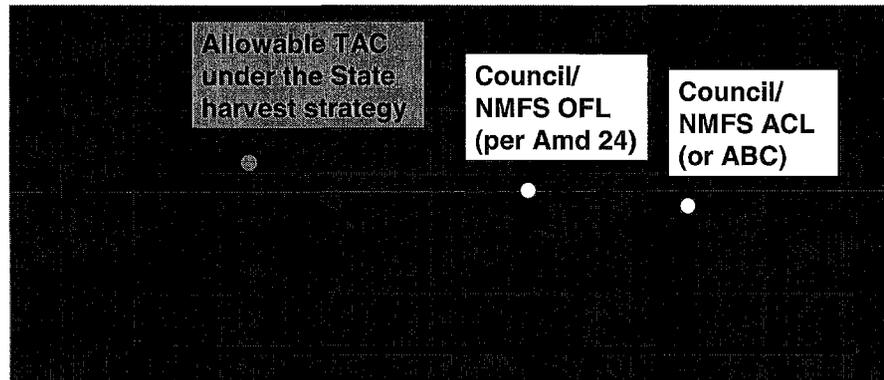
## Example: current impact of OFLs under State/Federal management



➔ Result:  $TAC \leq 5,750$  ( $TAC \leq OFL$  Amd 24)

RC4

## Example: potential impact of ACLs under State/Federal management



Result:  $TAC \leq 5,125$

$ACL \leq OFL$   
 $TAC \leq ACL$

RC4

## ABCs for crab stocks

- Amendment will establish ABC control rule for all 10 crab stocks
- ABC will be the ACL for each stock
- ABC control rule must account for scientific uncertainty and probability of overfishing

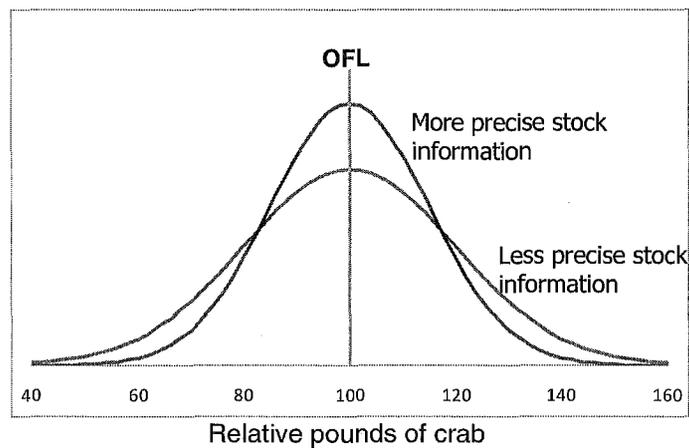
RC4

## NS1 Guidelines §600.310(f)(4)

- “ABC should be based, when possible, on the probability that an actual catch equal to the stock’s ABC would result in overfishing. This probability that overfishing will occur ***cannot exceed 50 percent and should be a lower value.***”
- “The ABC control rule must articulate how ABC will be set compared to the OFL based on ... the ***scientific uncertainty in the estimate of OFL and any other scientific uncertainty.***”

RC4

## Uncertainty around OFL estimate



RC4

## Two issues to consider in establishing ABC control rule

1. How to estimate relative uncertainty of OFL?
  - Quantifiable measures of uncertainty to consider
2. Probability of overfishing:
  - Policy-decision based upon risk aversion
  - Cannot exceed 50% (and should be lower)

RC4

## How to set ABCs for BSAI Crab Stocks?

- Use either a fixed buffer or Probability approach ( $P^*$ ) approach for incorporating uncertainty in ABC control rule
- What does this mean?
  - Estimate uncertainty of OFL
  - Set ABC so that, if catch=ABC, the probability of exceeding the *true but unknown OFL* is  $P^*$

RC4

## How does buffer vary with P\*?

- For a fixed buffer value (between ABC and OFL) , P\* will vary with uncertainty
  - Higher uncertainty leads to higher probability that the OFL will be exceeded
- For a fixed P\* value, the resulting buffer value (between ABC and OFL) will vary with uncertainty.
  - Higher uncertainty leads to larger buffer

RC4

## Fixed buffer and variable P\* for stocks A and B

ABC = 86% of OFL

P\* = 18%

P\* = 23%

ABC

OFL

Relative pounds of crab

RC4

**Approaches for maxABC specification  
(following plan team discussion/recommendations)**

**Alternatives:**

1. Range of constant buffers
  - ACL = 90% OFL; 80% OFL; 70% OFL; ...
2. Range of constant P\*s
  - Probability of overfishing ranges from 10%-50%

RC4

**Uncertainty in stock assessment**

- Buffer values and resulting risk of overfishing will vary according to the estimate of uncertainty in the assessment
- Higher uncertainty leads to larger buffer (between OFL and ABC) or a higher risk of overfishing

RC4

## Other issues for crab ACLs

- SSC must recommend ABC to Council
  - Current timing of process does not allow for this. Need to look at alternative process to allow for this including:
    - Change timing of TAC-setting (allow for SSC recommendation at October mtg)
    - Additional SSC mtg to review prior to TAC setting
    - Change timing of October Council mtg to allow for recommendation prior to TAC-setting

RC4

## Plan for amendment analysis

- Preliminary CPT review of analysis **March**
- SSC (AP/Council) comment on preliminary analysis **April**
- Initial review SSC/AP/Council **June 2010**
- Final Action **October 2010**
- Implementation for 2011/2012 fishing year
  - Assessments to include in 2011 assessment cycle

## Scallop ACLs

- 3 main changes to the FMP to comply with ACL requirements:
  1. Redefine stocks in fishery:
    - Weathervane = only target. No information exists for other scallop stocks known to occur (pink, spiny, rock);
  2. Account for all removals
  3. ABC control rule (defining  $ACL = ABC$ )

RC4

## Rebuilding Plans

- Snow crab (revised needed)
- Tanner crab (approaching overfished)
- Pribilof Island blue king crab (no progress towards rebuilding)

RC4

## **Snow crab**

- Alternatives to meet rebuilding time frames in years
  - E.g. 3 years to rebuild, 5 years to rebuild, 8 years to rebuild
  - All based on directed fishery harvests
- Analysis of alternative rebuilding strategies still being drafted (preliminary available by 3/24)

RC4

## **Tanner crab**

- Alternatives to meet rebuilding time frames in years
  - Maximum under new rebuilding time frame = 10 years (more if rebuilding cannot occur with no fishing in 10 years)
  - Directed harvest constraints combined with incidental catch in directed Tanner plus snow crab fisheries
- Analysis of alternative rebuilding strategies still being drafted (preliminary available by 3/24)

RC4

## **Pribilof Island blue king crab**

- Alternatives (all in federal groundfish fisheries)
  - area closures in groundfish fisheries
  - PSC limit (=OFL) to close groundfish fisheries when reached
- Status Quo = closed until stock is rebuilt
- All alternatives retain status quo directed harvest constraint
- Analysis of alternative rebuilding strategies still being drafted (preliminary available by 3/24)

RC4

RC5

# Bering Sea - Aleutian Islands Crab Fisheries Management Plan (FMP)

Stefanie Moreland  
Alaska Department of Fish and Game  
Extended Jurisdiction Section  
March 16, 2010



RC 5

1

## BSAI Crab FMP Overview

- State/Federal cooperative management
- Defers crab management to the State of Alaska with Federal oversight
- State regulations are subject to
  - provisions of the FMP, including its goals and objectives, and
  - Magnuson-Stevens Fishery Conservation and Management Act national standards

2

## BSAI Crab FMP Management Goal

*Maximize overall long-term benefit to the nation by coordinated federal and state management, consistent with responsible stewardship for conservation of king and Tanner crab resources and their habitats*

3

## BSAI Crab FMP Management Measure Categories

BSAI crab FMP defers management to the State of Alaska using 3 categories of management measures

1. Fixed in FMP
2. Frameworked in FMP
3. Discretion of the State of Alaska

4

## BSAI Crab FMP Management Measures – Category 1

1. Fixed in the FMP and require an FMP amendment to change
  - Legal gear
  - Permit requirements
  - Federal observer requirements
  - Limited access
  - Crab rationalization program
  - Norton Sound super-exclusive registration area
  - Essential Fish Habitat (EFH)
  - Habitat of Particular Concern (HAPC)

5

## BSAI Crab FMP Management Measures – Category 2

2. Framework-type measures *the state can change* following criteria in the FMP
  - Minimum size limits
  - Guideline harvest levels/Total allowable catch (GHL/TAC)
  - Inseason adjustments
  - Districts, subdistricts, and sections
  - Fishing seasons
  - Sex restrictions
  - Closed waters
  - Pot limits
  - Registration areas

6

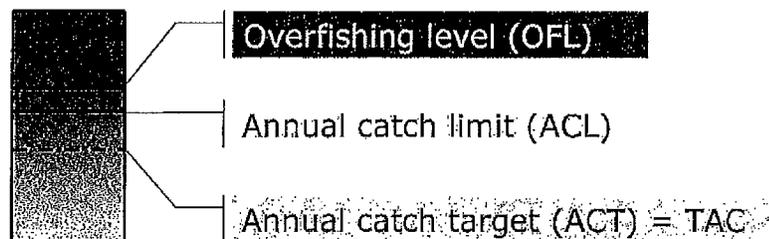
## BSAI Crab FMP Management Measures – Category 3

### 3. Discretion of the state, not specified or frameworked in the FMP

- Reporting requirements
- Gear placement and removal
- Gear storage
- Gear modifications
- Vessel tank inspections
- State observer requirements
- Bycatch limits (in directed crab fisheries)
- Other (subject to coordination with NMFS/Council)

7

## ACL Interactions with Category 2 Management



- Each threshold provides protection from overfishing, but also impedes the State's role in setting TACs
- Thresholds under new ACL guidelines explicitly account for scientific and management uncertainty eliminating the need for use of precautionary assumptions in stock assessment models used to establish the OFL

8

## Rebuilding Plan Interactions with Category 2 Management

- Alternatives for rebuilding include a range of rebuilding time periods
- Options increase the probability of rebuilding in a given time period
- Full range of North Pacific Fishery Management Council alternatives and options is achieved through harvest rate adjustments

9

## Key Question

*Which alternatives and options meet federal requirements and which are so highly restrictive that they diminish the State's authority in establishing the total allowable catch?*

10

## Potential Board Action

- Provide input, by letter, to
  - North Pacific Fishery Management Council Chairman, Eric Olson
  - National Marine Fisheries Service Regional Administrator, Jim Balsiger
- Request the State's role in establishing total allowable catch levels be recognized and retained
- Request Council and NMFS determine which alternatives and options meet federal requirements, and which exceed requirements
- Express concern over alternatives found to be more conservative than federally required

NEXT RC

# The Sustainable Salmon Fishery and Escapement Goal Policies

A Presentation to the Alaska Board of Fisheries  
March 16, 2010

Robert A. Clark  
Division of Sport Fish

and

Eric C. Volk  
Division of Commercial Fisheries



**RC 6**

## Objectives of Presentation

- Development of the Sustainable Salmon Fisheries Policy (SSFP)
- Development of the Escapement Goal Policy (EGP)
- Use of Sustainable Escapement Goals as Lower Bounds
- Proposals 170, 171, and 172

## Impetus for the SSFP

- FAO Code of Conduct
- Precautionary Approach in the MSA
- Mundy/Krasnowski Reports
- MSC Certification

3

## FAO Code of Conduct

- Developed in 1991-1995 by the U.N. FAO
- 19 General Principles of Responsible Fishery Management
- Principle 3 – prevent overfishing
- Principle 4 – use best scientific information
- Principle 5 – use a precautionary approach

4

## Precautionary Approach

- 1996 Magnuson-Stevens Act Reauthorization
- 10 National Standards
- NS 1 – prevent overfishing, achieve OY
- NS 2 – use best scientific information
- NMFS – development of harvest control rules based on biological reference points

5

## Mundy/Krasnowski Reports

- Fall of 1997 – SSFP conceptualized
- Conceptual Documents:
  - Mundy – scientific basis of sustainable salmon fishing
  - Krasnowski – salmon management and conservation in Alaska
- Precursors to SSFP and EGP

6

## MSC Certification

- Alaska salmon first certified in 2000
- Strengths – SSFP and EGP in regulation
- Requirements for continued certification:
  - Assess target reference points
  - Consider limit reference points

7

## Development of the SSFP 1997-1999

- BOF Sustainable Fisheries Committee
- Public Advisory Panel
- Department Panel
- External Peer Review

8

## Major Tenets of the SSFP

- Maintain Salmon Stocks and Habitat
- Manage for Escapements
- Establish and Apply Effective Management
- Encourage Public Support and Involvement
- Manage Conservatively, Acknowledge Uncertainty

9

## Regulatory Process under the SSFP

- Stocks of Concern – 3 levels
- Action Plans
- Research Plans

10

## **Yield Concern**

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Chronic inability, despite use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock's escapement needs

