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ALASKA DEPARTMENT OF FISH AND GAME

STAFF COMMENTS ON
REGULATORY PROPOSALS,
COMMITTEE OF THE WHOLE—GROUPS 1–8

FOR THE SOUTHEAST and YAKUTAT FINFISH and SHELLFISH
ALASKA BOARD OF FISHERIES MEETING
SITKA, ALASKA
January 11–January 23, 2018

Regional Information Report No. 1J17-12

The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Fisheries (board) meeting, February 23–March 3, 2015 in Sitka, Alaska. The comments are forwarded to assist the public and board. The comments contained herein should be considered preliminary and subject to change as new information becomes available. Final department positions will be formulated after review of written and oral public testimony presented to the board.

Acronyms and Abbreviations

The following acronyms and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Commercial Fisheries, Sport Fish, and Subsistence: 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.

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Acronyms

Acceptable Biological Catch	ABC
Alaska Board of Fisheries	board
Alaska Department of Fish and Game	department /ADF&G
Amount Necessary for Subsistence	ANS
Alaska Wildlife Troopers	AWT
Biological Escapement Goal	BEG
Central Gulf of Alaska	CGOA
Coded Wire Tag	CWT
Commercial Fisheries Entry Commission	CFEC
Cook Inlet Aquaculture Association	CIAA
Customary and Traditional	C&T
Department of Natural Resources	DNR
Demersal Shelf Rockfish	DSR
Emergency Order	EO
Guideline Harvest Level	GHL
Gulf of Alaska	GOA
Global Positioning System	GPS
Individual Fishing Quota	IFQ
Local Area Management Plan	LAMP
Lower Cook Inlet	LCI
Mean Low Water	MLW
Mean Lower Low Water	MLLW
No Data	ND
National Marine Fisheries Service	NMFS
National Oceanic and Atmospheric Administration	NOAA
Nick Dudiak Fishing Lagoon	NDFL
North Pacific Fishery Management Council	NPFMC
Optimum Escapement Goal	OEG
Pelagic Shelf Rockfish	PSR
Prince William Sound	PWS
Prior Notice of Landing	PNOL
Private Nonprofit Salmon Hatchery	PNP
River Mile	RM
Special Harvest Area	SHA
Sustainable Escapement Goal	SEG
Trail Lakes Hatchery	TLH
Upper Cook Inlet	UCI
Western Gulf of Alaska	WGOA

REGIONAL INFORMATION REPORT 1J17-12

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FOR THE SOUTHEAST AND YAKUTAT FINFISH AND SHELLFISH ALASKA BOARD OF FISHERIES MEETING

SITKA, ALASKA

JANUARY 11–JANUARY 23, 2018

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, AK 99518–1565

December 2017

ABSTRACT

This document contains Alaska Department of Fish and Game (department) staff comments on commercial, sport, subsistence, and personal use finfish and shellfish regulatory proposals for Southeast Alaska and Yakutat. These comments were prepared by the department for use at the Alaska Board of Fisheries (board) meeting, January 11–January 23, 2018, in Sitka, Alaska. The comments are forwarded to assist the public and board. The comments contained herein should be considered preliminary and subject to change as new information becomes available. Final department positions will be formulated after review of written and oral public testimony presented to the board.

Key words: Alaska Board of Fisheries (board), Alaska Department of Fish and Game (department) staff comments, Southeast Alaska, Yakutat, finfish, shellfish management, management plan, regulatory proposals, inriver, subsistence, personal use, sport, guided sport, commercial fisheries, biological escapement goal (BEG), sustainable escapement goal (SEG), optimal escapement goal (OEG)

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018

Proposal No.	Dept. Position	Issue	Page No.
53	S	Clarify regulations related to the sale of buoy tags to commercial Dungeness crab fishery permit holders.	1
54	N	Reduce the maximum number of pots per vessel in the Southeastern Alaska Area commercial Dungeness crab fishery from 300 pots to 240 pots.	2
55	N	Increase the maximum number of pots per vessel in the Southeastern Alaska Area commercial Dungeness crab fishery from 300 pots to 400 pots.	4
56	N	Close waters of Twelvemile Arm to commercial fishing for Dungeness crab.	6
57	N	Close waters in the Klawock vicinity to sport fishing for Dungeness crab.	17
58	N	Close waters in the Klawock vicinity to sport fishing for Dungeness crab.	17
59	S	Close the Yakutat Area Dungeness crab sport fishery.	19
60	N/O	Establish a guided sport ecotourism Dungeness crab fishery in Sitka Sound.	20
61	N	Expand waters of king and Tanner crab Registration Area A to include all waters from zero to 200 miles offshore.	23
62	N	Expand waters of king and Tanner crab Registration Area D to include all waters from zero to 200 miles offshore.	26
63	O	Open an exploratory commercial red king crab fishery in specific areas during years of low estimated abundance.	28
64	N/O	Manage the Southeastern Alaska Area commercial red king crab fishery under an equal quota share when harvestable surplus is less than 200,000 pounds.	32
65	O	Expand fishing area for the Southeastern Alaska Area commercial golden king crab fishery.	36
66	O	Implement weather-related fishery closure delays for the Southeastern Alaska Area commercial golden king crab fishery.	40
67	S	Establish a regulatory closure date for the Southeastern Alaska Area commercial golden king crab fishery.	42
68	O	Define methods used to set guideline harvest levels in the Southeastern Alaska Area commercial golden king crab fishery.	44
69	S	Reduce Southeastern Alaska Area commercial golden king crab fishery guideline harvest ranges.	46
70	S	Reduce the Southeastern Alaska Area commercial golden king crab fishery pot limit from 100 pots per vessel to 80 pots per vessel.	52
71	S	Allow operation of commercial, subsistence, sport, or personal use pots in the 14 days after closure of the Southeastern Alaska Area commercial Tanner crab fishery.	55
72	O	Re-define ‘non-core’ areas and define ‘exploratory’ areas in the Southeastern Alaska Area commercial Tanner crab fishery.	56
73	N	Manage the Southeastern Alaska Area commercial Tanner crab fishery using an equal quota share.	62
74	N/O	Establish a Tanner crab fishery in a section of the Yakutat District.	65
75	O	Reopen the personal use shrimp fishery in Section 11-A.	69
76	O	Establish mesh size requirements for Southeast Alaska Area sport fishing shrimp pots.	72
77	S	Amend shellfish methods and means and rescind unnecessary abalone regulations.	74

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018 (page 2 of 6).

Proposal No.	Dept. Position	Issue	Page No.
78	S	Add sections for Districts 6, 8, and 10 and provide shrimp fishery guideline harvest ranges for the new areas.	75
79	S	Repeal winter commercial shrimp fishery and modify fishing season for the Southeastern Alaska Area commercial shrimp fishery to avoid egg bearing shrimp.	77
80	N	Reduce the maximum number of pots per vessel, limit the number of pots per string and pot spacing, and limit gear to one operation cycle per day in the Southeastern Alaska Area commercial shrimp fishery.	78
81	N	Allow commercial shrimp pots in the Southeastern Alaska Area to be pulled only one time per day.	80
82	N	Close the Section 11-A commercial shrimp fishery.	82
83	N	Close waters of Section 11-A to commercial fishing for shrimp and red king crab.	85
84	N	Close additional waters in District 2 to commercial pot shrimp fishing.	89
85	S	Expand current beam trawl shrimp fishery logbook requirement to cover all fishing areas.	91
86	O	Open fishing areas deemed to have stable sea cucumber populations to commercial harvest of sea cucumbers without a pre-fishery stock assessment survey.	92
87	O	Open waters of a number of fishing areas previously closed to commercial sea cucumber harvest.	94
88	O	Modify the method for establishing the guideline harvest level in the Southeastern Alaska Area commercial sea cucumber fishery.	98
89	O	Modify the method for establishing the guideline harvest level in the Southeastern Alaska Area commercial geoduck fishery.	100
90	O	Open previously non-surveyed fishing areas to a limited commercial harvest of geoducks without a pre-fishery stock assessment survey.	102
91	N	Establish a weekly geoduck harvest limit of 1,000 pounds per diver in the Southeastern Alaska Area.	104
92	S	Remove guideline harvest range for District 16 scallops and set one guideline harvest range for all of Scallop Registration Area D.	105
93	O	Establish a commercial fishery for squid, using purse seine gear, in the Southeastern Alaska Area.	108
94		Reduce the amount of herring spawn reasonably necessary for subsistence in Sitka Sound.	293
95	N	Repeal the commercial sac roe herring fishery in Sections 15-B and 15-C.	297
96	N	Repeal the commercial sac roe herring fishery in Section 11-A.	297
97	N	Open the Southeastern Alaska Area winter commercial food and bait herring fishery on December 1.	299
98	N	Reduce harvest rate for commercial herring fisheries in the Southeastern Alaska Area.	300
99	N	Reduce maximum harvest rate used to establish the commercial sac roe herring fishery guideline harvest level in Sections 13-A and 13-B from 20% of the spawning biomass to 10% of the spawning biomass.	300
100	O	Amend formula used to calculate guideline harvest levels for the commercial herring sac roe fishery in Sections 11-A, 15-B, and 15-C.	304
101	N	Reduce bait fishery harvest limit in the Section 3-B commercial herring spawn on kelp fishery.	306

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018 (page 3 of 6).

Proposal No.	Dept. Position	Issue	Page No.
102	N	Reduce herring bait fishery harvest limit and increase spawn on kelp herring fishery harvest limit in Section 3-B.	306
103	N	Reduce the Section 3-B winter bait herring fishery harvest limit and increase the Section 3-B spawn on kelp herring fishery harvest limit.	306
104	N	Repeal closed waters in the District 13 commercial herring fishery.	307
105	N	Expand closed waters in the District 13 commercial herring fishery.	311
106	N	Expand closed waters in the District 13 commercial herring fishery.	314
107	N	Establish a herring spawn on kelp commercial fishery in Sections 13-A and 13-B.	316
108	N	Expand the open area for the spawn on kelp herring pound fishery in Section 3-B.	318
109	O	Allow no more than four Commercial Fisheries Entry Commission limited entry permit holders to operate in a single pound structure in the Southeastern Alaska Area herring spawn on kelp fishery.	320
110	S	Allow the department to close fishing to some herring pound types to manage the fishery within the allowable guideline harvest level.	321
111	O	Define and allow closed half pound structures in the Southeastern Alaska Area herring spawn on kelp fishery.	323
112	O	Use a conversion factor applied to final product weight to determine harvest in the Southeastern Alaska Area herring spawn on kelp fishery.	324
113	S	Expand description of allowable groundfish parts that may be used as bait.	246
114	O	Allow the transport of live groundfish for the purposes of export or sale for human consumption.	247
115	O	Create a new commercial fishery for spiny dogfish sharks using pot gear in the Eastern Gulf of Alaska Area.	249
116	N/O	Establish a regional sablefish nonresident annual limit.	252
117	N	Allow pots as a legal gear type in the Southeastern Alaska Area personal use sablefish fishery.	255
118	O	Change the season opening date for the Southern Southeast Inside Subdistrict commercial sablefish fishery to coincide with the federal sablefish fishery.	259
119	O	Amend gear and season dates for Southern Southeast Inside Subdistrict commercial sablefish fishery.	262
120	N	Modify fishing seasons in the Southern Southeast Inside Subdistrict commercial sablefish fishery to allow concurrent fishing with pot and longline gear.	265
121	NA/O	Allow Southern Southeast Inside permit holders the option of using longline or pot gear for sablefish.	267
122	O	Base guideline harvest limits for the commercial sablefish fishery on federal survey data.	269
123	N	Increase the minimum retention size for lingcod in the Eastern Gulf of Alaska Area commercial fishery.	274
124	N	Allow the sale of up to two lingcod taken as bycatch in the commercial salmon troll fishery in Sitka Sound.	276
125	S	Repeal mandatory retention requirements for nonpelagic rockfish.	280
126	N	Require all anglers to release nonpelagic rockfish at depth with a deepwater release mechanism.	283
127	N	Establish provisions for reducing the resident pelagic rockfish bag limit in Central Southeast Outside waters.	286
128	S	Reduce the pelagic rockfish limits in the Sitka Area.	288
129	S	Reduce the trip limit in the East Yakutat Section and clarify trip limits in the Southeast District and East Yakutat Section commercial demersal shelf rockfish fishery.	290

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018 (page 4 of 6).