11

## **Management Concern**

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Chronic inability, despite use of specific management measures, to maintain escapements for a stock within the bounds of the SEG, BEG, or OEG, or other specified management objective

12

## Conservation Concern

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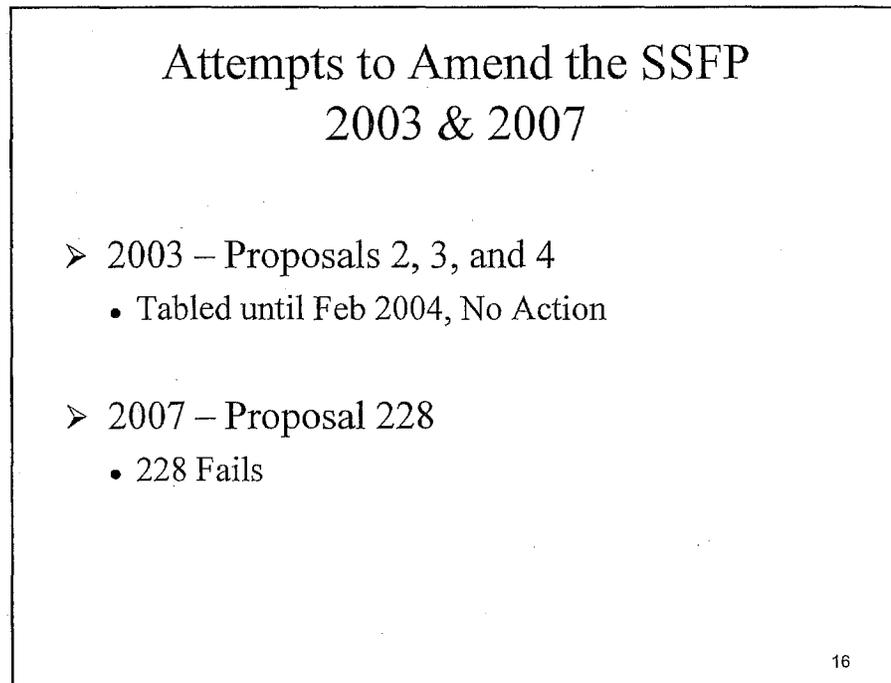
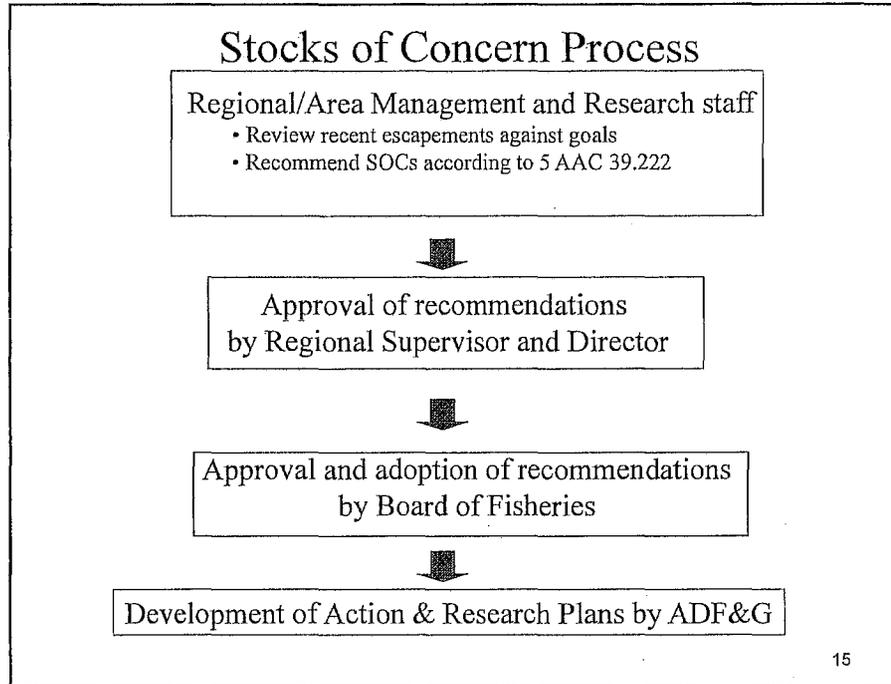
Chronic inability, despite use of specific management measures, to maintain escapements for a stock above a Sustained Escapement Threshold (SET)

13

## Current Stocks of Concern

- Arctic-Yukon-Kuskokwim
  - Yukon Chinook Yield
  - Norton Sound Sub-District 1,2,3 chum Yield
  - Norton Sound Sub-District 5,6 Chinook Yield
- Westward
  - None
- Central
  - Kvichak sockeye Yield
  - Yentna sockeye Yield
- Southeast
  - MacDonald Lake sockeye Mgmt.

14



## Development of the EGP

- Prior Versions of the EGP
- Current EGP
- Types of Escapement Goals
- Regulatory Process

17

## Prior Versions of the EGP

- 1980s – no written policy
  - Escapement goals derived by a variety of methods
  - Can be ranges, point values, or lower bounds
- 1992 – internal department policy
  - BEGs – sustainable; set by Department
    - Can be a range or a point value
    - Range must be based on achieving MSY
  - OEGs – sustainable; set by Board
- Current EGP – policy set in regulation in 2001

18

### Biological Escapement Goal (BEG)

- Determined by the Department
- Escapement with greatest potential for maximum sustained yield (MSY)
- Based on best available biological information
- Scientifically defensible
- Always a range
- Department will maintain evenly distributed escapements within the bounds of the range

19

### Sustainable Escapement Goal (SEG)

- Determined by the Department
- Escapement known to provide for sustained yields over a five to ten year period
- Used where a BEG cannot be estimated
- Based on best scientific information available
- Scientifically defensible
- Will be stated as a range and sometimes a lower bound
- Department will maintain escapements within the bounds of a range or above a lower bound

20

### Optimal Escapement Goal (OEG)

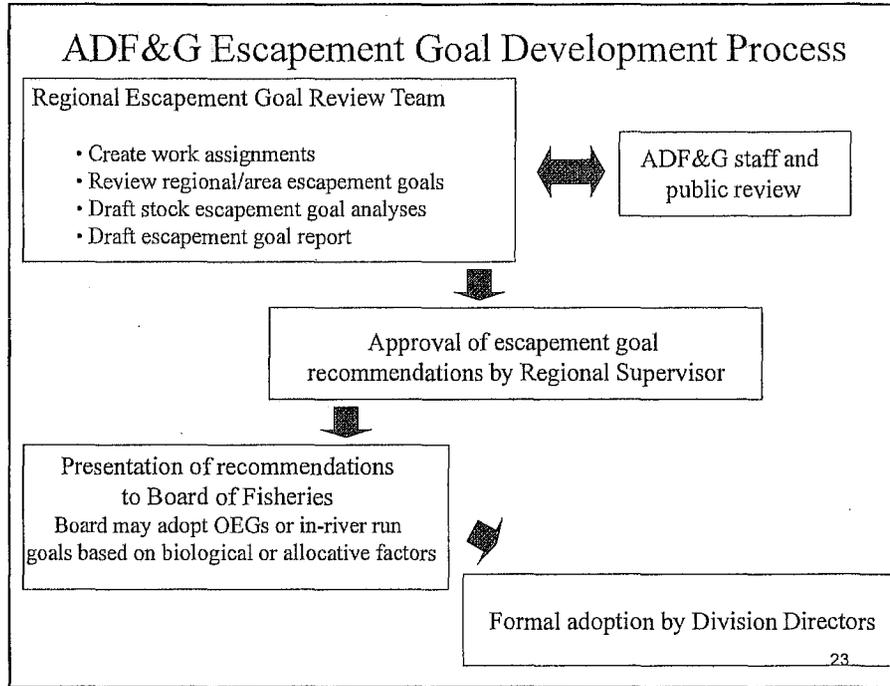
- Set in regulation by the Board of Fisheries
- Considers biological and allocative factors
- Can differ from BEG or SEG, but must be sustainable
- May be expressed as a range
- Department will maintain evenly distributed escapements within the bounds of the range

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### Sustainable Escapement Threshold (SET)

- Established by the Department in consultation with the Board of Fisheries
- Escapement level, below which sustainability is jeopardized
- Lower than the lower bound of BEG or SEG
- Can be based on lower levels of escapement that consistently sustain themselves

22



### Attempts to Amend the EGP 2003 & 2007

- 2003 – Proposals 2 and 5
  - Tabled until Feb 2004, No Action
  
- 2007 – Proposals 230 and 232
  - No Action

24

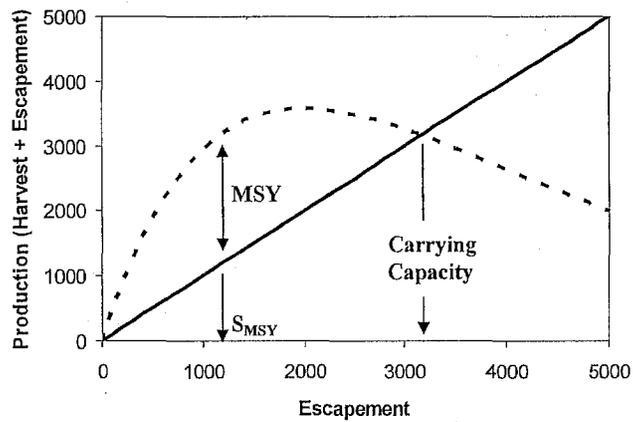
## Lower Bound (LB) SEGs

- Scientific Rationale
- Situations for Use
- Proposals 170, 171, and 172

25

## Scientific Rationale for LB SEGs

Escapements must be below carrying capacity to produce sustained yields



26

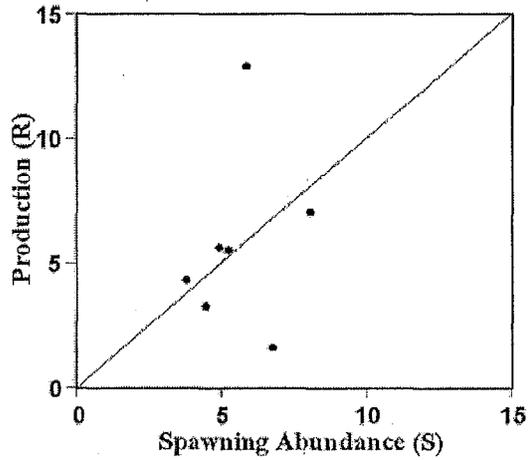
### Scientific Rationale for LB SEGs

- A typical situation:
  - Low or Unknown Harvest Rate
  - Only Escapements Monitored
  - Theory indicates that lower 50% of escapements are sustainable

27

### Scientific Rationale for LB SEGs

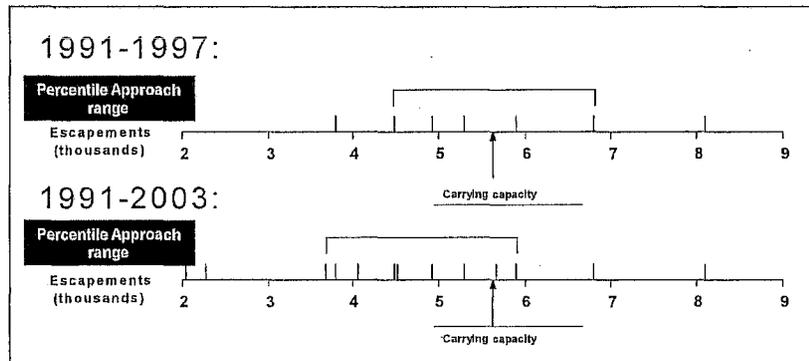
Chilkat Chinook salmon  
Avg harvest rate = 6%  
Escapements near carrying capacity



28

## Scientific Rationale for LB SEGs

Percentile approach gives SEG range that has an upper bound that does not produce sustainable yields.