Proposal No.	Dept. Position	Issue	Page No.
130	N/O	Close subsistence fishing for salmon in Chilkat Inlet through July 15, and Chilkat River from June 15 to August 1.	110
131	N/S	Implement maximum gillnet mesh-size restrictions in the Chilkat Inlet and River subsistence salmon fishery.	113
132	N	Amend sport king salmon regulations in Districts 11, 12, 14, and 15 based on the Taku River king salmon preseason escapement estimate.	115
133	N/O	Base duration of commercial salmon troll and drift gillnet gear spring openings on preseason king salmon abundance projections.	121
134	N/O	Close the spring commercial salmon troll fishery in Districts 9, 12, and 14 when the Juneau area sport fishery is closed to protect king salmon.	124
135	N	Modify lawful gear for subsistence salmon fishing in Yakutat Bay.	126
136	O	Extend the area closed to sport fishing downstream and upstream of the Situk River weir during June and July.	128
137	N	Increase the regional resident king salmon possession limit when the Southeast Alaska Area preseason king salmon abundance index is greater than 2.0.	129
138	N	Allow the retention of other salmon while fishing for king salmon with two rods.	130
139	N	Eliminate provisions for a rotational fishery in Southeast Cove Terminal Harvest Area and allow the department to manage the fishery in consultation with the hatchery operator.	131
140	N	Prohibit use of drift gillnet gear for commercial salmon fishing in the Anita Bay Terminal Harvest Area during the 2018–2020 fishing seasons.	133
141	N	Modify net rotation schedules for the commercial drift gillnet gear and purse seine gear salmon fisheries at Deep Inlet and Anita Bay terminal harvest areas.	134
142	N	Modify drift gillnet and purse seine fishing rotations in the Deep Inlet Terminal Harvest Area.	136
143	N	Change the time ratio for drift gillnet gear to purse seine gear openings in Deep Inlet Terminal Harvest Area.	137
144	N	Allow increased commercial salmon fishing opportunity with troll gear in the Deep Inlet Terminal Harvest Area.	138
145	N	Allow commercial salmon fishing with purse seine gear in the Nakat Inlet Terminal Harvest Area.	139
146	N	Do not include enhanced salmon produced by private nonprofit hatcheries in Southeastern Alaska Area Enhanced Salmon Allocation Management Plan gear-specific value allocations.	140
147	N	Amend Mist Cove salmon closure to allow for taking of salmon with fly fishing gear and prohibit snagging.	141
148	O	Expand the Herring Bay Sportfish Terminal Harvest Area to provide additional sport fishing opportunity for hatchery-produced king salmon.	143
149	S	Extend the closing date for salmon harvest by the hatchery permit holder in Deep Inlet Special Harvest Area.	146
150	N	Establish a special harvest area in Crawfish Inlet.	147
151	N/O	Establish a terminal harvest area and management plan for Carroll Inlet.	149
152	S	Update area description and coordinates of the Anita Bay Terminal Harvest Area boundaries.	151
153	N	Repeal the District 1 Pink Salmon Management Plan.	152
154	N	Establish a management plan for pink salmon in Lower Clarence Strait.	153
155	N	Eliminate the wild sockeye salmon harvest limit for the District 12 commercial salmon purse seine fishery.	154

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018 (page 5 of 6).

Proposal No.	Dept. Position	Issue	Page No.
156	N	Change time period the District 12 commercial salmon purse seine fishery wild sockeye salmon harvest cap is in effect to reflect current sockeye salmon run timing.	157
157	N	Include wild sockeye salmon harvested in the Amalga Harbor Special Harvest Area in the District 12 commercial salmon purse seine fishery wild sockeye harvest limit.	159
158	N	Include wild sockeye salmon harvested in the Amalga Harbor Special Harvest Area in the wild sockeye salmon harvest limit for the commercial salmon purse seine fishery in District 12.	159
159	N	Prohibit the use of all aircraft used to locate salmon or direct commercial fishing operations during open commercial salmon fishing periods in the Southeastern Alaska Area.	162
160	O	Allow commercial fishing for salmon in waters near selected streams in Boat Harbor, Anita Bay, Deep Inlet, and Nakat Inlet Terminal Harvest Areas up to a straight line between the seaward extremities of the exposed tideland banks.	163
161	S	Update commercial salmon fishery closed waters coordinates in Whitewater Bay.	165
162	O	Open additional fishing area in the remainder of the Yakutat District as mitigation for king salmon conservation closures around the Situk and Lost Rivers.	166
163	N	Continue to allow set gillnet gear permit stacking in the Yakutat Area, by removing the sunset provision.	169
164	S	Update commercial salmon fishery closed waters description at the mouth of the Situk River to provide a more accurate description of current closed waters.	170
165	S	Change commercial salmon fishery closed waters description for Tsiu and Tsivat Rivers to more accurately reflect current stream mouth location.	171
166	N	Allow a weekly commercial fishery targeting pink salmon with purse seine gear in District 12.	172
167	N/O	Close waters beyond one half mile from shore in Districts 12 and 14 to commercial fishing for salmon with purse seine gear.	177
168	N/O	Close certain waters of Districts 12 and 14 to commercial salmon fishing with purse seine gear.	179
169	N	Open Section 6-D the second Sunday of June to commercial fishing for salmon with drift gillnet gear.	182
170	N	Open a portion of District 10 the third Sunday of June to commercial fishing for salmon with drift gillnet gear only.	184
171	S	Add District 6 to the mesh-size restriction area and allow implementation of the mesh-size restriction for an additional month.	186
172	N/O	Remove restrictions on harvesting non-Alaska hatchery-produced salmon in the spring commercial salmon troll fishery on the Gravina Island shore.	187
173	N/S	Allow commercial fisheries using troll gear to target enhanced chum salmon in Districts 12 and 14 to continue by removing the sunset provision.	189
174	N/O	Establish commercial fisheries targeting enhanced chum salmon using troll gear in portions of Districts 9 and 10.	191
175	S	Implement a king salmon possession restriction for vessels participating in the enhanced chum salmon troll fishery.	193
176	N	Establish a commercial fishery using troll gear to target hatchery-produced chum salmon in Crawfish Inlet.	194
177	N	Allow commercial fishing with troll gear for hatchery-produced coho salmon, in certain areas, during commercial troll fishery coho salmon conservation closures.	196
178	N/O	Restrict fishing area in Sitka Sound when harvest of non-Alaska hatchery-produced king salmon reaches 30,000 fish by March 1.	198

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Summary of Department Positions, Southeast and Yakutat Board of Fisheries Meeting, January, 2018 (page 6 of 6).

Proposal No.	Dept. Position	Issue	Page No.
179	N/O	Adopt measures to reduce harvest rate in the winter commercial salmon troll fishery during times of high king salmon abundance.	199
180	N/O	Reduce triggers in the Southeastern Alaska Area spring commercial salmon troll fishery by five percent in years of high king salmon abundance.	201
181	N	Reduce the percentage of remaining commercial king salmon troll fishery harvest taken during the initial summer king salmon retention period from 70% to 60% during years of high king salmon abundance.	203
182	N/O	Establish a starting date for the reopening the summer commercial king salmon troll fishery.	205
183	N	Modify commercial salmon fishing closed waters adjacent to the Situk River.	207
184	N	Modify gear specifications for the commercial salmon hand troll fishery.	208
185	N/O	Increase opportunity to harvest salmon and allow additional gear types in the Southeastern Alaska Area personal use salmon fishery.	209
186	S	Define what constitutes a guest of a lodge, charter vessel, or other enterprise.	
187	O	Open personal use sockeye salmon fishing in the Klawock River.	211
188	S	Provide for personal use harvest of hatchery-produced salmon in Ketchikan Creek.	215
189	S	Provide regulatory provisions necessary to harvest aquatic plants for personal use within the Joint Board of Fisheries and Game nonsubsistence areas in the Southeast Alaska Area.	216
190	N	Increase the personal use household limit for sockeye salmon in the Taku River drainage.	217
191	N/O	Amend the personal use salmon season in the Taku River drainage to open the fishery on the fourth Saturday in June.	219
192	N/O	Allow personal use fishing for salmon in District 11.	221
193	N/O	Establish a personal use salmon set gillnet fishery in Section 15-A.	224
194	N/O	Allow personal use fishing for salmon in District 15.	228
195	N/O	Establish nonresident annual limits for sockeye salmon in Southeast Alaska Area salt waters.	230
196	N/O	Establish nonresident annual limits for sockeye salmon in Southeast Alaska Area fresh waters.	230
197	S	Simplify current freshwater sport fishing regulations for king salmon in freshwater drainages of the Sitka Sound Special Use Area.	233
198	O	Amend the open season for Dolly Varden in Auke Bay.	234
199	O	Increase the bag limit for Dolly Varden on the Juneau road system.	236
200	N/O	Prohibit snagging in all salt and freshwaters along the Juneau road system, with minor exceptions.	238
201	O	Allow catch-and-release only in the Juneau vicinity Dredge Lakes area.	239
202	O	Allow only single, barbless hooks on artificial lures in the Dredge Lakes area.	240
203	S	Rescind the salmon sport fishing closure in Sheep Creek.	241
204	N/O	Amend bag limit and season provisions and establish an annual limit for sockeye salmon in Windfall Creek.	242
205	O	Prohibit multiple and barbed hooks in the Tsiu River drainage.	244
234	N/S	Require a personal use fishing permit for the taking of king crab in all areas of Southeast Alaska and reduce the daily bag and possession limit.	34
235	N/O	Repeal the Southeastern Alaska Area Dungeness Crab Fisheries Management Plan and adopt fixed-length summer and fall fishing seasons.	10

COMMITTEE OF THE WHOLE GROUP 1: Crab (25 proposals: Chair - TBD)

Dungeness Crab (10 Proposals)

Commercial Fishery (5 Proposals)

PROPOSAL 53 – 5 AAC 32.126. Dungeness crab pot marking requirements for Registration Area A; 5 AAC 34.126. King crab pot marking requirements for Registration Area A; and 5 AAC 35.126. Tanner crab gear marking requirements for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would clarify regulatory language on the long standing practice of the sale of buoy tags to a permit holder, rather than to a vessel owner or to a specific CFEC permit. This would not change how buoy tags are sold to permit holders, with the exception of when two separate permit holders simultaneously register to fish from the same vessel for the Tanner crab and golden king crab fisheries. In this instance, buoy tags would be sold to the vessel for the duration of the fishery.