29

## Use of Lower Bound SEGs

- Low or unknown harvest rate
- Low fishing power
- Non-targeted stock
- No inseason management

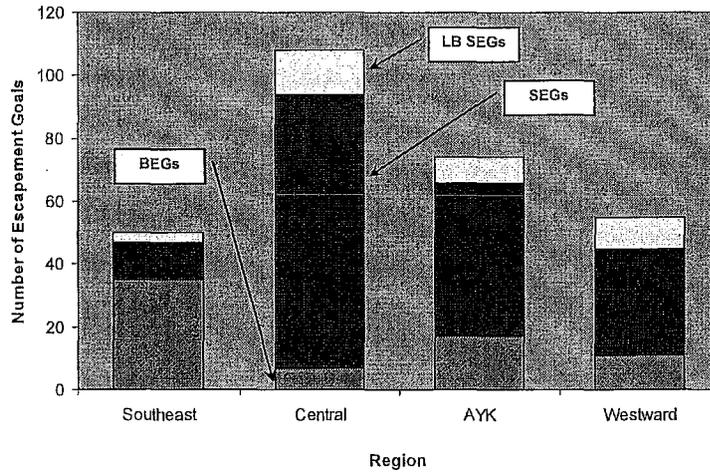
➤ Precaution against:

- Changes in fishing power
- Changes in productivity

Limit Reference Point

30

Escapement goal types by region (all species)



31

Proposals

- 170 – All BEG/SEGs expressed as ranges only
- 171 – Department sets BEG/SEGs as ranges
  - Board sets OEGs & Inriver Goals as ranges
- These proposals would limit the Department’s flexibility to set Lower Bound SEGs
- Department does not support these proposals

32

## Proposals

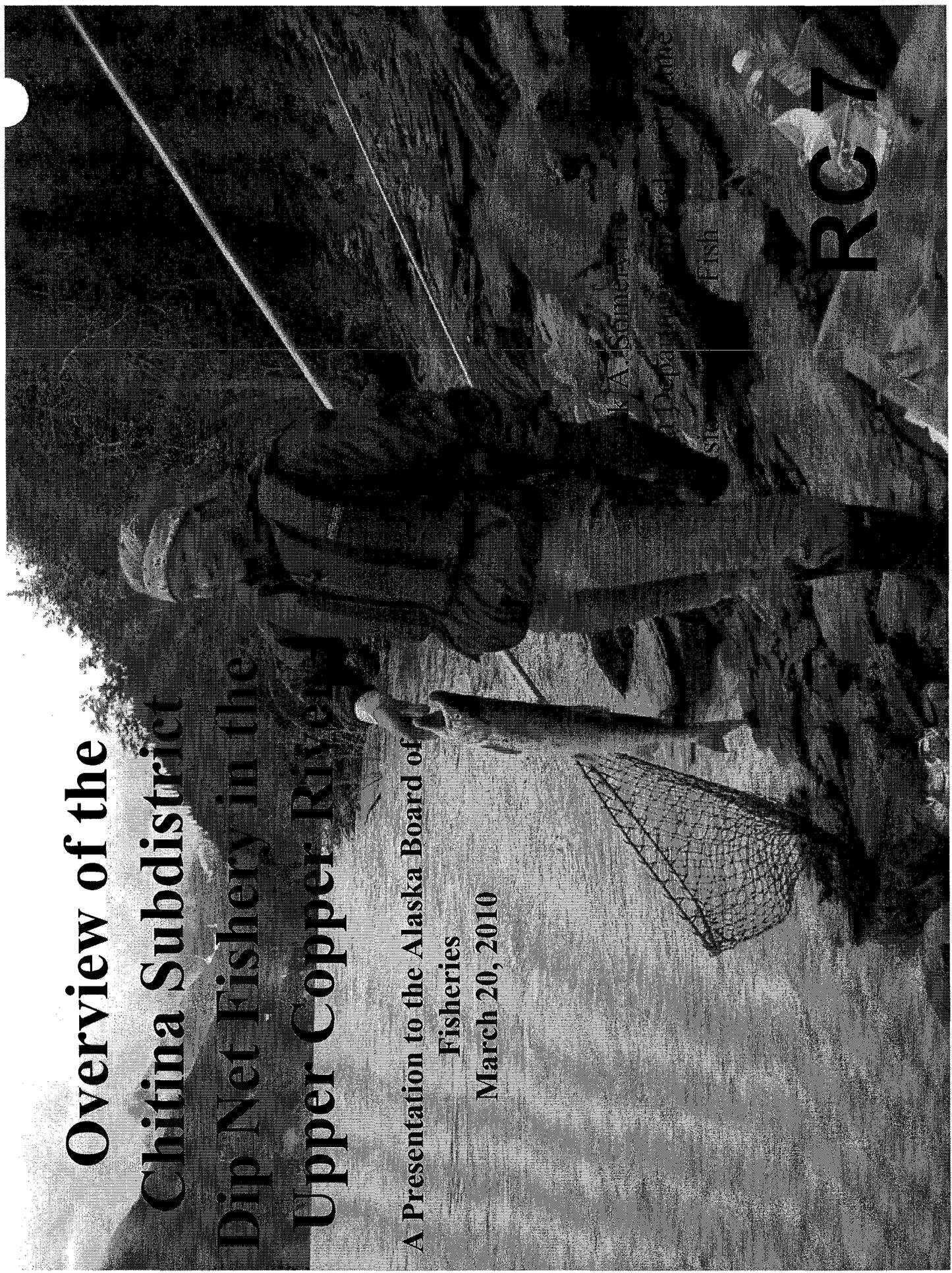
- 172 – Define SEG threshold in SSFP
- Department supports this proposal

33

NEXT RC

# Overview of the Chitina Subdistrict Dip Net Fishery in the Upper Copper River

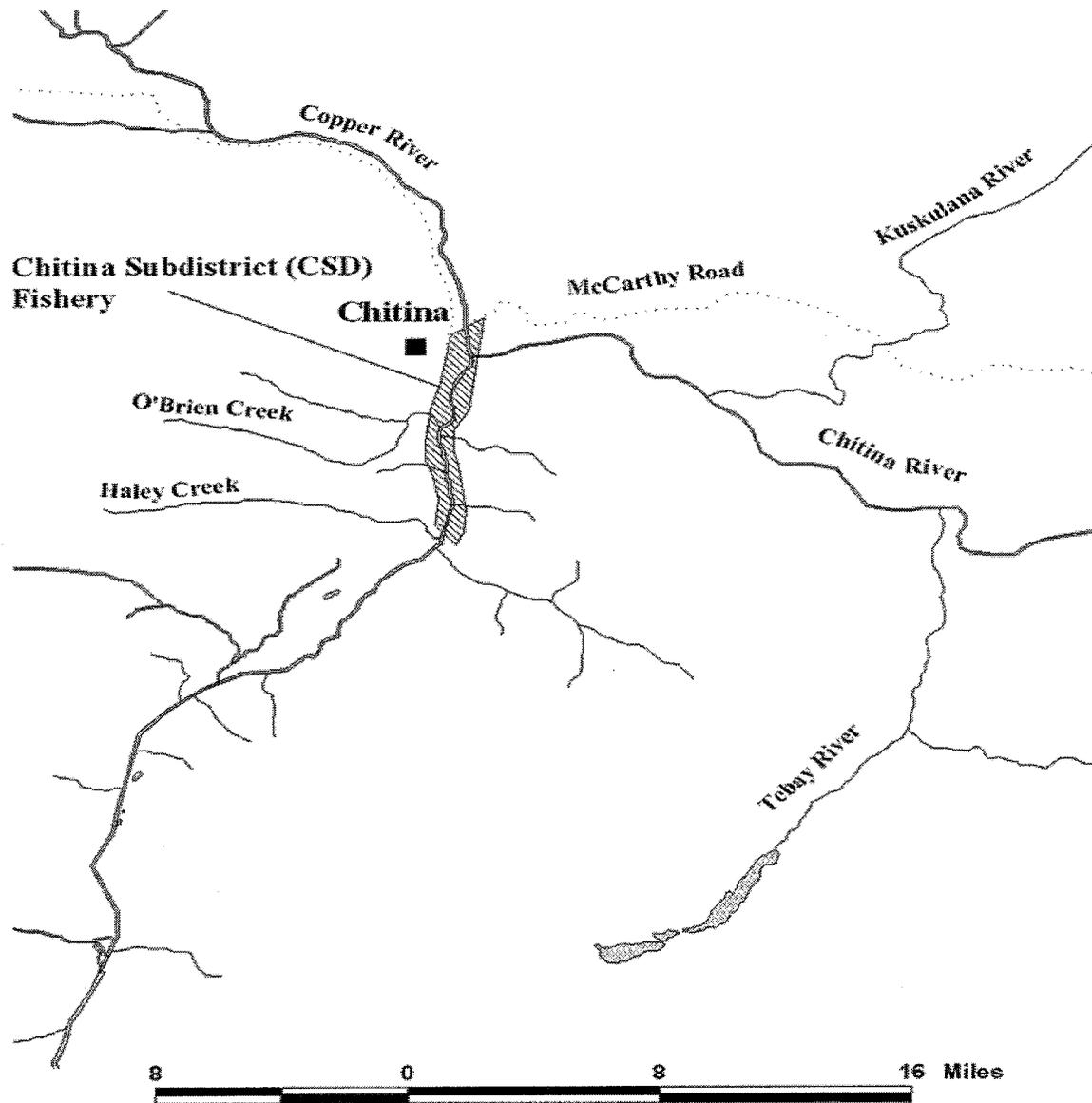
A Presentation to the Alaska Board of  
Fisheries  
March 20, 2010