WHAT ARE THE CURRENT REGULATIONS? Current regulations specify that identification tags are sold to a vessel owner.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This reduces confusion by the public and aligns regulatory language with the department's practice of selling identification tags to permit holders, and not to vessel owners or to specific CFEC permits.

BACKGROUND: Buoy identification tags have been required since as early as 1979 (Tanner crab fishery) to facilitate the enforcement of pot limits.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Conversations between the department and AWT have upheld the practice of selling and associating buoy tags to a permit holder, and not to a specific vessel or CFEC permit. This allows permit holders to switch vessels mid-season and keep their purchased tags. It also allows permit holders in the Dungeness crab fishery to purchase new permits and retain some or all of their purchased buoy tags. According to A.S. 16.05.632, buoy tags are nontransferable, therefore may only be sold to the permit holder.

Issuing buoy tags to a specific vessel or CFEC permit creates logistical problems for enforcement and the department. The exception to this would be when multiple permit holders simultaneously register a vessel for the Tanner crab and golden king crab fisheries. This exception would allow the department to use the same approach it uses now for a single permit holder registering for the Tanner crab and golden king crab fisheries with either a single permit that allows the privilege to fish for both species, or two permits that allow the privilege to fish for both species.

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.

PROPOSAL 54 – 5 AAC 32.125. Lawful gear for Registration Area A.

PROPOSED BY: Ryan Littleton.

WHAT WOULD THE PROPOSAL DO? This would reduce the maximum vessel pot limit in the Southeast Alaska commercial Dungeness crab fishery from 300 pots to 240 pots. This would be a 20% reduction in gear for all permit holders.

WHAT ARE THE CURRENT REGULATIONS? Regulations allow for a maximum of 300 Dungeness crab pots to be operated from a single vessel. Limited entry set up a tiered permit system based on the maximum number of pots, with permits allowing 25%, 50%, 75%, or 100% of the maximum number of crab pots to be fished from one vessel.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The overall effect on the harvest is unknown, but it is likely that permit holders would haul similar amounts of gear each day by hauling pots more frequently. This would likely reduce gear conflicts and crowding on the fishing grounds.

BACKGROUND: In 1954, gear for the commercial Dungeness crab fishery was limited to pots or ring nets. The current 300 pot limit was implemented in 1963. A permit moratorium was imposed by the Commercial Fisheries Entry Commission (CFEC) in 1991. The CFEC convinced the legislature to authorize the use of tiered pot limits to accommodate the large number of qualifying participants while limiting the effort to acceptable levels. In January 1996, the moratorium period ended and a limited entry tiered pot limit was adopted for implementation by June 15, 1997. The tiered permit system was structured to provide a maximum of 48,750 pots in the Dungeness fishery. Currently there are 273 active permanent and interim permits in the fishery (Table 54-1).

There are both advantages and disadvantages when considering lowering the vessel pot limit. Many vessels haul their full allotment of gear every day, if not more than once. A pot limit reduction could result in shorter soak times since permit holders may haul gear more frequently. By decreasing the amount of time for escape rings to work, there is an increased handling of female and sublegal male crab. Handling of crabs, particularly of soft shelled crabs, has been shown to induce up to 50 percent mortality depending upon the crab's shell condition. However, a pot limit reduction could decrease pot loss. Pot loss and resulting ghost fishing of pots also kills crabs at an increasing rate depending upon the confinement period. The 60-thread cotton biodegradable twine used in Dungeness pots is calculated to biodegrade after a period of approximately 107 days. Once the panel degrades, crabs have a better chance of escaping but can still be retained due to marine fouling on the pot lid. This is of particular concern in areas with a high sediment load when the pot becomes mudded in. Currently, approximately 700 Dungeness crab replacement buoy tags are issued annually (Table 54-2), presumably to individuals who have lost pots. Pot limit reductions have been shown by various economic models to favor smaller vessels at the expense of larger ones and are thus considered to have allocative implications.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on 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.

Table 54-1.–Dungeness permits available in 2017, by permit type.

Permit Type	Active Permanent and Interim Permits
D9AA	49
D9BA	43
D9CA	83
D9DA	98
Total Number of Permits	273

Table 54-2.–Number of Dungeness replacement tags issued by year.

Year	Number of Replacement Tags
2013/14	508
2014/15	773
2015/16	1,321
2016/17	322
2017/18	612
5-yr Avg.	707

PROPOSAL 55 – 5 AAC 32.125.Lawful gear for Registration Area A.

PROPOSED BY: Derek Thynes.

WHAT WOULD THE PROPOSAL DO? This would increase the maximum number of Dungeness crab pots that may be operated from a single vessel from 300 to 400. The maximum number of pots that may be operated by a single permit holder would remain at 300 pots. If multiple permit holders registered to fish from the same vessel, then each additional permit would be allowed to operate one-third of the terms of the additional person's CFEC permit, up to a vessel maximum of 400 pots.

WHAT ARE THE CURRENT REGULATIONS? Regulations allow for a maximum of 300 Dungeness crab pots to be operated from a single vessel. CFEC regulations limit fishing capacity for Southeast Alaska Dungeness crab pot permits (20 AAC 05.764) to one of four tier levels: A) 300 pots or 100% of the board's maximum, whichever is less; B) 225 pots or 75% of the board's maximum, whichever is less; C) 150 pots or 50% of the board's maximum, whichever is less; or D) 75 pots or 25% of the board's maximum, whichever is less.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The overall effect on the harvest would be unknown, but it is likely that permit holders would continue to haul similar amounts of gear on a daily basis. Increasing the maximum number of pots that may be operated by a single vessel may increase soak times and would allow non-legal crab more time to escape the pots. This would likely result in an increase in the number of vessels operating with two or more CFEC permit holders onboard and could potentially lead to fleet consolidation and increase the value of CFEC permits for this fishery.

In addition, the percentage of harvest taken in the first week of the fishery has been increasing in recent seasons. This frontloading of the harvest, resulting in more crab taken early in the season before the summer mating period, could be exacerbated with an increase in the number of pots fished per vessel. Larger boats, capable of operating 400 pots, typically fish in the first week or two of the summer season before converting over to the salmon fisheries.

BACKGROUND: In 1954, gear for the commercial Dungeness crab fishery was limited to pots or ring nets. The current 300 pot limit was implemented in 1963. A permit moratorium was imposed by CFEC in 1991. Tiered pot limits were authorized to accommodate the large number of qualifying participants while limiting overall effort to acceptable levels. In January 1996, the moratorium period ended and a limited entry tiered pot limit was adopted for implementation by June 15, 1997. The tiered permit system was structured to provide a maximum of 48,750 pots in the Dungeness fishery. Currently there are 273 active permanent and interim permits in the fishery (Table 54-1).

There are both advantages and disadvantages when considering raising the vessel pot limit. Many vessels haul their full allotment of gear every day, if not more than once. A pot limit increase could result in longer soak times since permit holders would haul gear less frequently, increasing the amount of time for escape rings to work. By increasing the amount of time for escape rings to work, there is decreased handling of female and sublegal male crab. Handling of crabs, particularly of soft shelled crabs, has been shown to induce up to 50 percent mortality depending upon the crab's shell condition. However, a pot limit increase could increase pot loss. Pot loss and resulting ghost fishing of pots also kills crabs at an increasing rate depending upon the confinement period. The 60-thread cotton biodegradable twine used in Dungeness pots is

calculated to biodegrade after a period of approximately 107 days. Once the panel degrades, crabs have a better chance of escaping but can still be retained due to marine fouling on the pot lid. This is of particular concern in areas with a high sediment load when the pot becomes mudded in. Currently, approximately 700 Dungeness crab replacement buoy tags are issued annually (Table 54-2), presumably to individuals who have lost pots.

In the 2016/17 commercial Dungeness crab season in Southeast Alaska, a total of 208 permits made landings in the fishery. Of those, 47 permits were simultaneously registered on a vessel with more than one permit (Table 55-1).

DEPARTMENT COMMENTS: 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.

Table 55-1.–Number of Dungeness crab permits simultaneously registered on the same vessel, by season 2007/08 through 2016/17.

Season	Total Permits	Number of Permits Simultaneously Registered on same vessel
2007/08	193	39
2008/09	207	45
2009/10	195	36
2010/11	176	32
2011/12	162	33
2012/13	160	29
2013/14	150	28
2014/15	192	46
2015/16	205	50
2016/17	208	47
10-year average	185	39

PROPOSAL 56 – 5 AAC 32.150. Closed Waters In Registration Area A.

PROPOSED BY: Hollis Community Council Inc.

WHAT WOULD THE PROPOSAL DO? This seeks to expand the commercial Dungeness crab fishery closed waters area near the Hollis anchorage near the community of Hollis.

WHAT ARE THE CURRENT REGULATIONS? There are currently sixteen areas in Southeast Alaska that are closed either seasonally or year round to the commercial Dungeness crab fishery. The waters referenced in this proposal are adjacent to the closed area defined as those waters of Twelve-mile Arm west of a line from Prince of Wales Island at 55° 29.07′ N. lat., 132° 37.60′ W. long., to the northeastern most tip of Loy Island at 55° 29.07′ N. lat., 132° 36.70′ W. long., to the easternmost tip of Cat Island at 55° 27.80′ N. lat., 132° 39.08′ W. long., to Prince of Wales Island at 55° 27.80′ N. lat., 132° 40.93′ W. long., including waters of Hollis Anchorage.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This area would be closed to the commercial Dungeness crab fishery but remain open to personal use, sport, and subsistence Dungeness crab fisheries.

BACKGROUND: The currently closed area near Hollis was established during the 2000 board meeting. The original proposal requested that the area be closed west of a line that stretched from Sandy Point to Outer Point (near the mouth of Twelve-mile Arm). This proposal was carried as amended and reduced to the currently closed area around Hollis Anchorage (Figures 56-1 and 56-2).

Current regulations specify 16 areas closed to commercial harvest of Dungeness crab in Southeast Alaska (Figure 56-1). The proposed closed area encompasses approximately 8% of department statistical area 102-60 (Figure 56-2). The historical commercial harvest in department statistical area 102-60 is given in Table 56-1; the average harvest over the past 10 full seasons is 84,263 lb with a CPUE of 3.6, by an average of six permit holders.

According to regulation 5 AAC 02.108 *Customary and traditional subsistence use of shellfish stocks* (2), the proposed area is within an area that the board has found there are customary and traditional uses of the Dungeness crab stock. Recent information on the magnitude of noncommercial harvest in the proposed area is unavailable. The most current information from the department's last household survey of the nearby community of Hollis was from 1998, which estimated the total subsistence use harvest of Dungeness crab from that year at 1,913 lb, approximately 12.33 lb per capita. There is currently no annual stock assessment survey in place for Dungeness crab in Southeast Alaska.

DEPARTMENT COMMENTS: The department does not have any conservation concerns for the Dungeness crab resource in this area and is **NEUTRAL** on the allocative aspects of this proposal.

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

Table 56-1.–Commercial Dungeness crab harvest (pounds) and effort in statistical area 102-60 for the past 10 seasons. The area proposed for closure to commercial fishing for Dungeness crab is located within a portion of this statistical area.

Season	Harvest	Permits	Landings	# Crab	Pot Lifts	CPUE
2007/08	138,147	5	19	65,495	14,606	4.5
2008/09	57,097	5	12	29,547	9,830	3.0
2009/10	116,964	7	28	60,965	12,260	5.0
2010/11	85,338	5	15	38,543	10,551	3.7
2011/12	75,343	4	14	35,580	7,364	4.8
2012/13	41,637	6	13	20,155	7,765	2.6
2013/14	81,246	4	14	42,193	8,439	5.0
2014/15	126,314	10	47	62,197	18,027	3.5
2015/16	46,068	6	35	22,116	9,603	2.3
2016/17[a]	74,477	12	37	37,064	20,360	1.8
10-year average	84,263	6	23	41,386	11,881	3.6

[a] Last season with complete data prior to publication.

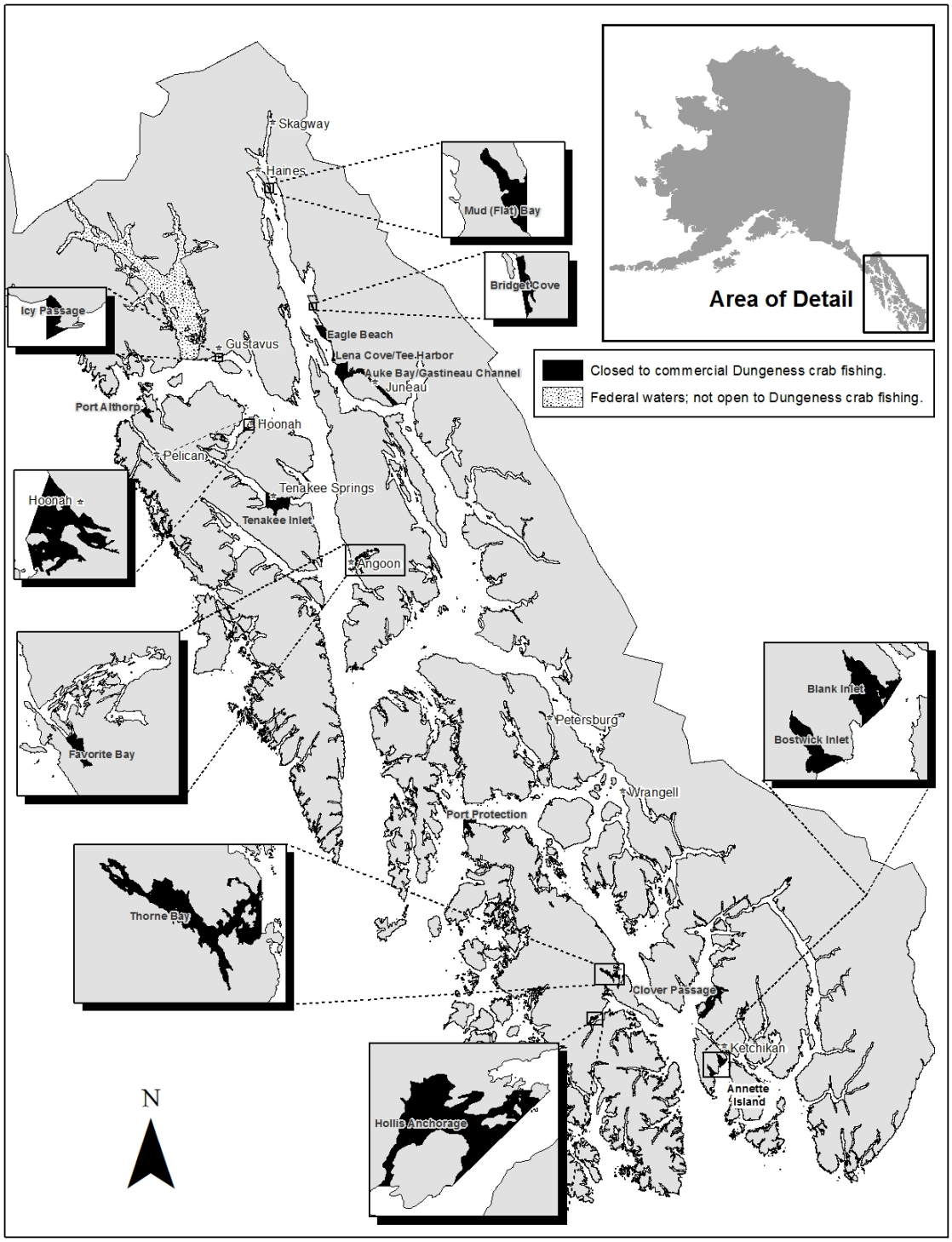


Figure 56-1.–Map showing the 16 areas currently closed to commercial fishing for Dungeness crab.

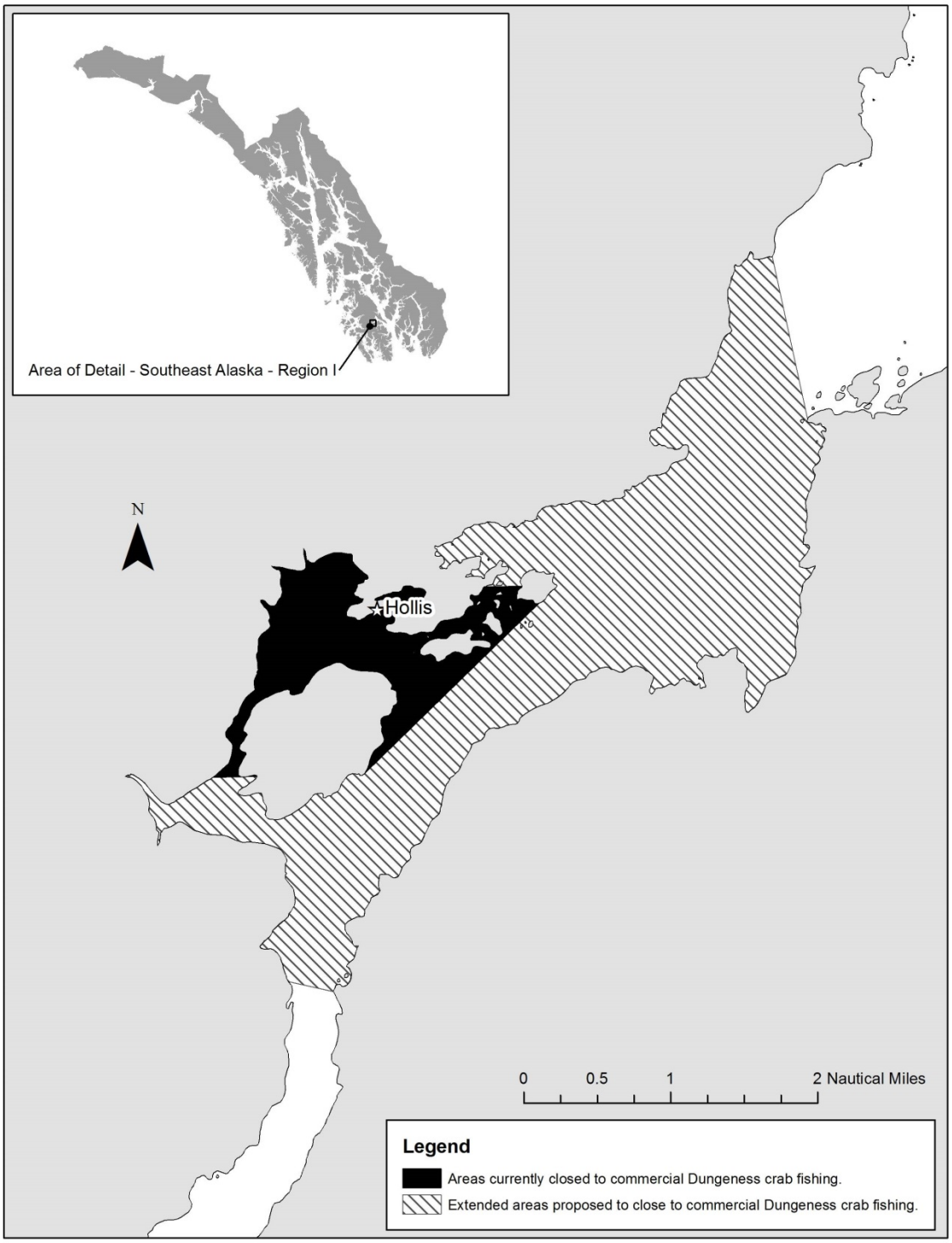


Figure 56-2.–The area proposed to close to commercial fishing for Dungeness crab in portions of Twelve-mile Arm surrounding the Hollis anchorage.

PROPOSAL 235 – 5 AAC 32.146. Southeastern Alaska Area Dungeness Crab Fisheries Management Plan and 5 AAC 32.110. Fishing Seasons for Registration Area A.

PROPOSED BY: Alaska Board of Fisheries.

WHAT WOULD THE PROPOSAL DO? This would repeal the *Southeastern Alaska Area Dungeness Crab Fisheries Management Plan* and adopt fixed-length summer and fall fishing seasons.

WHAT ARE THE CURRENT REGULATIONS? The commercial Dungeness crab season varies by area:

(1) June 15 through August 15 and October 1 through November 30, in all waters of Registration Area A other than those waters specified in (2) and (3);

(2) October 1 through November 30, in the waters of

(A) Section 13-B that are in the Sitka Sound Special Use Area;

(B) 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;

(3) October 1 through February 28, in

(A) District 1;

(B) District 2; and

(C) Section 13-B, except the waters of Sitka Sound Special Use Area.