K.A. Somerville  
Department of Fish and Game  
State of Alaska

RC7

# Chitina Subdistrict Personal Use Fishery

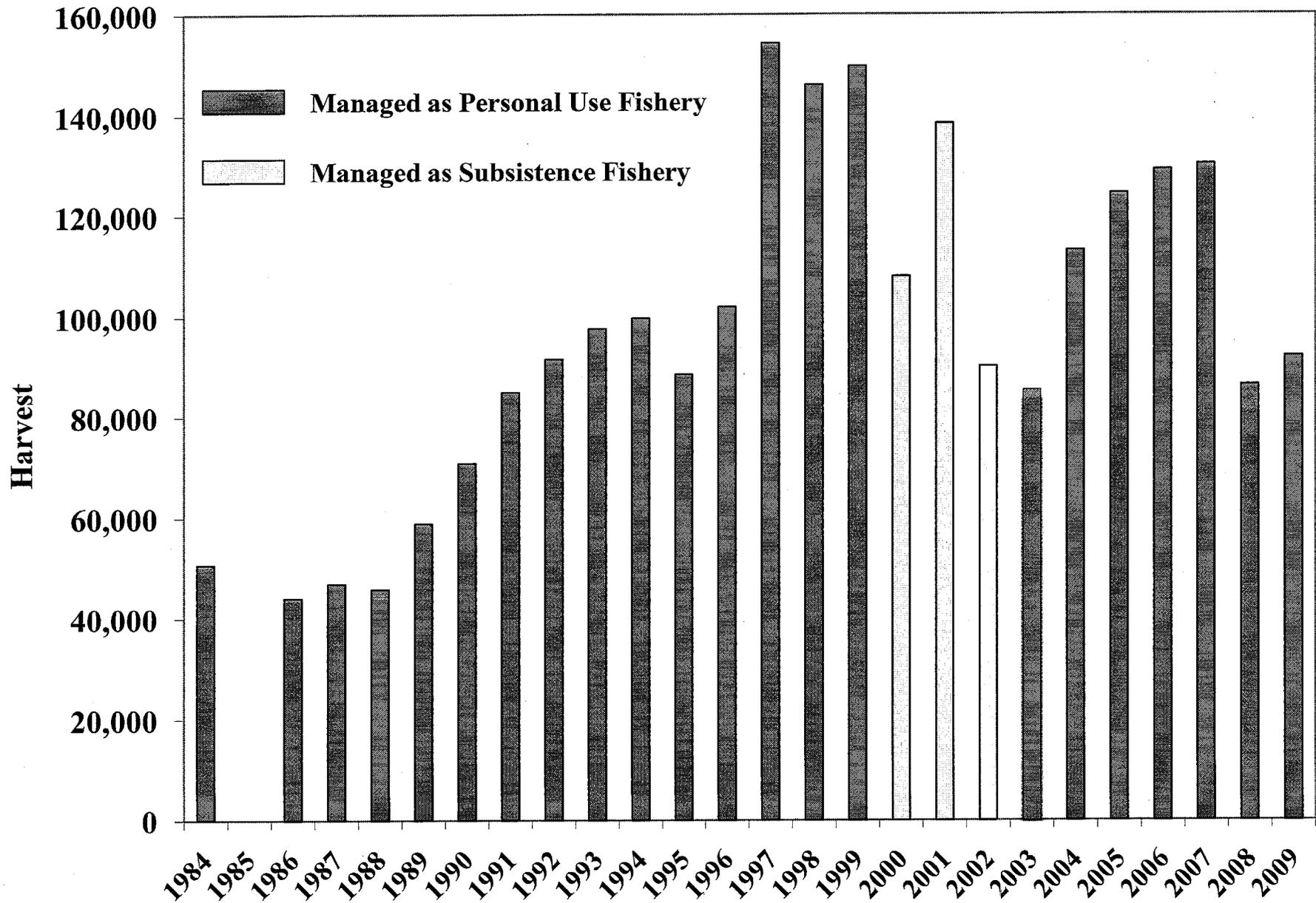


# Personal Use Management Plan

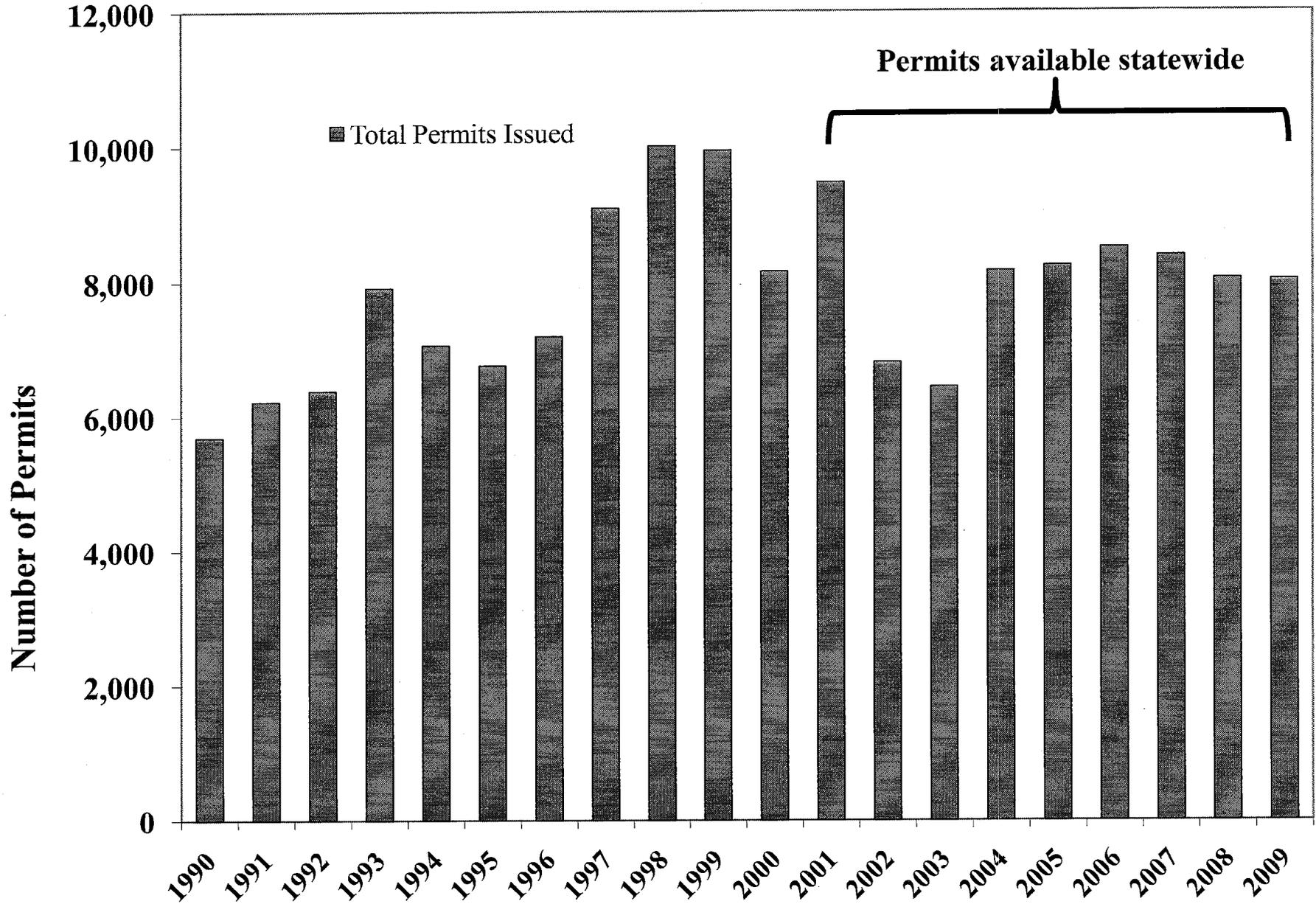
(5 AAC 77.591)

- June 1 to September 30, opening and fishing periods established by Emergency Order
- Abundance based schedule, 100,000 – 150,000 salmon allocation distributed throughout the run
- Household of one - 15 salmon, no more than 1 king salmon  
Household of two or more - 30 salmon, no more than 1 king salmon
- Supplemental permit allows 10 additional sockeye salmon when surplus of 50,000 salmon above weekly projected escapement

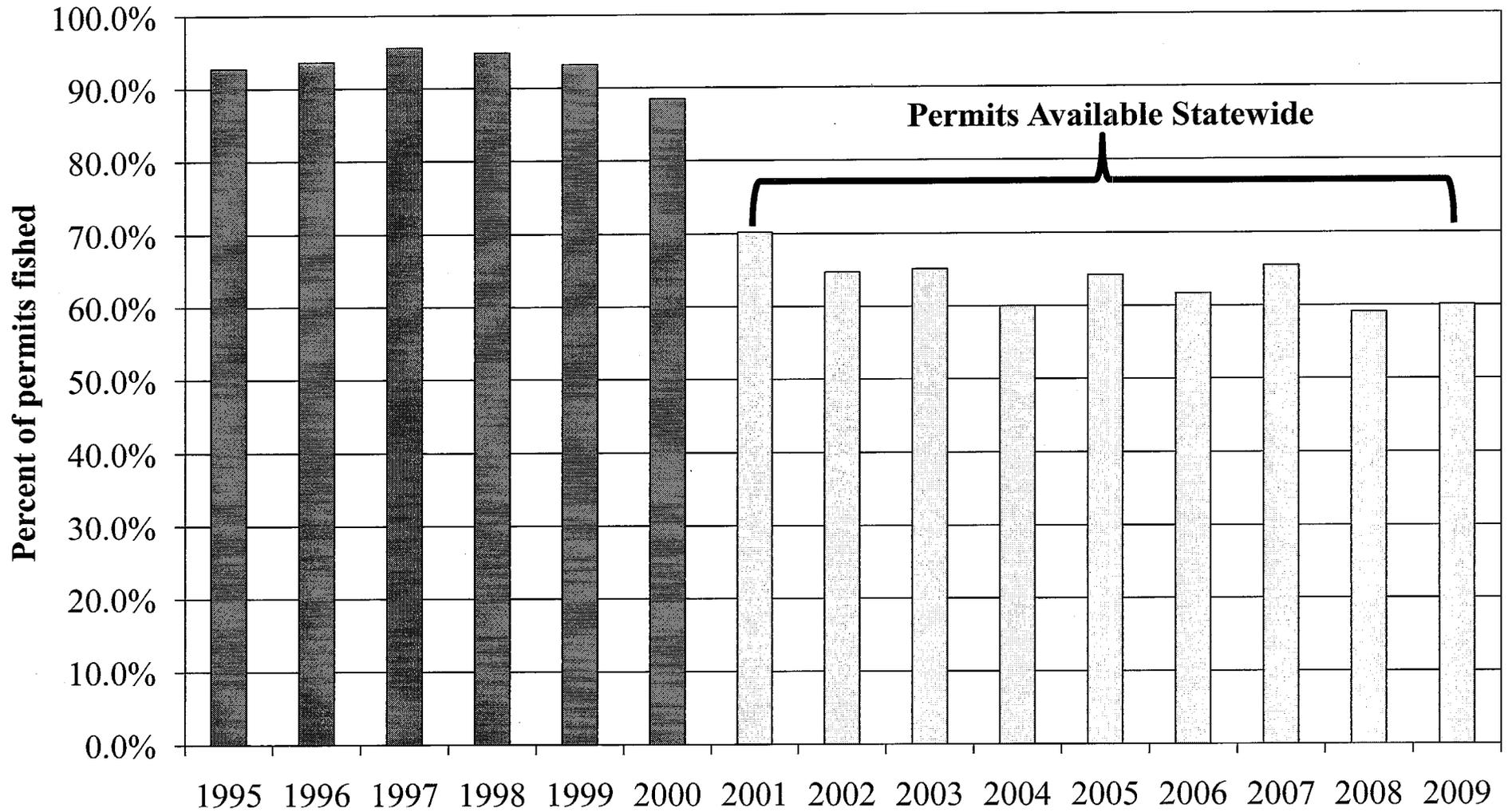
# Chitina Subdistrict Salmon Harvest, 1984 to 2009



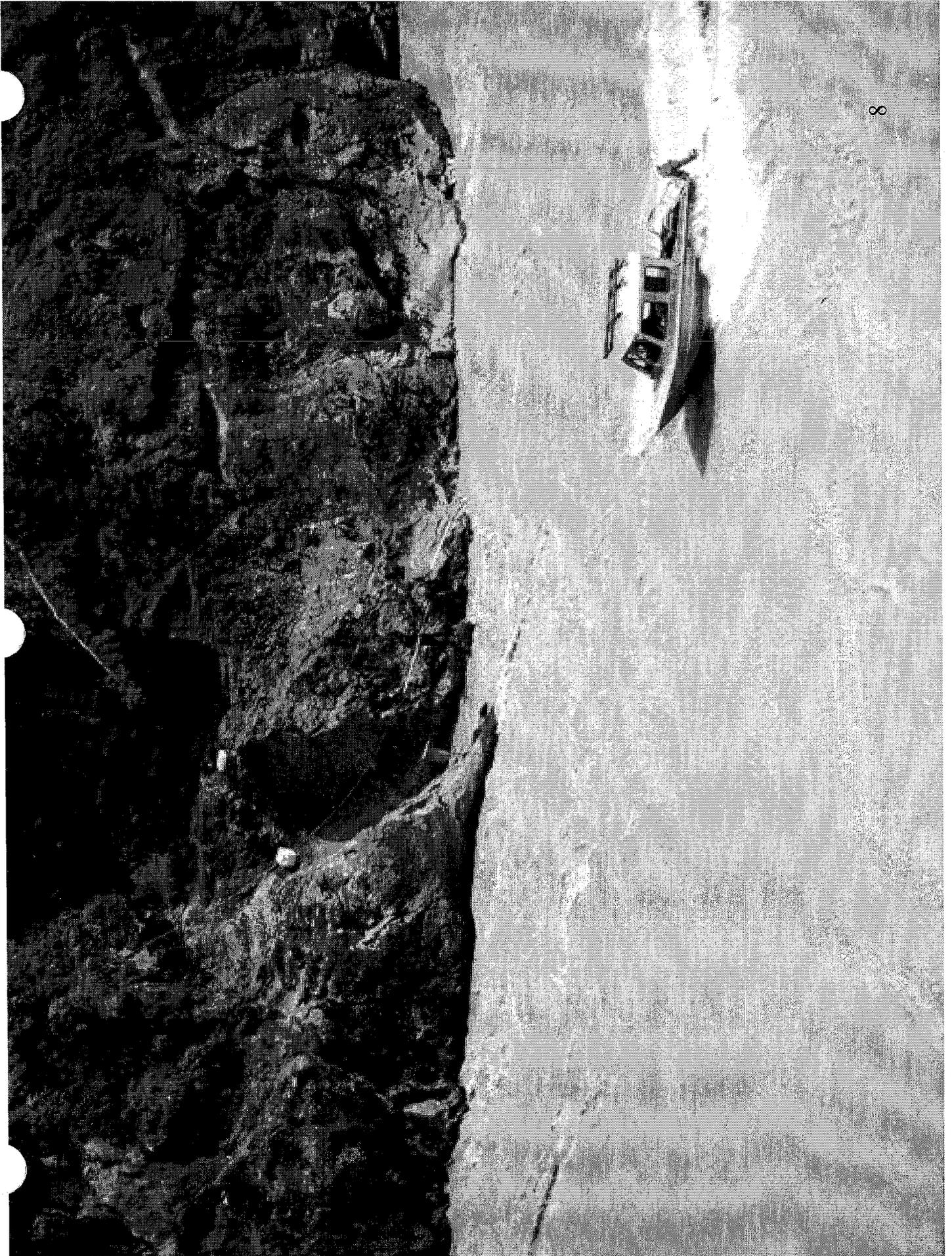
# Chitina Subdistrict Permits, 1990 to 2009