The department shall establish a projection of harvest no later than 14 days after the start of the summer Dungeness crab fishing season. If the department projects that the entire season's catch of legal Dungeness crab will be 1.5 million lb or less, the department will close the summer Dungeness crab fishing season no sooner than 21 days after the season opened, and the fall Dungeness crab fishing season will not open. If the harvest projection is more than 1.5 million lb, but less than 2.25 million lb, the department will close the summer Dungeness crab fishing season no sooner than 28 days after the season opened, and the fall Dungeness crab fishing season will be open for 30 days. If the harvest projection is more than 2.25 million lb, the summer and fall Dungeness crab fishing seasons will occur as specified in 5 AAC 32.110.

If the department determines that harvest projections fail to meet the 2.25 million lb threshold due to soft-shelled crabs early in the summer Dungeness crab fishing season, the department may open the fishery for the full fall Dungeness crab fishing season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The commercial Dungeness crab fishery would remain open for the full seasons described in regulation regardless of what early season commercial harvest is. Commercial harvest would increase by an unknown amount during some years. The department would retain the time and area authority to close fisheries should conservation concerns be documented.

For districts 1 and 2, and the portion of Section 13-B not in the Sitka Sound Special Use Area, a summer Dungeness crab season from June 15 to August 15 would be opened, the fall season from October 1 to November 30 would be retained, and the winter season from December 1 to February 28 would be eliminated.

BACKGROUND: At the 2000 board meeting, the department submitted a proposal to reduce the intensity of the summer commercial Dungeness crab fishery in Southeast Alaska by altering the summer opening date, reducing pot limits, defining separate management areas, and defining guideline harvest ranges. The proposal was in response to intensification of commercial effort in the summer season with 244 permits fished during the 1998/99 season (Figure 235-1); recent declines in catches with 2.33 million lb harvested in the 1998/99 season (Figure 235-1); high sorting rate of soft-shelled crabs, female crabs, and sublegal male crabs; and increasing loss of fishing grounds due to sea otter predation on crabs.

At that time the department was concerned that the majority of the harvest was comprised of recruit class crabs and that most of the legal males were being harvested prior to mating. In addition, timing of the fishing season, which partially overlapped the male molting period, led to increased sorting of sublegal, female, and soft-shelled crabs as the season progressed.

Out of this 2000 board proposal, the current *Southeastern Alaska Area Dungeness Crab Fisheries Management Plan* was created. The plan uses estimated full season harvest as a proxy for stock health, and assumes a relatively constant level of effort, processing capacity, and area available for harvest. Since the plan went into effect, effort and harvests have been relatively stable, with three record high harvests occurring in the 2002/03, 2007/08, and 2014/15 seasons (Figure 235-1). Overall the department's full season harvest projection done early in the season has proven to be relatively accurate since its inception (Figure 235-2). Twice since the plan began, the season has been shortened due to the harvest estimate falling below thresholds described in the management plan. In the 2013/14 season, the projected full season harvest estimate was 2.17 million lb. That season, the department determined that shortening the fishery by one week was commensurate with the estimate falling near the upper end of the 1.5–2.25 million lb range in 5 AAC 32.146(2)(B). Based on data from port sampling and fish tickets, the department determined that soft-shelled crab not retained during the first week of the season were a contributing factor in failing to meet threshold, and therefore, per 5 AAC 32.146(3), the fall fishing season was prosecuted for the standard duration as described in 5 AAC 32.110. In the 2017/18 season, the projected full season harvest estimate was 1.68 million lb. That season, the department determined that shortening the summer fishery by three weeks was commensurate with the estimate falling near the lower end of the 1.5–2.25 million lb range in 5 AAC 32.146(2)(B). Based on port sampling data and fish tickets, the department determined that soft-shelled crab not retained during the first week of the season were not a contributing factor in failing to meet threshold, unlike the decision made in 2013/14, and therefore, per 5 AAC 32.146(2) (B) and 5 AAC 32.146(3), the department recommended a 30-day commercial Dungeness crab fall fishing season for the entire region.

Beginning in 1985, the commercial fishery was open from June 15 to August 15 and October 1–February 28 because field studies indicated that the major period when females molted and were mated was late August–September. Conclusions of research done later in Southeast Alaska supported those field studies and other research indicated that peak timing of the female molt and mating is late summer through early fall. The first split season for districts 1 and 2 was adopted in 1986, which changed a number of times over the next 20 years.

The season remained October 1–February 28 in districts 1 and 2 and in portions of Section 13-B until 2009 when the board adopted a proposal that made the commercial season in districts 1 and 2 the same as the northern and central portions of the region. That regulation change had a sunset clause which stipulated both districts 1 and 2 would revert back to a fall/winter season beginning

February 29, 2012 unless other action was taken. In 2010, the board considered an agenda change request from the Organized Village of Kasaan and revised the season description for District 2, changing it back to a fall/winter only season. No action was taken on the sunset clause that remained in place for District 1 so the season in that area reverted back to the fall/winter only season in 2012.

The current summer season of June 15–August 15 in much of Southeast Alaska overlaps a portion of the primary male molt period from March to July. Handling of crab in the soft-shell condition can cause death, leg loss, decreases in growth and interruptions of molt timing by changing the molt frequency.

The current late summer closed period (August 16–September 30) was designed to protect females during molting and mating, and the winter and spring closed period (March 1–June 14) to protect males during molting. However, the closed seasons only partially protect vulnerable crab life history stages. Male Dungeness crab molt from February to July, and females from May to September, while peak mating timing is in late summer and early fall. This results in significant handling of soft-shell males at the beginning of the summer season in some areas and seasons. While the current seasons provide for a closure (August 15–October 1) which encompasses the majority of the late summer female molt and mating period, the current summer season begins on June 15 in most of the region, before the male molt is typically completed. Consequently there is sometimes a high prevalence of soft-shelled crab during the first few weeks of the summer fishery (Table 235-1).

The board did not adopt similar proposals to repeal the *Southeastern Alaska Area Dungeness Crab Fisheries Management Plan* (proposals 58, 59, and 60) in 2015, and also did not adopt a proposal (Proposal 166) in 2012 which sought to maintain summer (June 15–August 15) and fall (October 1–November 30) season descriptions for District 1, and sought to change the season description for District 2 from a fall/winter season (October 1–February 28) to summer and fall seasons.

DEPARTMENT COMMENTS: The department **OPPOSE**S this proposal. In addition to limited entry and the associated tiered pot limits, size-sex-season management, and emergency order authority, the *Southeastern Alaska Area Dungeness Crab Fisheries Management Plan* is a useful tool that allows the department to assess early in the season whether recruitment failure has potentially occurred and to take appropriate management action if necessary. With few exceptions, the current method used by the department to project full season harvest has proven to be relatively accurate (Figure 235-2). In addition, this plan allows the department flexibility to determine an appropriate reduction in the number of days the summer season is shortened when the estimate produced is between 1.5 and 2.25 million lb, and allows further flexibility to conduct a full fall season if it is determined that the upper threshold was not met due to non-retained, soft-shelled crab early in the summer season.

The current summer season of June 15–August 15 in much of Southeast Alaska overlaps a portion of the male molt period from February to July. As a result, handling of soft-shelled crabs can be high during the first few weeks of the summer fishery in some seasons. The incidence of soft-shelled crab also varies by area during any given season. The percentage of legal males that are soft-shelled can be very high in some periods and areas. Surveys conducted in 2001 and 2002 in Duncan Canal during early June found that 59% of the legal males were in soft or light shell condition. It takes approximately two months after molting for crabs to reach a marketable shell

condition (new shell). Since handling mortality of soft-shelled crabs can be as high as 50%, yield is reduced by handling-induced deadloss. As such, the department has advocated a fall/winter season be adopted for the entire Southeast Alaska fishery because avoiding the soft-shell period would increase yielded poundage and reduce handling mortality on discarded crabs.

In recent years the commercial Dungeness crab fleet has become increasingly concentrated on the fishing grounds, leading to increased gear congestion. Changing the season dates in districts 1 and 2 to match those of the rest of Southeast Alaska would provide for increased distribution of the fleet during the summer fishery, but would eliminate the winter fishery (December–February) in those areas. Historically, harvest in the winter fishery makes up a small percentage of the overall harvest (0.9%).

The department is **NEUTRAL** on the allocative aspects of this proposal.

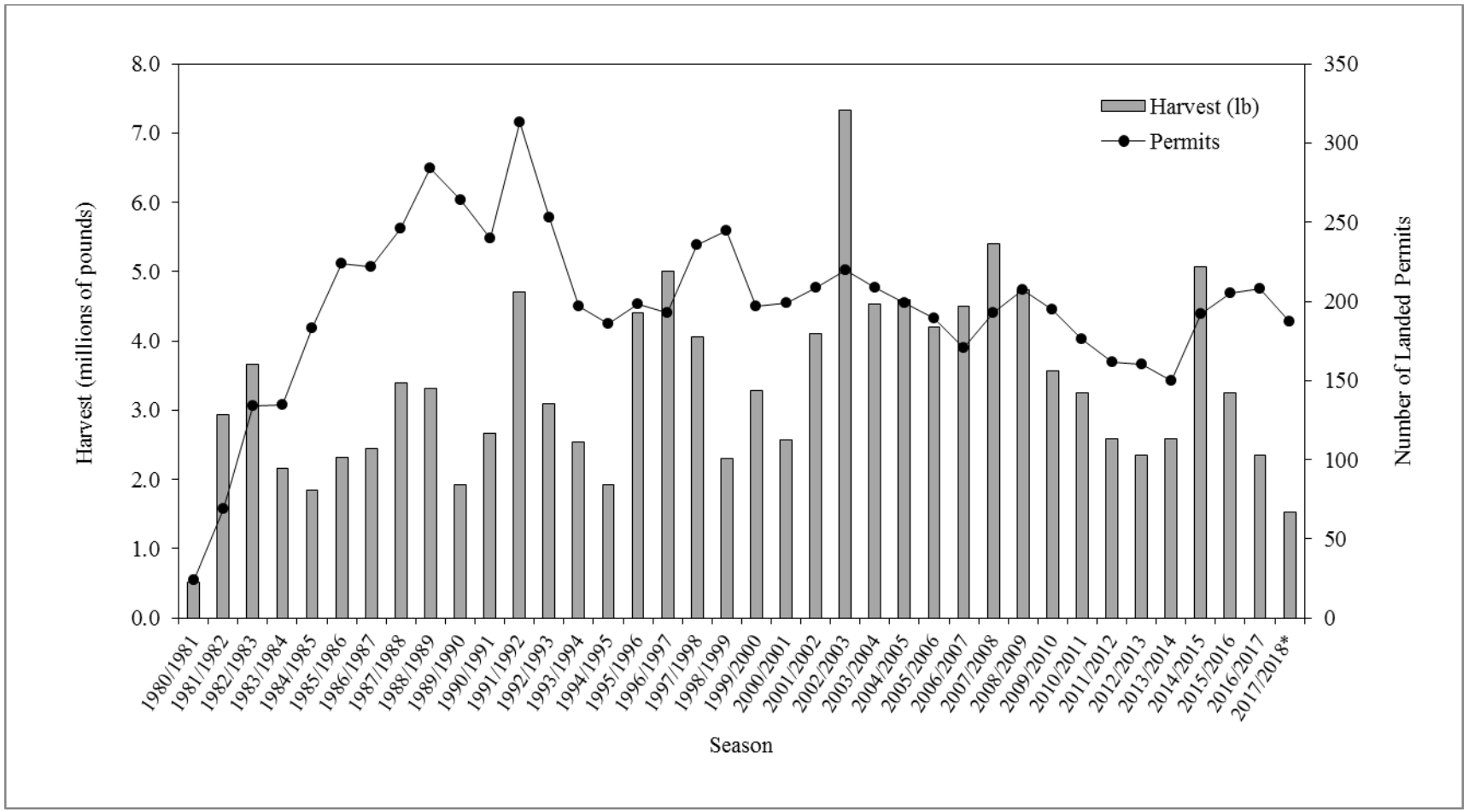
COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for a private person to participate in this fishery.