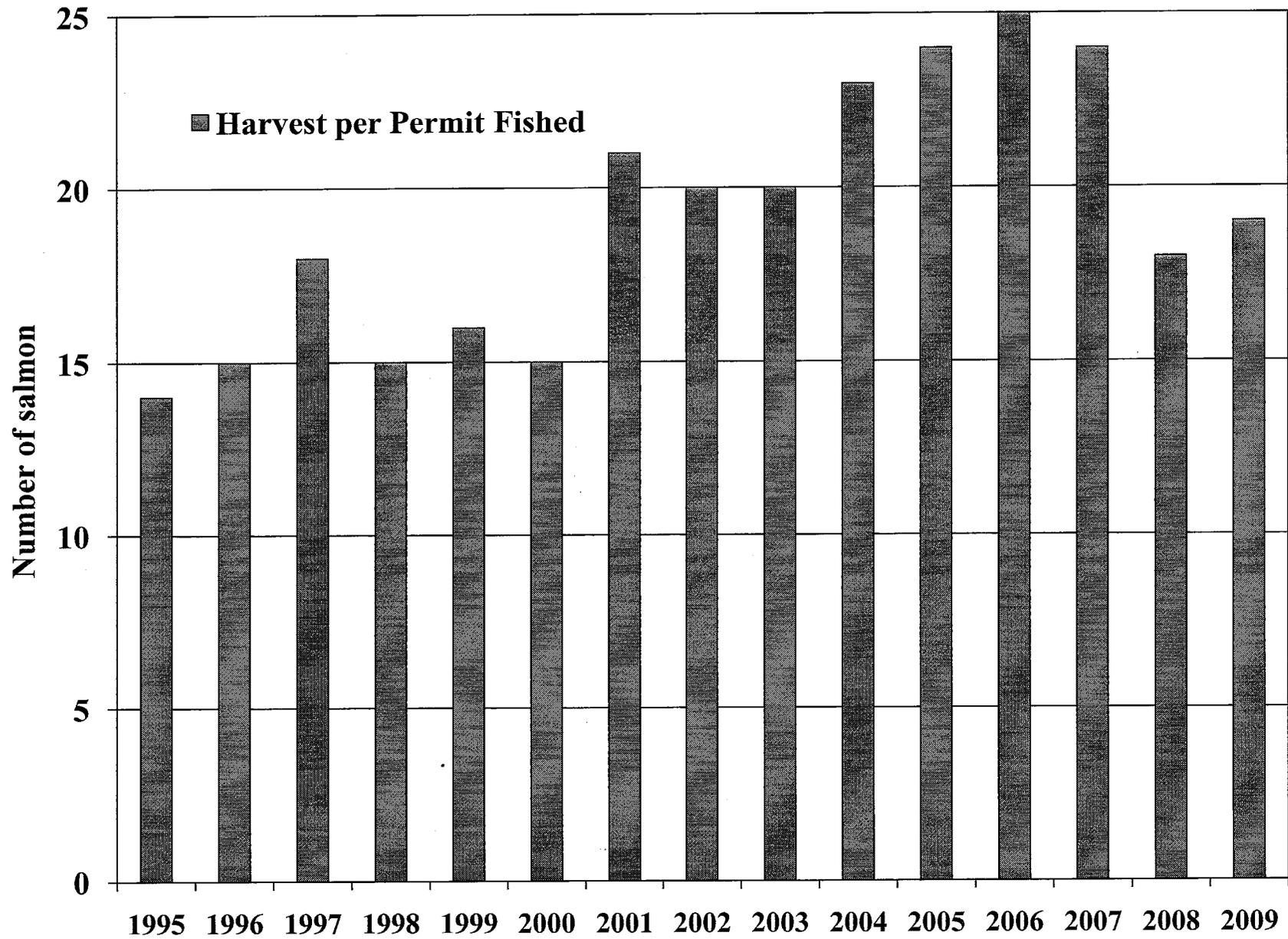
# Percentage of Chitina Subdistrict Permits Fished 1995-2009



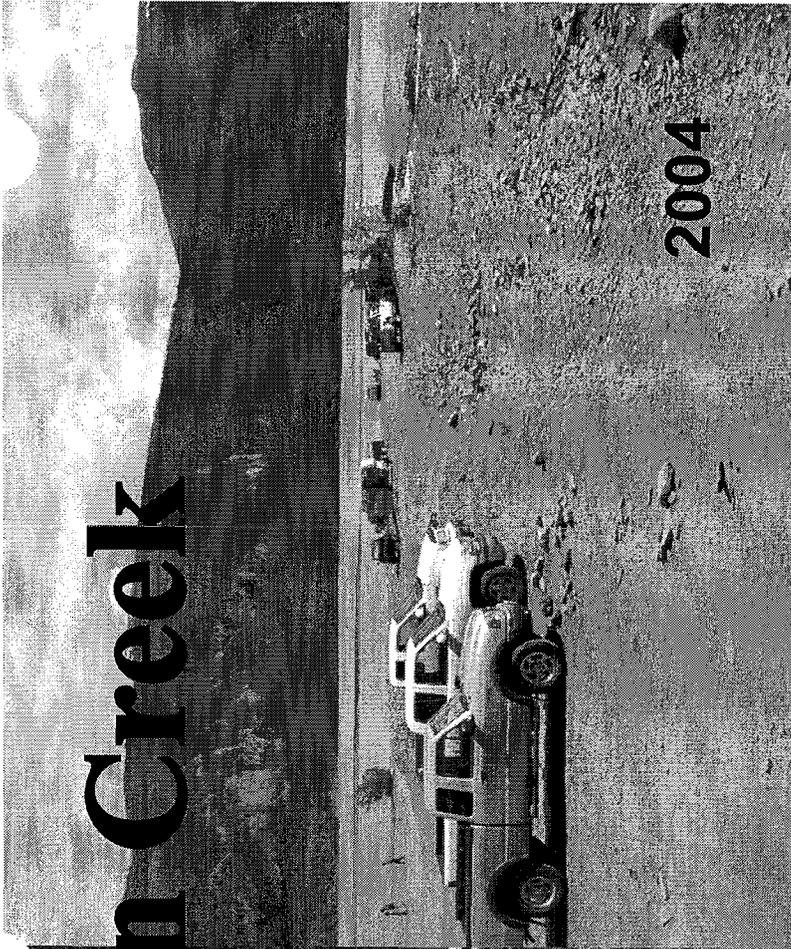




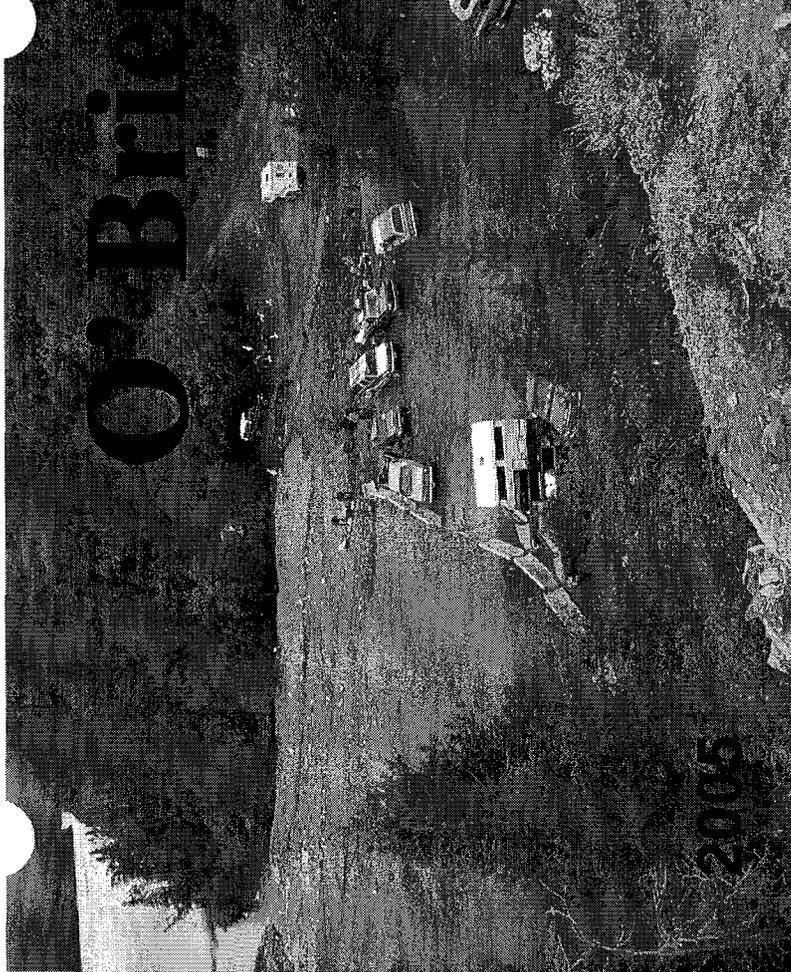
# Chitina Subdistrict Harvest per Permit, 1995-2009



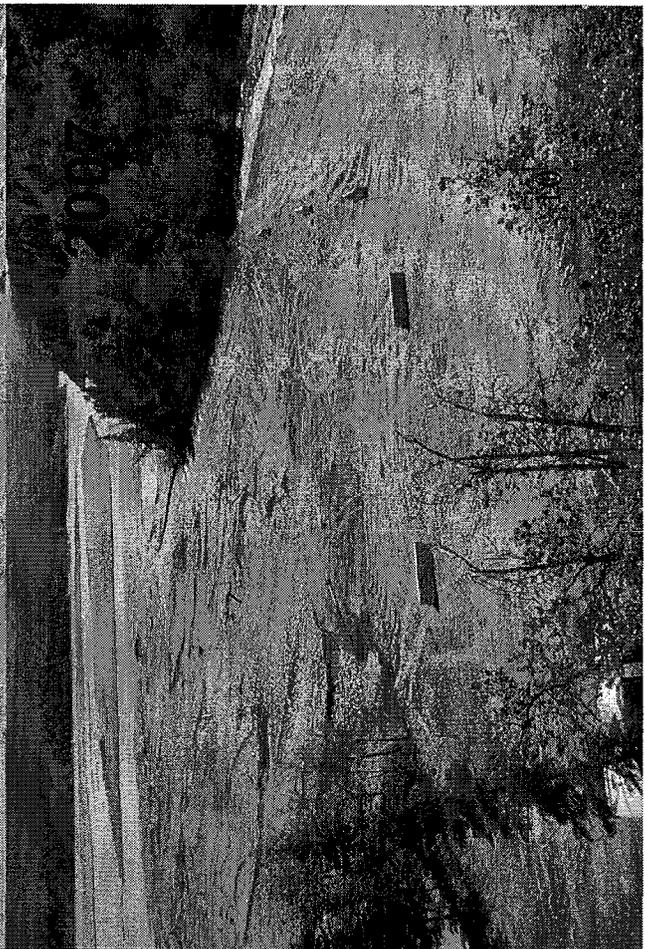
# O'Brien Creek



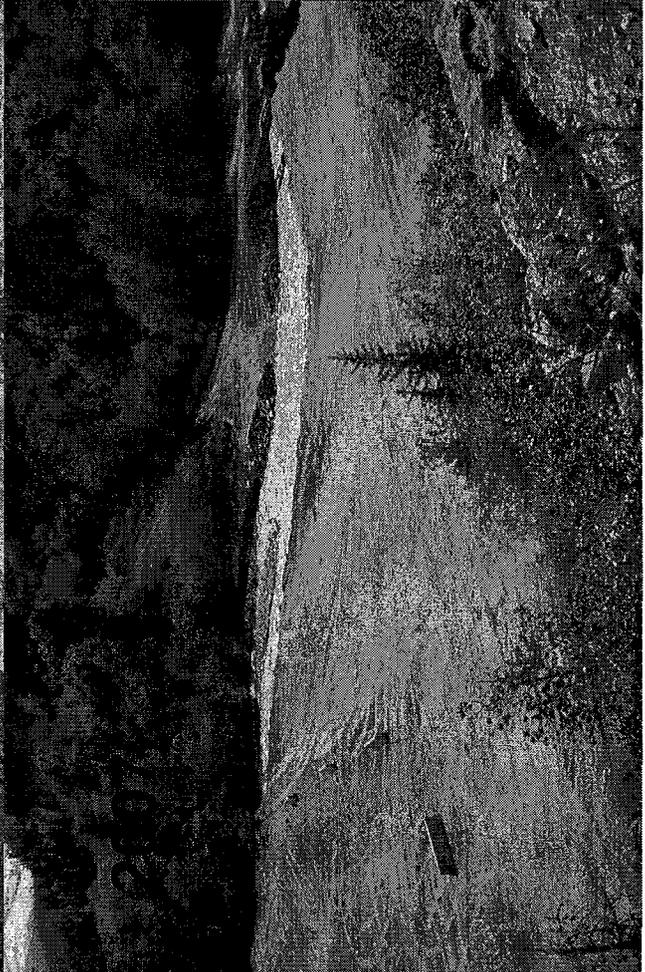
2004



2005



2007



2008

Special Publication No. 10-03

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**An Overview of the Chitina Subdistrict Personal Use  
Dip Net Fishery: A Report to the Alaska Board of  
Fisheries**

by

**Mark A. Somerville**

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March 2010

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

<b>Weights and measures (metric)</b>		<b>General</b>		<b>Measures (fisheries)</b>	
centimeter	cm	Alaska Administrative Code	AAC	fork length	FL
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	mid-eye to fork	MEF
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	mid-eye to tail fork	METF
hectare	ha	at	@	standard length	SL
kilogram	kg	compass directions:		total length	TL
kilometer	km	east	E		
liter	L	north	N	<b>Mathematics, statistics</b>	
meter	m	south	S	<i>all standard mathematical signs, symbols and abbreviations</i>	
milliliter	mL	west	W	alternate hypothesis	H <sub>A</sub>
millimeter	mm	copyright	©	base of natural logarithm	e
		corporate suffixes:		catch per unit effort	CPUE
		Company	Co.	coefficient of variation	CV
<b>Weights and measures (English)</b>		Corporation	Corp.	common test statistics	(F, t, $\chi^2$ , etc.)
cubic feet per second	ft <sup>3</sup> /s	Incorporated	Inc.	confidence interval	CI
foot	ft	Limited	Ltd.	correlation coefficient (multiple)	R
gallon	gal	District of Columbia	D.C.	correlation coefficient (simple)	r
inch	in	et alii (and others)	et al.	covariance	cov
mile	mi	et cetera (and so forth)	etc.	degree (angular)	°
nautical mile	nmi	exempli gratia		degrees of freedom	df
ounce	oz	(for example)	e.g.	expected value	E
pound	lb	Federal Information Code	FIC	greater than	>
quart	qt	id est (that is)	i.e.	greater than or equal to	≥
yard	yd	latitude or longitude	lat. or long.	harvest per unit effort	HPUE
		monetary symbols (U.S.)	\$, ¢	less than	<
		months (tables and figures): first three letters	Jan,...,Dec	less than or equal to	≤
<b>Time and temperature</b>		registered trademark	™	logarithm (natural)	ln
day	d	trademark	®	logarithm (base 10)	log
degrees Celsius	°C	United States (adjective)	U.S.	logarithm (specify base)	log <sub>2</sub> , etc.
degrees Fahrenheit	°F	United States of America (noun)	USA	minute (angular)	'
degrees kelvin	K	U.S.C.	United States Code	not significant	NS
hour	h	U.S. state	use two-letter abbreviations (e.g., AK, WA)	null hypothesis	H <sub>0</sub>
minute	min			percent	%
second	s			probability	P
				probability of a type I error (rejection of the null hypothesis when true)	α
<b>Physics and chemistry</b>				probability of a type II error (acceptance of the null hypothesis when false)	β
all atomic symbols				second (angular)	"
alternating current	AC			standard deviation	SD
ampere	A			standard error	SE
calorie	cal			variance	
direct current	DC			population	Var
hertz	Hz			sample	var
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***SPECIAL PUBLICATION NO. 10-03***