Table 235-1.–Commercial fishing seasons for Southeast Alaska Dungeness crab and major molting/mating periods.

District/Section	January–February	March–May	June	July	August	September	October	November	December
1 2 13-B non-Special Use Area									
3 4 5 6 7 8 9 10 11 12 13 14 15									
SSSUA/WP									

Male Molt Period **Female Molt/Mating Period**

	Closed Season
	Open Season



*Preliminary harvest, season ongoing. Harvest and permits fished through 10/16/17

Figure 235-1.–Southeast Alaska commercial Dungeness crab harvest and permits fished, 1980/81 to 2017/18 season.

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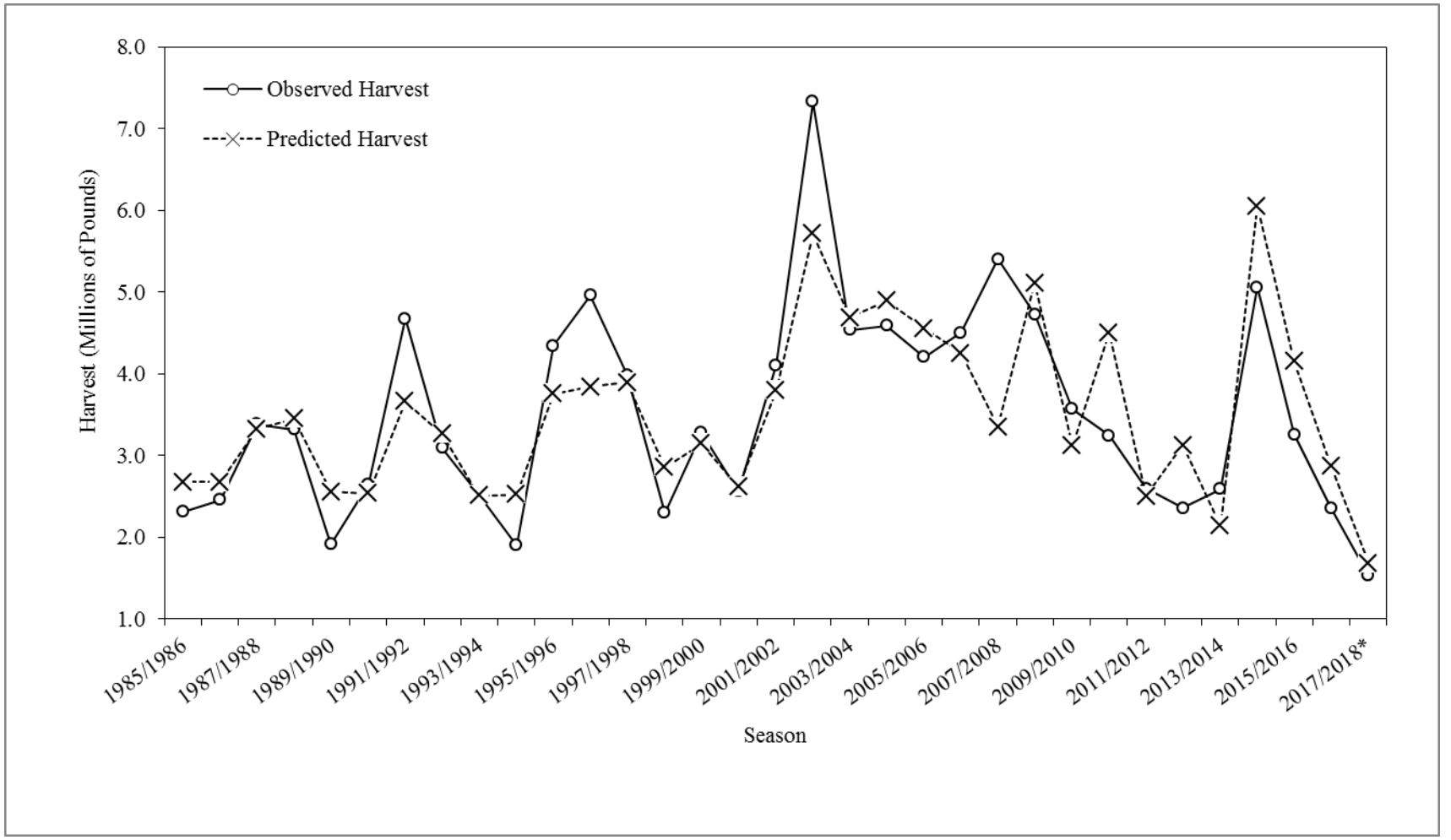


*Preliminary harvest, season ongoing. Harvest and permits fished through 10/16/17.

Figure 235-2.–Southeast Alaska commercial Dungeness crab actual and estimated harvest, 1985/86 to 2017/18 season. The current management plan was adopted in 2000; predicted harvest for earlier years is based on the same methodology currently used.

Sport Fishery and Personal Use (5 Proposals)

PROPOSAL 57 & 58 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Tom & Brenda Leask, Byron Vaughn Skinna Jr. (Proposal 57); Klawock Tribe (Proposal 58).

WHAT WOULD THESE PROPOSALS DO? These would close the sport Dungeness crab fishery in waters near the communities of Craig and Klawock. Proposal 57 defines a specific area to be closed (Figure 57 & 58-1) while Proposal 58 suggests the more general "middle area of the West coast of Prince of Wales Island".

WHAT ARE THE CURRENT REGULATIONS? The sport fishery for Dungeness crab is open year-round with a bag and possession limit of three male Tanner and Dungeness crab in combination, with a minimum size limit of a 6½ inch carapace width for Dungeness crab. While taking Dungeness crab, four crab pots or 10 rings per person may be used with a maximum of 10 crab pots or 20 rings per vessel.

A captain and crew of a charter vessel may not deploy, set or retrieve their own shellfish gear while the vessel is chartered. Chartered anglers may deploy and set gear from a charter vessel as long as they personally set and retrieve the gear and the buoy is marked with their name, home address and Department of Motor Vehicles registration number of the vessel used.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? This action would close sport fishing for Dungeness crab and create a greater disparity between sport and personal use regulations. It would further complicate regulations by adding an area-specific regulation as an exception to regionwide regulations.

BACKGROUND: There is a positive C&T finding for shellfish (except shrimp, king crab, and Tanner crab) in sections 3-A and 3-B of District 3.

Sport fishing regulations for Dungeness crab in Southeast Alaska were established in 1989 with a bag and possession limit of five male Dungeness/Tanner crab in combination and a minimum size limit of 6½ inches for Dungeness crab. In 2009, the bag and possession limit was lowered to three male Dungeness/Tanner crab in combination. In 2012, the number of ring nets which could be fished in the sport Dungeness crab fishery was limited to 10 per person and 20 per vessel.

From 2011 to 2016, the statewide harvest survey estimates of Dungeness crab harvest for western POW, which includes Craig and Klawock, averaged 4,667 crab (Table 57 & 58-1). The proportion of harvest by nonresidents in this area cannot be determined due to insufficient responses rates in the statewide harvest survey. However, the nonresident harvest of Dungeness crab has averaged 50% of the statewide harvest survey estimates for the entire POW area during the same period (Table 57 & 58-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these allocative proposals. The department does not have any biological concerns for the Dungeness crab resource in this area. Adoption may provide a subsistence user with more opportunity to harvest crab; however, the department is concerned that it would further complicate shellfish regulations in Southeast Alaska.

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

Table 57 & 58-1.–Statewide harvest survey estimates of Dungeness crab by residency harvested in the sport and personal use Dungeness crab fisheries of Prince of Wales Management Area, 2011–2016.

	Prince of Wales			West Prince of Wales*
Year	Nonresident	Resident	Total	Total Harvest
2011	5,001	7,047	12,048	3,950
2012	7,160	4,230	11,390	4,089
2013	5,530	3,595	9,125	3,449
2014	8,250	8,850	17,100	3,255
2015	6,494	9,917	16,411	8,575
2016	6,943	5,727	12,670	4,682
6-year average (2011–2016)	6,563	6,561	13,124	4,667
Percent of recreational harvest	50%	50%		

* Residency data not available for West Prince of Wales.

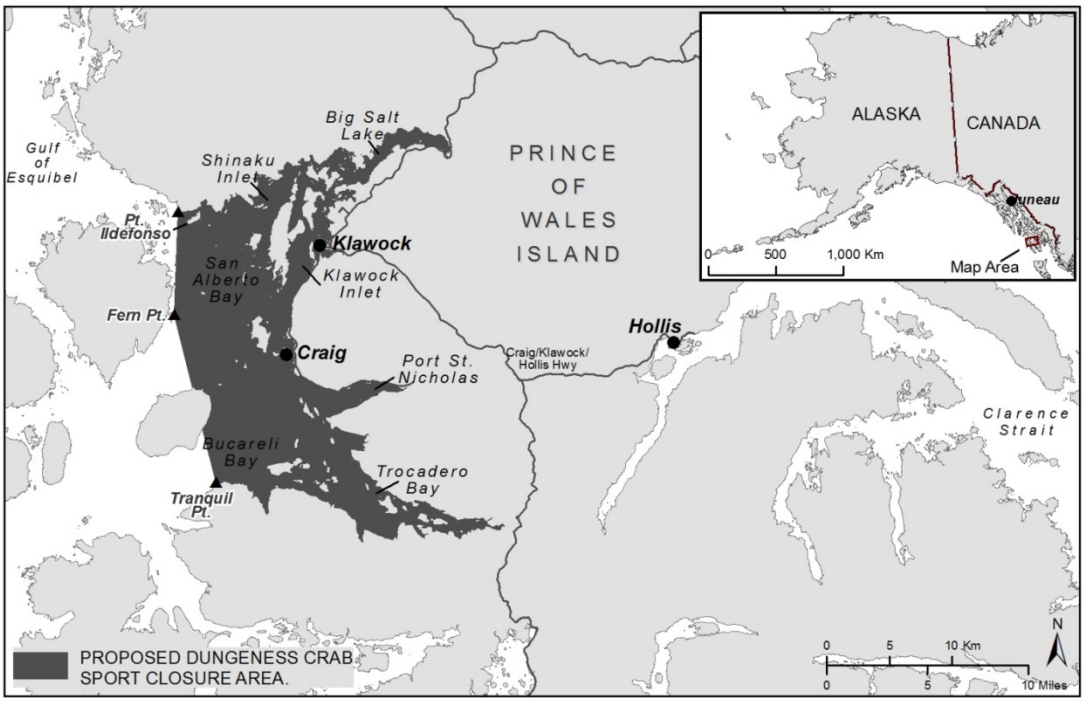


Figure 57 & 58-1.–Proposed closed area to sport Dungeness crab, identified by Proposal 57.

PROPOSAL 59 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Close the Yakutat Area Dungeness crab sport fishery.

WHAT ARE THE CURRENT REGULATIONS? The sport fishery for Dungeness crab is open year-round with a bag and possession limit of three male Tanner and Dungeness crab in combination, with a minimum size limit of a 6½ inch carapace width for Dungeness crab.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would close the Yakutat Area Dungeness crab sport fishery, and simplify regulations by eliminating the need for annual emergency orders to close the fishery.

BACKGROUND: Surveys conducted by the department indicate that the Dungeness crab stock in the Yakutat Area is not rebuilding following the closure of the commercial fishery in 2000. A 600 pot survey was conducted in 2005, 2012, and 2013; these surveys showed no evidence of stock recovery. Estimates of sport Dungeness crab harvest prior to 2005 indicated a declining trend in the Yakutat Area Dungeness crab stock. The Dungeness crab sport fishery has been closed annually since 2005 by emergency order. The personal use fishery has also been closed by an annual emergency order during this time while the subsistence fishery remains open. The department will seek to reopen the sport fishery if it is determined that Yakutat area Dungeness crab stocks have recovered.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The proposed change would simplify regulations while continuing to protect depleted Dungeness crab stocks in the Yakutat Area.

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.

PROPOSAL 60 – 5 AAC 47.XXX. New section.

PROPOSED BY: Kenyatta Bradley.

WHAT WOULD THE PROPOSAL DO? This would establish a guided sport ecotourism Dungeness crab fishery in Sitka Sound modeled after the George Inlet superexclusive guided sport ecotourism Dungeness crab fishery.

WHAT ARE THE CURRENT REGULATIONS? Statewide guided sport ecotourism regulations, under 5 AAC 75.085, require a person conducting guided sport ecotourism to obtain a sport fishing operator's registration and comply with all the applicable requirements for their industry. A registered guide must be present when gear or fish are being handled and persons handling gear or fish must hold a sport fishing license. All participants must comply with the rules relating to nonresidents, regardless of residency, and all fish taken must be immediately released unharmed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would create a new fishery in the Sitka Area. The proposed fishery would differ from the current statewide guided sport ecotourism requirements in that persons handling fish or gear would not be required to hold a sport fishing license. It would differ from the George Inlet superexclusive guided sport ecotourism Dungeness crab fishery in that a vessel could deregister and reregister in order to participate in other Dungeness crab or guided sport fisheries. While no crab would be harvested in this fishery, there would likely be some unknown amount of handling mortality.

BACKGROUND: Prior to the development of ecotourism regulations, one operator conducted Dungeness crab ecotourism tours from 2003 to 2007 under the Commissioner's authority to issue permits for scientific and educational purposes. By 2007, more commercial tour operators requested to use the state resources for tourism activities. After further review the department determined that scientific and educational permits to conduct ecotourism fisheries were erroneously issued and that regulations for tour fisheries needed to be established. In 2008, two frameworks to establish ecotourism fishery regulations were presented to the board for consideration; one modeled using commercial regulations and the other using guided sport regulations. The board chose to establish ecotourism fishery regulations under sport fishery regulation by establishing statewide guided sport ecotourism regulations in 5 AAC 75.085 that mirror statewide requirements for sport fishing and the George Inlet superexclusive guided sport ecotourism Dungeness crab fishery in 5 AAC 47.090.

Due to Dungeness crab in the Ketchikan Area being fully allocated and increasing interest for ecotourism in the Ketchikan Area, the board established George Inlet ecotourism Dungeness crab fishery as a superexclusive fishery. In this superexclusive fishery registered operators and vessels may not participate in any other Dungeness crab fishery or any other guided sport fishery during the calendar year of operation. Guides must register for this fishery but may deregister to participate in another Dungeness crab fishery or guided sport fishery as a guide or operator. The George Inlet fishery is open April 15–September 30. A registered sport fishing operator is permitted six pots with three lifts per pot per day and all crab must be released except for one male Dungeness crab per trip may be temporarily retained for demonstration. A sport fishing license is required for guides and any client who handles crab or operates gear. Each vessel is required to complete a logbook to track the number of crab caught and released and the Commissioner has authority to close or further restrict the fishery if necessary to protect the resource. While guides may register and deregister in this fishery, no such provision exists for

vessels registered in the George Inlet superexclusive guided sport ecotourism Dungeness crab fishery. One business registered for the George Inlet superexclusive guided sport ecotourism Dungeness crab fishery since establishment in 2008.

The commercial harvest of Dungeness crab in Sitka Sound has averaged 1,052 crab between 2009 and 2017. Statewide harvest survey responses are insufficient to generate Dungeness crab harvest estimates specifically for Sitka Sound. In the entirely of the Sitka area, Dungeness crab harvest has averaged 6,717 crab between 2011 and 2016. The nonresident portion of this harvest has averaged 2,326 Dungeness crab, or 35% of the total harvest.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The department **OPPOSES** the aspects of the proposal that would allow clients to pull pots and handle shellfish without obtaining a sport fishing license or permit. This would complicate regulations by deviating from the current statewide guided sport ecotourism 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.

PROPOSAL 186 – 5 AAC 77.027 Prohibitions for use of personal use-taken shellfish.

PROPOSED BY: Susan Doherty.

WHAT WOULD THE PROPOSAL DO? This defines "guest(s)" as a person(s) who is not providing payment for any service rendered before, during, or after being considered a guest in regards to shellfish consumption.

WHAT ARE THE CURRENT REGULATIONS? Alaska Statute 16.05.940 (26) defines personal use fishing as, "the taking, fishing for, or possession of finfish, shellfish, or other fishery resources, by Alaska residents for personal use and not for sale or barter, with gill or dip net, seine, fish wheel, long line, or other means defined by the Board of Fisheries".

Current regulations prohibit an owner, operator, or employee of a lodge, charter vessel, or other enterprise that furnishes food, lodging, or sport fishing guide services from furnishing to a client or guest of that enterprise, shellfish that has been taken for personal use, unless the:

(1) shellfish has been taken with gear deployed and retrieved by the client or guest;

(2) gear has been marked with the client's or guest's name and address, as specified in 5 AAC 77.010(d); and

(3) shellfish is to be consumed by the client or guest or is consumed in the presence of the client or guest.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would make an addition to the regulatory language adopted in 2012 which prohibits sport, personal use and subsistence caught shellfish from entering commerce by creating a definition of "guest" within the personal use fishery.

BACKGROUND: At the 2012 statewide meeting, the board adopted regulatory language, proposed by the department of public safety (proposal 374), explicitly prohibiting lodging, food, or sport fishing guide service providers, or their employees, from harvesting shellfish for clients or guests and clarified that sport, personal use and subsistence shellfish may only be served to a client or guest when it was harvested by that client or guest or consumed in the presence of the client or guest. In addition, the language adopted in 2012 prohibits the captain and crew of a charter vessel from deploying, setting, or retrieving their own gear in a sport, personal use or subsistence shellfish fishery when that vessel is being chartered.

DEPARTMENT COMMENTS: The department **SUPPORTS** clear regulatory language prohibiting retail sale of personal use caught fish and shellfish. If regulatory language needs to be clarified to provide for effective enforcement, adopting of similar language in sport regulations is recommended.

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.

King and Tanner Crab (15 proposals)

General (2 Proposals)

PROPOSAL 61 – 5 AAC 34.100. and 35.100. Description of Registration Area A.

PROPOSED BY: Jared Bright.

WHAT WOULD THE PROPOSAL DO? This seeks to change the offshore boundary line for king and Tanner crab fisheries in Registration Area A (Southeast Alaska) from the three-nautical-mile state water limit to the 200-nautical-mile federal Exclusive Economic Zone boundary.

WHAT ARE THE CURRENT REGULATIONS? Registration Area A has as its southern boundary the International Boundary at Dixon Entrance, and as its northern boundary a line extending seaward from the western tip of Cape Fairweather to the intersection with the seaward limit of the three-nmi territorial sea (Figure 61-1). Currently, any fishing outside of three miles could be prosecuted through the terms of a Commissioner's permit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The Tanner crab fishery outside of three nmi in Registration Area A would be prosecuted under 5 AAC 35.113 and this area would be managed with the noncore areas. It is likely that little harvest would occur due to the limited number of noncore fishing days and presumed low harvest potential in offshore waters compared to other noncore areas in the internal waters.

The red king crab fishery outside of three nmi would be prosecuted under 5 AAC 34.113 and this area would be managed with other non-surveyed areas. Little harvest is likely to occur because there is no evidence of a harvestable surplus of red king crab in offshore waters.

The golden king crab fishery would be prosecuted under 5 AAC 34.113 and according to the *Description of golden king crab fishing areas within Registration Area A* (5 AAC 34.107), this area would not be part of any of the seven fishery areas so no harvest would occur.

BACKGROUND: The description for Registration Area A included the seaward limit of three-nmi territorial sea starting in 2005. Prior to this time, the waters of Registration Area A had a southern boundary at the international boundary at Dixon Entrance, and a northern boundary at the Loran-C line 7960-Y-29590, which intersects the western tip of Cape Fairweather at 58° 47' 58" N. lat., 137° 56' 30" W. long., except for District 16, which is defined as all waters north of a line projecting west from the southernmost tip of Cape Spencer and south of a line projecting southwest from the westernmost tip of Cape Fairweather.

There is little information on crab stocks in offshore waters. The department does not conduct any crab surveys in these areas and information from the biennial federal groundfish trawl survey shows catches of fewer than four crabs (Table 61-1). Bycatch of Tanner crab in the District 16 scallop fishery, which includes waters in the Gulf of Alaska from Cape Spencer to Cape Fairweather, has been variable over the past eight seasons, ranging from zero in 2015 and 2016 to 2,165 crabs (all sizes and sexes combined) in 2013 (Table 61-2).

Fish ticket records from District 16 show that 469,507 lb of Tanner crab have been harvested in statistical areas on the outer coast from 0-3 nmi offshore since 1972. A limited amount of red king crab has been harvested in the offshore statistical areas since 1972; effort was by fewer than

three permit holders and remains confidential. In the remainder of Registration Area A, 130,255 lb of Tanner crab; 31,122 lb of grooved Tanner crab; 9,817 lb of golden king crab; and 13,629 lb of red king crab have been harvested in the offshore statistical areas since 1969.