**AN OVERVIEW OF THE CHITINA SUBDISTRICT PERSONAL USE DIP  
NET FISHERY: A REPORT TO THE ALASKA BOARD OF FISHERIES**

by

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## ABSTRACT

A history of the status, management, and harvest in the Chitina Subdistrict fishery of the Upper Copper River District is presented. This information is provided as a reference for the Alaska Board of Fisheries (BOF), general public, and other interested parties. The Chitina Subdistrict personal use dip net fishery was established by the BOF in 1984. In 1999, the BOF ruled in favor of a positive customary and traditional use finding for salmon stocks of the Chitina Subdistrict and changed its status to a subsistence fishery. In 2003, the BOF reversed this decision and the Chitina Subdistrict fishery status returned to personal use. From 1999 to 2008, an average of 8,277 permits were issued and 116,431 salmon were harvested in the Chitina Subdistrict fishery. Sockeye salmon comprised over 95% of this harvest. From 2004 to 2008, the majority of permits were issued to residents of Fairbanks (45%), Anchorage (28%), the Mat-Su area (16%), and other communities across the state (10%). Only 1% of permits have been obtained by Copper River Basin residents. Participation in the Chitina Subdistrict fishery is dependent on access, river conditions, and salmon run strength in both Copper River and Cook Inlet drainages.

Key words: Chitina Subdistrict, Copper River, personal use, salmon, subsistence, fishery management, king, sockeye, coho, Alaska Board of Fisheries, dip net.

## FISHERY BACKGROUND AND HISTORICAL PERSPECTIVE

There is a long history of salmon harvested for personal needs in the Copper River drainage. Ahtna Natives took salmon, mostly king and sockeye, with funnel traps and spears in clearwater tributaries. Haley Creek was the site of one of many Ahtna traditional fishing camps along the Copper River. By 1920, fish wheels had replaced dip nets as the primary means of capturing salmon in the mainstem Copper River, but weirs and funnel traps were used in clearwater tributaries until the 1940s. The use of dip nets to capture salmon in the Copper River began to increase in the 1940's and 1950's as more residents from outside the Copper River Basin communities participated in the Copper River fisheries.

Historically, the taking of salmon for consumption as food or use as bait in the Copper River drainage has been governed under subsistence regulations (See Appendix A for a historical summary of Chitina Subdistrict regulations). Since 1960, participants in the Copper River subsistence fisheries have been required to have a subsistence fishing permit and record all salmon harvested in the Copper River by species, location, and date. In 1977, due to growth in the subsistence fishery, the Board of Fisheries (BOF) created the Chitina and Glennallen subdistricts. At this time, due to the potential "fishing power" from the large number of participants in the Chitina Subdistrict, fishing time for fish wheels was allowed only 4 days a week; dip nets were allowed 7 days a week. In the Glennallen Subdistrict fish wheels were allowed to operate 7 days a week. In 1978, Alaska passed its first subsistence law. This legislation recognized the "customary and traditional use" of fish and game harvest in Alaska and gave this harvest a priority over other harvests. The BOF adopted the *Copper River Subsistence Salmon Fisheries Management Plan* (5 AAC 01.647) in 1980. Under this plan, subsistence fishers were given one of four classes of permits depending upon their locality to the fishery, income, age, and past use. During times of low escapement, Copper River Basin residents received priority over non-basin residents. The current version of this management plan establishes seasons, open areas, legal gears, permit requirements, and bag limits for a subsistence salmon fishery in the Copper River. The plan also directs the Alaska Department of Fish and Game (department) to manage the Copper River commercial salmon fishery to ensure adequate spawning escapement and that upriver subsistence needs are met.

In 1980, the Alaska National Interest Lands Conservation Act (ANILCA) established a priority subsistence use of fish and game for federally-qualified rural residents on lands and waters for which the federal government asserts jurisdiction. The state of Alaska has also established a priority for subsistence use of fish and game by Alaskan residents (AS 16.05.258) on all lands and waters, but cannot discriminate between rural and urban residents (Alaska State Constitution Article VIII, sections 3 and 15). Because of this difference, the federal government asserted authority to ensure a priority subsistence use of fish and game for rural residents on federal lands and certain adjacent waters. To comply with ANILCA the Joint Boards of Fisheries and Game adopted a regulation in 1982 stating that only "rural" residents had "customary and traditional use" of fish and game and established eight criteria for identifying "customary and traditional uses." This regulation excluded many individuals from participating in Copper River subsistence fisheries, thereby precluding them from harvesting fish for their personal use. This led the BOF to establish personal use fisheries in 1982 (5 AAC 77.001). These fisheries were created to provide Alaskans who became ineligible to harvest fish under new subsistence regulations the opportunity to harvest fish for consumption as food or use as bait. Personal use fisheries, like commercial and sport fisheries, were not given a "priority" in terms of allocation as with subsistence fisheries. In 1989, the McDowell decision reversed the "rural preference" and once again allowed all Alaskan residents to participate in subsistence fisheries under state regulations.

Personal use fisheries differ from sport fisheries in both their objective and management. Both fisheries provide Alaskans the opportunity to harvest fish for personal consumption (in either fishery, fish cannot be sold or bartered), but personal use fisheries are managed to maximize harvest potential whereby sport fisheries are managed to provide diversity of opportunity. Anyone can participate in Alaska's sport fisheries (provided they have a sport fishing license), only Alaska *residents* may participate in personal use fisheries. The Division of Sport Fish manages most of the state's freshwater personal use fisheries, while the Division of Commercial Fisheries manages most of the subsistence fisheries and saltwater personal use fisheries. However, the Glennallen Subdistrict subsistence fishery in the Upper Copper River District is managed by the Division of Sport Fish.

In 1984, based on analyses of the eight-point criteria, the BOF created a personal use salmon fishery in the Copper River drainage under the *Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.590). At its December 1999 meeting, the BOF ruled in favor of a positive customary and traditional (C&T) determination for the Chitina Subdistrict and this fishery became a subsistence fishery (5 AAC 01.647(k)). Along with classifying the Chitina Subdistrict fishery as subsistence, the annual limit of king salmon was reduced from four king salmon to one king salmon. In February 2003, the BOF reversed its positive C&T determination for the Chitina Subdistrict and reinstated the *Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.591). The BOF viewed this as a name and allocation priority change only. Management of the fishery continued as it had prior to the 1999 ruling, based upon the number of fish passing the Miles Lake sonar. The king salmon annual limit for the fishery was left at one king salmon.

Harvests in the Copper River subsistence and personal use fisheries are dominated by sockeye salmon, followed by king and coho salmon (**Table 1**). Both subsistence and personal use salmon fisheries in the Copper River drainage have undergone changes since their inception. Currently, all Alaskans are eligible to participate in subsistence fisheries based on the McDowell decision in 1989. The Glennallen Subdistrict Subsistence Salmon Fishery occurs upstream of the Chitina-

McCarthy Bridge to Slana and can be prosecuted with fish wheels or dip nets. The season is open from June 1 through September 30, unless closed by emergency order. Only Alaska residents may participate in this subsistence fishery. A free subsistence permit is required to participate in the fishery. Users must record their harvest on their permit prior to leaving the fishing site and return the permit upon completing fishing for the season. The limits are 30 salmon for a household of one, 60 salmon for a household of two, and 10 salmon for each additional person in a household of more than two people. Individuals may request additional salmon up to a maximum of 200 salmon and households may request up to 500 salmon. For people using dip nets, only five of the salmon may be king salmon. A subsistence fishery for salmon, other than king salmon, is also allowed in a portion of Tanada Creek, near the traditional Ahtna Native fishing site of Batzulnetas, with spears and dip nets.

The Chitina Subdistrict Personal Use Dip Net Salmon Fishery is opened each year by emergency order between May 31 and June 12. The mainstem Copper River between the downstream edge of the Chitina-McCarthy Bridge and a department marker located about 200 yards upstream of Haley Creek (in Wood Canyon) is open to personal use fishing (Figure 1). Both a valid Alaska resident sport fishing license and a free personal use permit are required to participate in the fishery. From 1991 to 1999, a fee of \$10 was attached to the permit and from 2000 to 2003, the permit fee was \$25. A portion of this fee was paid to Ahtna and Chitina Native Corporations for access across their lands. Users must record their harvest on their permit prior to leaving the fishing site and return the permit when they are done fishing for the season or by October 15. The limits are 15 salmon for a single person and 30 salmon for a household of two or more, only one of which may be a king salmon. Only dip nets may be used to harvest salmon in this fishery. The BOF has mandated that a household may not be issued both a Copper River (Glennallen Subdistrict or Copper River District) subsistence salmon fishing permit and a Chitina Subdistrict personal use salmon fishing permit in the same year.

The BOF has authorized the department to manage the commercial salmon fishery to provide the following inriver goals for salmon escapement as measured at the Miles Lake Sonar (in 5 AAC 24.360(b)):

Spawning escapement (sockeye salmon)	300,000
Spawning escapement (other salmon)	17,500
Glennallen Subdistrict Subsistence Fishery	61,000–82,500
Chitina Subdistrict Personal Use Fishery	100,000–150,000
Sport Fishery	15,000
Hatchery brood stock (sockeye salmon)	Estimated annually
Hatchery surplus (sockeye salmon)	Estimated annually
Total	Announced annually

Hatchery brood stock and hatchery surplus are adjusted annually based on the anticipated return of wild and hatchery stocks. Prior to 1997, maximum harvest for the Chitina Subdistrict was 60,000 salmon, with 25% of fish in excess of the inriver goal allocated to the personal use fishery. From 1997-1999, maximum harvest for the Chitina Subdistrict was 100,000 salmon, excluding fish in excess of the inriver goal and not including any salmon harvested after August

31. In 1998, the BOF adopted a proposal that allows permit holders, who have filled their original limit, to take 10 additional sockeye salmon in weeks when a harvestable surplus of 50,000 salmon or greater will be available in the Chitina Subdistrict. This supplemental harvest is exclusive of the maximum harvest level. A supplemental harvest period has occurred at least once during the season in 10 of the 12 years since this provision was adopted (no supplemental periods occurred in 2003 and 2009). In 2000, following the 1999 BOF reclassification of the Chitina Subdistrict as a subsistence fishery, the harvest necessary to meet subsistence needs was determined to be 100,000–150,000 salmon. Based upon coded-wire tag recoveries from the commercial fishery, 85,000–130,000 salmon of this harvest are considered wild salmon.

In 2003, the BOF reversed its 1999 decision and reclassified the Chitina Subdistrict as a personal use fishery. This decision was based on new information provided by ADF&G Division of Subsistence on the use and users in the Chitina and Glennallen subdistricts. The harvest level and bag limits were left unchanged and weekly management of the fishery was still based on Miles Lake sonar counts. A provision that “if the Copper River District commercial salmon fishery is closed for 13 or more consecutive days, the maximum harvest level in the Chitina Subdistrict is reduced to 50,000 salmon” was removed from regulation when the fishery was classified as subsistence and was reinstated with the 2003 reclassification from subsistence to personal use.

All Alaska residents are eligible to participate in the Chitina Subdistrict fishery. A majority of participants come from Fairbanks, Anchorage, and the Mat-Su area (Palmer, Wasilla and surrounding communities) (Table 2). Participation in the Chitina Subdistrict fishery increased from 4,031 permits in 1986 to a peak of 10,006 permits issued in 1998 (Table 3). The total number of permits issued each year from 1999 to 2008 has averaged 8,277. When permits were issued only from the Chitina or Glennallen offices and required to be returned after each fishing trip (prior to 2000), over 90% of those permits were fished. Since 2001, Chitina Subdistrict permits have been issued from ADF&G offices in Glennallen, Delta Junction, Fairbanks, Palmer, and Anchorage and 40 to 50 vendors in Southcentral and Interior Alaska, and are required to be returned only at the end of the season. From 2002 - 2008, the average percentage of Chitina Subdistrict fishery permits actually fished was 64% and was 61% in 2009 (Table 3). Although the total number of permits issued in 2009 was 21% below the peak number of permits issued in 1998, actual participation, as measured by the number of permits actually fished in 2009, has dropped 48% since 1998. Several factors have probably played a role in decreased participation in the Chitina Subdistrict fishery. Since 2002, shore access to the fishery has diminished due to multiple landslides along the Copper River Highway easement. Although a land use fee associated with the permit was discontinued in 2004, conflicts over trespass on private lands has remained and reduced boat access to the fishery, causing some users to avoid the fishery. Finally, reduced fishery performance due to fluctuating Copper River water levels, poor return forecasts for the Copper River, and good fishery performance in Cook Inlet personal use fisheries, as well as increased travel costs have combined to reduce participation in the Chitina Subdistrict fishery in recent years.

## **FISHERY MANAGEMENT**

The *Copper River Personal Use Dip Net Salmon Fishery Management Plan* requires that harvest be distributed from June 1 through August 31, based upon projected sonar counts. The fishery is open by regulation for the month of September. A preseason schedule is established each year that sets weekly fishing periods for the Chitina Subdistrict fishery based on projected inriver

returns. Actual inriver returns are estimated in season by the sonar unit located at Miles Lake. When an escapement of more or less than the projected inriver goal of salmon actually passes the sonar counter, the BOF has mandated the department decrease or increase fishing time by the corresponding percentage. For management purposes, a weekly fishery period is from Monday through Sunday. Based upon previous migration studies, a two-week travel period from the Miles Lake sonar to Wood Canyon is used for management purposes from June through mid-July and a three-week travel period for mid-July until the sonar is removed. Any salmon above the projected daily salmon escapement are considered surplus. Since 1998, when the department determines that a weekly harvestable surplus of 50,000 salmon or more will be present in the Chitina Subdistrict, a supplemental permit for 10 additional fish is available to a permit applicant that has already met their annual limit. Actual fishing time tends to be less in June during the early portion of the salmon run and increases to continuous fishing as the run builds, and participation declines as the season progresses (Table 4).

The *Copper River Personal Use Dip Net Salmon Fishery Management Plan 5* AAC 77.591(f) stipulates that “the maximum harvest level for the Chitina Subdistrict personal use salmon fishery is 100,000 – 150,000 salmon, not including any salmon in excess of the inriver goal or salmon taken after August 31. If the Copper River District commercial salmon fishery is closed for 13 or more consecutive days, the maximum harvest level in the Chitina Subdistrict is reduced to 50,000 salmon.” This stipulation was first implemented during the 2008 season and led to reduced fishing hours in the Chitina Subdistrict during August of that year (Table 4). While the Chitina Subdistrict was designated as a subsistence fishery (2000–2002), this stipulation was repealed. In 2000 and 2002, the Copper River District commercial fishery was closed for over 13 days, but due to the subsistence classification at that time, no reduction in maximum harvest was made for the Chitina Subdistrict fishery.

Sockeye salmon comprise the majority of harvest in the Chitina Subdistrict. Since 1986, approximately 95% of the harvest has been sockeye salmon, 3% king salmon, and 2% coho salmon (Table 3). From 1999 to 2008, Chitina Subdistrict fishery participants harvested an average of 111,392 sockeye salmon, 2,819 king salmon, and 2,516 coho salmon. Over the last five years (2004 to 2008), the average harvest has been 112,854 sockeye salmon, 2,404 king salmon, and 2,415 coho salmon. In 2009, a total of 90,852 sockeye salmon, 222 king salmon, and 1,723 coho salmon were harvested which was well below the previous 5-year and 10-year averages. In 2009, retention of king salmon was prohibited in the Chitina Subdistrict personal use fishery after the first week of June due to a poor Copper River king salmon return, resulting in the below average king salmon harvest.

## **FISHERY OUTLOOK**

Participation in the Chitina Subdistrict fishery is expected to remain static at current levels into the foreseeable future. The Department of Transportation has no plans to repair the landslide damage to the Copper River Highway easement and therefore, shore and boat access to the fishery will remain limited. A strong sockeye return could result in an increase in participation in the Chitina Subdistrict especially if Cook Inlet personal use fisheries are restricted in the same season.



## **TABLES AND FIGURES**

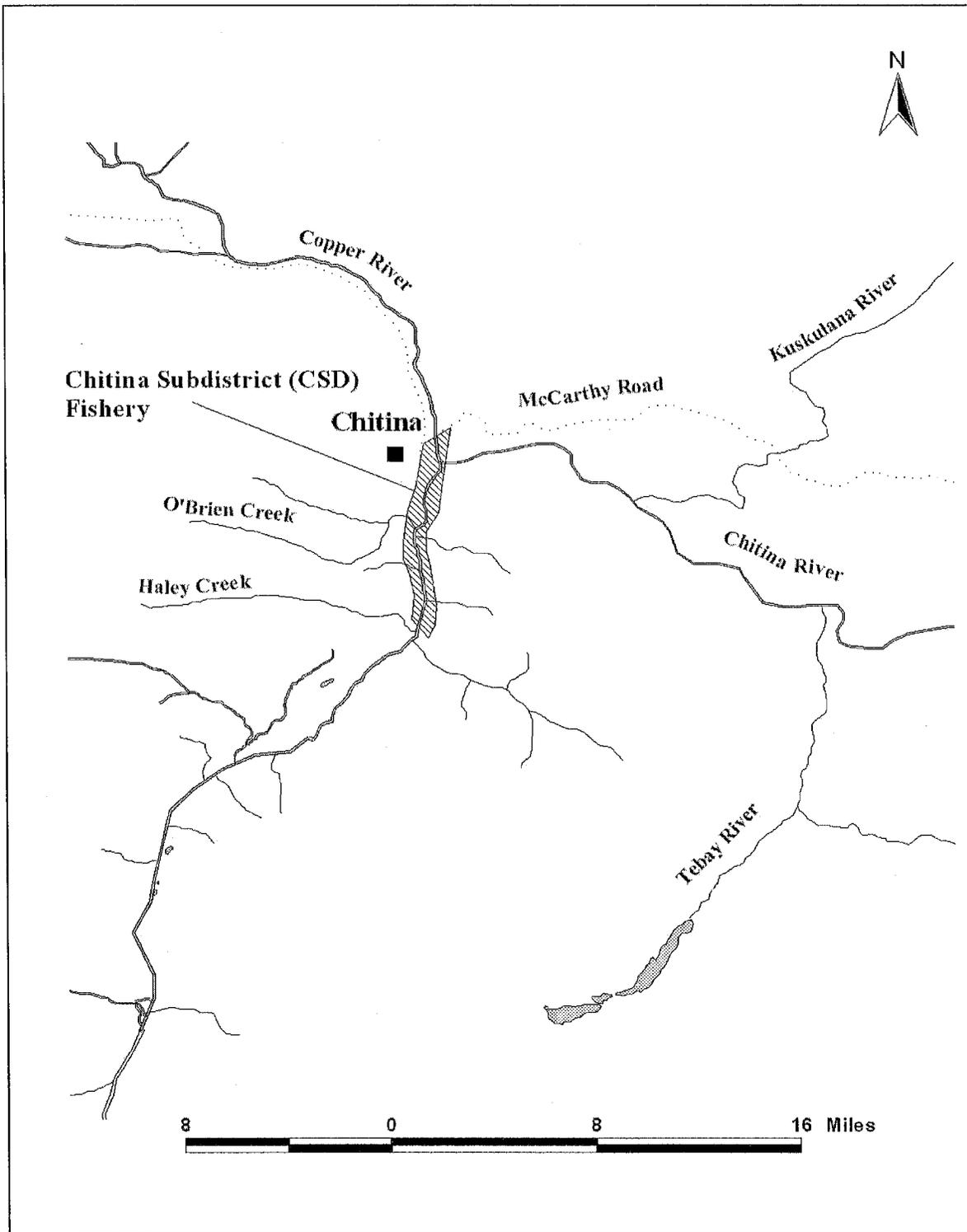


Figure 1.—Map of the Chitina Subdistrict.

Table 1.—Estimated subsistence and personal use (Glennallen and Chitina Subdistricts) harvests of king, sockeye, and coho salmon in the Copper River, 1977–2009.

Year	Salmon Harvest			Total
	King	Sockeye	Coho	
1977	2,555	41,978	523	45,056
1978	2,239	25,783	675	28,697
1979	3,416	33,096	928	37,440
1980	3,035	31,041	822	34,898
1981	2,410	65,168	1,077	68,655
1982	2,764	105,432	1,361	109,557
1983	5,950	110,794	1,855	118,599
1984	2,269	76,177	884	79,330
1985	1,958	61,551	655	64,164
1986	3,053	68,495	829	72,377
1987	3,781	76,598	585	80,964
1988	3,986	71,525	876	76,387
1989	3,038	84,138	926	88,102
1990	3,355	98,197	1,603	103,155
1991	5,384	117,189	3,586	126,159
1992	4,854	131,956	1,867	138,677
1993	4,280	146,724	1,493	152,497
1994	5,732	162,302	2,041	170,075
1995	6,599	131,522	5,752	143,873
1996	5,066	147,059	3,938	156,063
1997	8,030	231,534	347	239,911
1998	8,565	201,624	2,678	212,867
1999	9,191	219,027	3,249	231,467
2000	7,755	167,353	4,189	179,297
2001	6,666	215,895	3,874	226,435
2002 <sup>a</sup>	6,273	145,343	2,545	154,161
2003 <sup>a</sup>	5,013	142,108	3,222	150,343
2004 <sup>a</sup>	6,484	181,741	3,607	191,832
2005 <sup>b</sup>	4,712	208,603	2,210	215,525
2006 <sup>b</sup>	5,910	200,866	2,975	209,751
2007 <sup>b</sup>	6,661	209,492	2,078	218,231
2008 <sup>b</sup>	5,240	139,950	3,533	148,723
2009 <sup>a</sup>	3,209	149,537	1,984	154,730
<b>2004-2008 average</b>	<b>5,801</b>	<b>188,130</b>	<b>2,881</b>	<b>196,812</b>
<b>1999-2008 average</b>	<b>6,391</b>	<b>183,038</b>	<b>3,148</b>	<b>192,577</b>

<sup>a</sup> Includes reported federal fishery harvests in the Glennallen and Chitina subdistricts, and Batzulnetas.

<sup>b</sup> Includes estimated federal fishery harvests in the Glennallen and Chitina subdistricts

Table 2.—Percentage<sup>a</sup> of Chitina Subdistrict permits issued by area, 1988–2009.

Year	CR Basin	Anchorage	Fairbanks	Mat-Su	Other	Permits Issued
1988	1	29	53	8	9	4,251
1989	0	32	50	8	8	4,582
1990	0	34	47	9	9	5,689
1991	1	36	46	11	7	6,222
1992	1	34	46	10	9	6,385
1993	1	37	42	11	8	7,914
1994	1	34	45	11	9	7,061
1995	1	34	44	12	9	6,760
1996	1	34	43	13	9	7,198
1997	1	37	38	15	9	9,086
1998	1	37	38	16	9	10,006
1999	1	35	39	17	9	9,943
2000	1	34	40	17	9	8,151
2001	1	35	39	17	8	9,463
2002	1	30	45	16	9	6,804
2003	1	30	46	15	9	6,441
2004	1	29	43	18	9	8,156
2005	0	26	46	15	13	8,230
2006	1	27	45	16	10	8,497
2007	1	28	46	16	9	8,377
2008	1	29	43	16	11	8,041
2009	1	29	42	18	10	8,020
<b>2004–2008 Average</b>	1	28	45	16	10	8,260
<b>1999–2008 Average</b>	1	30	43	16	10	8,210

<sup>a</sup> Percentage based on state issued permits only. Federally qualified residents may hold permits for both the Glennallen and Chitina subdistricts.

Table 3.—Allocation and estimated state and federal harvest of salmon in Chitina Subdistrict fisheries, 1984–2009<sup>a</sup>.

Year	Allocation	Permits			King	Sockeye	Coho	Steelhead	Other	Total Harvest	Harvest per Issued Permit
		Issued <sup>b</sup>	Fished	Percent Fished							
1984	60,000	5,415			1,760	48,236	717	0	20	50,734	9
1985	No Data										
1986	60,000	4,031			2,367	41,054	538	0	89	44,047	11
1987	60,000	4,245			2,968	43,492	424	0	24	46,908	11
1988	60,000	4,251			2,994	42,331	504	1	25	45,855	11
1989	60,000	4,582			2,251	55,778	857	25	31	58,941	13
1990	60,000	5,689			2,708	66,432	1,511	24	137	70,812	12
1991	60,000	6,222			4,056	77,590	3,354	12	46	85,059	14
1992	60,000	6,385			3,405	86,724	1,517	31	5	91,683	14
1993	60,000	7,914			2,846	93,472	1,416	14	19	97,767	12
1994	60,000	7,061			3,743	94,024	1,981	36	39	99,822	14
1995	60,000	6,760	6,266	92.7%	4,707	79,006	4,870	21	13	88,617	13
1996	60,000	7,198	6,735	93.6%	3,584	95,007	3,381	90	46	102,108	14
1997	100,000	9,086	8,689	95.6%	5,447	148,727	160	3	12	154,349	17
1998	100,000	10,006	9,492	94.9%	6,723	137,161	2,145	0	46	146,075	15
1999	100,000	9,943	9,271	93.2%	5,913	141,658	2,128	0	34	149,779	15
2000	100 - 150,000	8,151	7,216	88.5%	2,899	107,856	3,657	0	203	108,099	13
2001	100 - 150,000	9,463	6,644	70.2%	3,113	132,108	2,720	0	484	138,425	15
2002	100 - 150,000	6,926	4,480	64.7%	2,056	86,543	1,934	0	317	90,850	13
2003	100 - 150,000	6,541	4,257	65.1%	1,921	81,485	2,603	0	264	86,273	13
2004	100 - 150,000	8,265	4,955	60.0%	2,502	108,527	2,878	0	509	114,416	14
2005	100 - 150,000	8,306	5,330	64.2%	2,094	122,463	1,869	0	478	126,904	15
2006	100 - 150,000	8,572	5,291	61.7%	2,681	124,810	2,735	0	464	130,690	15
2007	100 - 150,000	8,475	5,549	65.5%	2,722	126,154	1,783	0	660	131,319	15
2008	100 - 150,000	8,123	4,803	59.1%	2,022	82,318	2,811	0	407	87,558	11
2009	100 - 150,000	8,088	4,830	60.7%	222	90,852	1,723	0	267	93,064	12
<b>2004-2008<sup>c</sup></b>		8,348	5,186	62.1%	2,404	112,854	2,415	0	504	118,177	14
<b>1999-2008<sup>c</sup></b>		8,277	5,780	69.8%	2,792	111,392	2,512	0	382	116,431	14

<sup>a</sup> Harvest numbers from 2002 – 2004 and 2009 include estimated state personal use harvest and reported federal subsistence harvest (not expanded to account for non-respondents) and from 2005-2008 they include estimated state personal use harvest and estimated federal subsistence harvest.

<sup>b</sup> Includes both state and federal permits from 2002 – 2009. (The number of federal permits issued in a year ranges from 68-122). The federal government began issuing separate permits beginning in 2002 when federal and state subsistence regulations diverged.

<sup>c</sup> Average for years depicted.

Table 4.—Actual hours of fishing time per weekly period in the Chitina Subdistrict dip net fishery, 1997–2009.

Fishing Period <sup>a</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average 04-08	Average 99-08
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	32	36	36	12	156	36	112	90	104	56	36	72	156	72	71
3	144	108	36	80	168	156	168	168	168	168	168	168	168	168	145
4	168	168	104	80	168	168	168	168	168	168	168	168	150	168	153
5	168	168	112	112	132	120	168	168	168	168	168	168	168	168	148
6	168	168	168	168	128	84	168	168	168	168	168	168	168	168	156
7	168	168	168	168	168	112	168	168	168	168	168	168	150	168	162
8	168	168	168	168	168	168	136	168	168	168	168	168	150	168	165
9	168	168	168	168	168	168	144	168	168	168	168	168	168	168	166
10	168	168	168	168	168	168	96	168	168	168	168	120	168	158	156
11	168	168	168	168	168	168	96	168	136	168	168	144	168	157	155
12	168	168	168	168	168	168	168	168	168	168	168	132	168	161	164
13	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168
14	168	168	168	168	168	168	168	168	168	168	168	84	168	151	160
15	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168
16	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168
17	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168
18	168	168	96	144	168	168	168	168	168	144	168	144	168	158	154
Total	2,696	2,664	2,400	2,444	2,768	2,524	2,600	2,778	2,760	2,720	2,723	2,544	2,790	2,758	2,657

<sup>a</sup> By regulation, salmon may be harvested in the Chitina Subdistrict from June 1 to September 30. Fishing Period 1 represents the first week in June the fishery could open by regulation and often is not a full 7-day week. Similarly, Fishing Period 18 represents the last week in September and is also not necessarily a full 7-day week.

## **APPENDIX A**

### **CHITINA SUBDISTRICT, PERSONAL USE**

The Chitina Subdistrict Personal Use Salmon Fishery was established in 1984.

#### **Regulations as of 1987:**

- Salmon could be taken in the personal use fishery only in the Chitina Subdistrict from June 1 through September 30 only during periods established by emergency order.
- Chitina Subdistrict was described as: all waters of the mainstem Copper River from the downstream edge of the Chitina-McCarthy Road Bridge downstream to an east-west line across the Copper River at the upstream side of Haley Creek, as designated by ADF&G markers and also on the east side of the river from the upstream edge of the bridge to an ADF&G marker ¼ mile upstream.
- Lawful gear was by dip net or fish wheel.
- Only one type of gear allowed per permit.
- Dip nets were only allowed in the Chitina Subdistrict downstream from the Chitina-McCarthy Road Bridge.
- Fish wheels were only allowed on the east side, for ¼ mile upstream of Chitina-McCarthy Road Bridge.
- Each personal use fishwheel operator must closely attend the wheel when it is in use.
- A personal use permit was required. Only one permit allowed per household. Must also have Alaska resident sport fishing license. A household which has already been issued a Copper River District subsistence permit may not be issued a Chitina Subdistrict personal use salmon fishing permit.
- Marking of salmon: both lobes of caudal or tail fin must be immediately removed. (Under Statewide Provisions.)
- There was a total annual limit of 15 salmon for a household of one, and 30 for a household of more than one.
- If the Copper River personal use harvest was less than 45,000 by the end of the fifth week, then the above limits were increased to 20 for individual, 40 for a household of two, and 15 salmon for each additional person in a household of more than two.

#### **Management Plan:**

- Maximum personal use harvest of 60,000 through August 31.
- The department shall manage the personal use fishery to apportion the 60,000 as follows:
  - Week 1            10%

Week 2	20%
Week 3	25%
Week 4	20%
Week 5	15%

The remaining 10% may be taken during the rest of the season.

- The escapement goal passing the sonar was 401,000, plus hatchery brood and surplus salmon determined by the department annually.
- When more than the escapement goal passed the sonar counter, then 25% of the excess is allocated to the personal use fishery.
- The opening of the personal use fishery may be delayed up to 10 days, depending upon the strength and timing of the sockeye salmon run.

**1989:**

- A limit of five king salmon per permit was added to regulation.

**1991:**

- Chitina Subdistrict upper boundary description was changed to no longer contain any waters upstream of Chitina-McCarthy Road Bridge.
- Lawful gear became exclusively dip nets.
- Sonar escapement goal was increased to 516,000.
- A \$10 fee was required for Chitina Subdistrict personal use permit.

**1997:**

**Management Plan:**

- The commissioner shall establish a preseason schedule, June 1 through August 31, based on daily sonar counts. Adjustments shall be made to the schedule based on actual sonar counts compared to projected counts.
- The area within the Chitina Subdistrict open to dipnetting was defined to be from the downstream edge of the Chitina-McCarthy Road Bridge downstream to ADF&G markers approximately 200 yards upstream of Haley Creek.
- Maximum personal use harvest increased to 100,000 salmon, not including any salmon in excess of the inriver goal or salmon taken after August 31.
- Total annual limit was set at 15 for individual and 30 for household of more than one.
- Personal use king salmon limit reduced to four per household permit.
- Rainbow or steelhead trout must be released.
- Marking of salmon was listed under area regulations: both lobes of caudal or tail fin must be immediately removed. (Repealed back to Statewide Provisions after this season.)

**1998:**

**Management Plan:** (additions to the existing plan)

- Supplemental permits for 10 additional sockeye shall be available when the department determines that a weekly harvestable surplus of 50,000 salmon or greater will be present in the Chitina Subdistrict. An additional supplemental permit may be issued to a permittee who has met the limits of a previously issued supplemental permit.
- If the Copper River District commercial fishery is closed for 13 or more consecutive days, then the maximum harvest level in the Chitina Subdistrict is reduced to 50,000 (from 100,000).

**2000:**

- Personal use fishery was repealed as a result of a positive C&T finding (December 1999 BOF) and re-classified as a subsistence fishery.

**2003:**

- Personal use fishery was re-instated as a result of a negative C&T finding (December 2003 BOF).

**2004:**

- Permit fee repealed.

**CHITINA SUBDISTRICT, SUBSISTENCE**

**In effect as of 1984:**

- The Chitina Subdistrict consisted of all waters of the mainstem Copper River from the downstream edge of the Chitina-McCarthy Road Bridge downstream to an east-west line crossing the Copper River at the confluence of the unnamed stream located approximately 1-1/4 mile below the U.S.G.S. gauging cable across the Copper River, as designated by the ADF&G regulatory markers. (The Upper Copper River District also had this downstream boundary.)
- Salmon could be taken in the Chitina Subdistrict only when that subdistrict was open to personal use salmon fishing.
- Salmon could not be taken under a subsistence permit on the east side of the Copper River from the upstream edge of the Chitina-McCarthy Road Bridge upstream to the ADF&G regulatory marker located 1/4 mile upstream of the bridge.
- Gear was limited to dip net.
- Only one subsistence fishing permit could be issued to each household per year. A household that was already issued an Upper Copper River District subsistence permit could not be issued a Chitina Subdistrict personal use salmon fishing permit.
- Permits had to be returned to the department no later than October 31 or a permit for the following year could be denied.

- Marking of subsistence salmon: dorsal fin had to be immediately removed.
- Participation was limited. A subsistence permit for the Upper Copper River District could be issued only to those persons domiciled in Game Management Units 11, 13-A, 13-B, 13-C, and 13-D, the Jacksina River drainage, and the communities of Tetlin, Northway, Dot Lake, Tanacross, and Tok.
- Total annual possession limit for an Upper Copper River District subsistence salmon fishing permit was 30 salmon for a household of one, 60 for a household of two persons, and 10 salmon for each additional member of the household. Upon request, permits could be issued for additional salmon of no more than a total of 200 salmon for a household of one and no more than 500 salmon for a household of two or more.

**1986:**

- The Chitina Subdistrict consisted of all waters of the Upper Copper River District downstream of the downstream edge of the Chitina-McCarthy Road Bridge to an east-west line crossing the Copper River approximately 200 yards upstream of Haley Creek as designated by ADF&G regulatory markers and the east side of the Copper River upstream of the upstream edge of the bridge to an ADF&G marker located ¼ mile upstream of the bridge.

**1991:**

- The Chitina Subdistrict was closed to subsistence fishing. Personal use fishing continued.
- The Chitina Subdistrict no longer contained waters on the east side of the Copper River upstream of the Chitina-McCarthy Road Bridge.

**2000 - 2002:**

- Personal use fishery was repealed as a result of positive C&T finding (December 1999 BOF) and re-classified as subsistence.
- The commissioner would establish a preseason schedule, June 1 through August 31, based on daily projected sonar counts. Adjustments would be made to the schedule based on actual sonar counts compared to projected counts.
- The area within the Chitina Subdistrict open to dipnetting was defined to be from the downstream edge of the Chitina-McCarthy Road Bridge downstream to the ADF&G markers approximately 200 yards upstream of Haley Creek.
- Maximum harvest was set at 100,000–150,000 salmon, not including any salmon in excess of the inriver goal or salmon taken after August 31.
- Salmon could be taken from June 1 through Sept. 30.
- Total seasonal limit was 15 for individual and 30 for household of more than one.

- A household could not be issued both a Glennallen Subdistrict subsistence salmon fishing permit and a Chitina Subdistrict subsistence salmon fishing permit.
- A \$25 fee was required for a permit.
- King salmon limit was one.
- Marking of subsistence salmon: both tips (lobes) of the tail fin (caudal) must be immediately removed.
- Rainbow or steelhead trout must be released.
- If the department determined that a weekly harvestable surplus of 50,000 salmon or greater was present in the Chitina Subdistrict then supplemental permits for 10 additional sockeye would be available to permit holders that met the seasonal limit. An additional supplemental permit could be issued to a permittee who met the limits of a previously issued supplemental permit.