No federal fishery management plan has been established for crab stocks in the Gulf of Alaska, therefore the state has management authority within the 200-mile exclusive economic zone.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The expanded area would be managed as a noncore area for the Tanner crab fishery, as a non-surveyed area for the red king crab fishery, and would continue to be managed under the conditions of a Commissioner's permit for the golden king crab 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.

Table 61-1.–Federal Gulf of Alaska groundfish trawl survey catch of commercially important crab species in the offshore waters of Southeast Alaska, 2003–2015.

Species	2003	2005	2007	2009	2011	2013	2015
Tanner (*bairdi*)	0	1	1	3	3	3	1
Grooved Tanner	1	0	3	1	1	0	4
Dungeness	0	1	0	0	1	0	0
Golden king	0	1	0	0	0	0	0

Source: https://www.afsc.noaa.gov/RACE/groundfish/survey_data/data.htm

Table 61-2.–Observed and estimated total Tanner crab bycatch in the District 16 scallop fishery, 2009–2016.

Year	Observed	Estimated
2009	89	1,020
2010	11	95
2011	4	56
2012	131	1,700
2013	267	2,165
2014	33	302
2015	0	0
2016	0	0

Source: ADF&G Scallop observer database

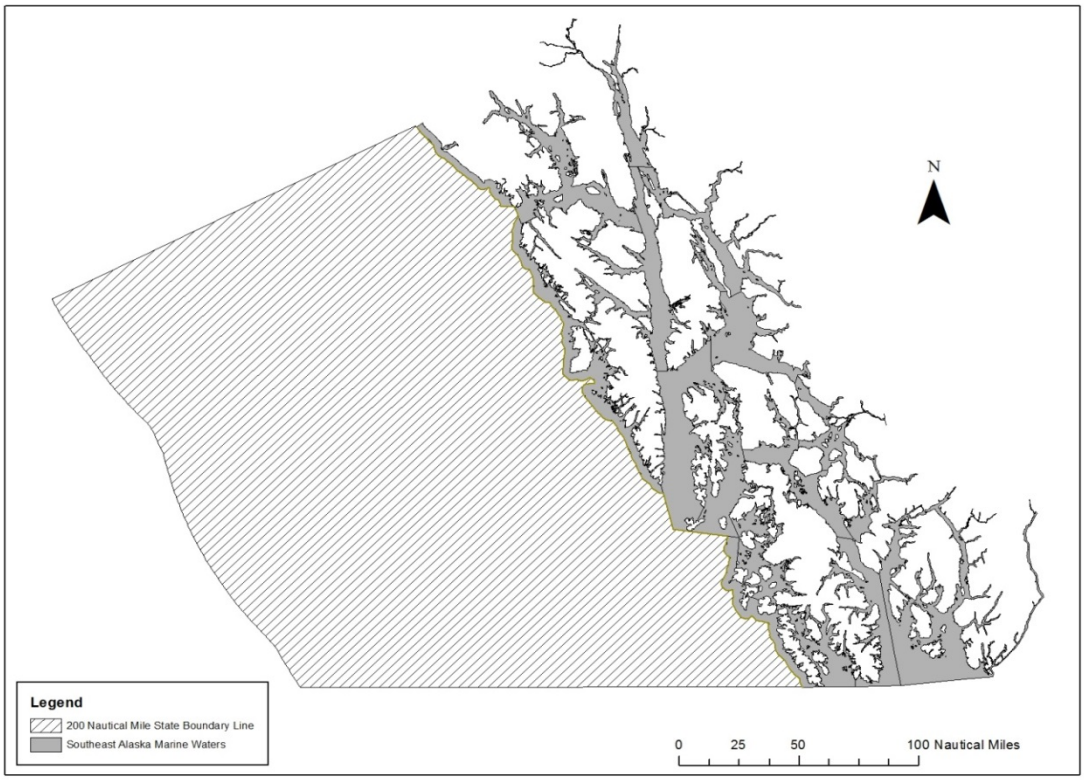


Figure 61-1.–Map showing the proposed expanded boundary definition for Registration Area A.

PROPOSAL 62 – 5 AAC 34.160. and 35.160. Description of Registration Area D.

PROPOSED BY: Jared Bright.

WHAT WOULD THE PROPOSAL DO? This seeks to change the offshore boundary line for king and Tanner crab fisheries in Registration Area D from the three-nmi state water limit to the 200-nmi federal Exclusive Economic Zone boundary.

WHAT ARE THE CURRENT REGULATIONS? Registration Area D has as its western boundary the longitude of Cape Suckling (144° W. long.), and as its southern boundary a line extending seaward from the western tip of Cape Fairweather to the intersection with the seaward limit of the three-nmi territorial sea.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The Tanner crab, red and blue king crab, and golden king crab fisheries in Registration Area D would change very little under this proposal. The Tanner crab fishery has been closed by emergency order since 1999 for stock health concerns. Historically, over 7% of the harvest was taken from offshore waters outside of three miles.

BACKGROUND: The description of Registration Area D included the seaward limit of the three-nmi territorial sea starting in 2005. Prior to this time, the waters of Registration Area D had as its western boundary the longitude of Cape Suckling (143° 53' W. long.), and as its southern boundary Loran-C line 7960-Y-29590, which intersects the western tip of Cape Fairweather at 58° 47' 58" N. lat., 137° 56' 30" W. long.

In Registration Area D, 901,267 lb of Tanner crab have been harvested in the statistical areas offshore outside (0-3 mi) since 1974. There has also been a small amount of red king and grooved Tanner carb harvested outside of the three mi boundary, but this was by fewer than three permit holders so the information is confidential.

Few commercially important crab species are caught in the biennial federal groundfish trawl survey (Table 62-1). Estimated bycatch of Tanner crab in the Yakutat scallop fishery over the past eight seasons has varied from 827 crab (all sizes and sexes) in 2016 to 23,933 crab in 2013 (Table 62-2).

The red and blue king crab fishery has historically occurred almost entirely in Yakutat Bay and Russell Fjord. Historically, there have been some red king crab harvested outside of three mi; this harvest was by fewer than three permit holders and remains confidential. There have been no verified landings of golden king crab from Registration Area D.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on 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.

Table 62-1.–Federal Gulf of Alaska groundfish trawl survey catch of commercially important crab species in the offshore waters of Yakutat, 2003–2015.

Species	2003	2005	2007	2009	2011	2013	2015
Tanner (*bairdi*)	6	7	3	2	3	15	4
Grooved Tanner	4	3	4	1	0	0	4
Red king	0	0	0	0	0	0	1
Dungeness	0	0	1	0	0	0	0

Source: https://www.afsc.noaa.gov/RACE/groundfish/survey_data/data.htm

Table 62-2.–Observed and estimated total Tanner crab bycatch in the Yakutat scallop fishery, 2009–2016.

Year	Observed	Estimated
2009	904	11,441
2010	1,661	14,654
2011	1,069	11,487
2012	1,058	11,180
2013	3,329	21,768
2014	118	1,096
2015	232	1,912
2016	91	827

Source: ADF&G Scallop observer database

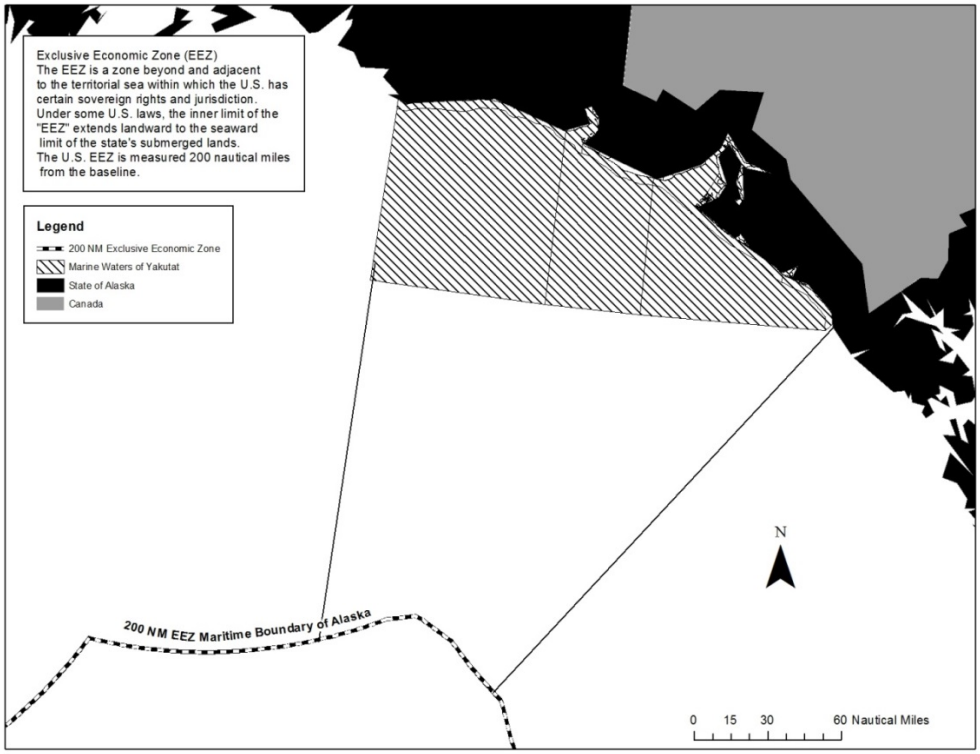


Figure 62-1.–Map showing the proposed expanded boundary definitions for Registration Area D.

Red King Crab (3 Proposals)

PROPOSAL 63 – 5 AAC 34.113. Southeast Alaska Red King Crab Management Plan.

PROPOSED BY: Jared Bright, Luke Whitethorn, Yancey Nilsen, and Derek Thynes.

WHAT WOULD THE PROPOSAL DO? This seeks to modify the *Southeast Alaska Red King Crab Management Plan* (management plan) by opening an exploratory commercial red king crab fishery in specific areas during years when the available harvest is below the current minimum threshold of 200,000 lb of legal male red king crab.

WHAT ARE THE CURRENT REGULATIONS? The management plan does not allow for a commercial fishery if the GHL is less than 200,000 lb of legal male red king crab.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The area described would open when available harvest is below the minimum threshold of 200,000 lb of legal male red king crab. If Proposal 61 were to be adopted, the "outside waters" would extend to the 200-nmi Exclusive Economic Zone boundary. Annual harvest of red king crab would occur by both commercial and personal use user groups. The department would need to determine an appropriate harvest level for the commercial fishery in the areas described.

Currently, if the red king crab commercial fishery is closed because the 200,000-lb minimum GHL is not met, the department may open the personal use red king crab fishery with reduced bag and possession limits, provided that the personal use red king crab fishery is not closed because of conservation concerns (5 AAC 77.664). The trigger for the department to consider reducing the personal use bag and possession limit is dropping below the 200,000 lb threshold, not the opening of the commercial fishery. If adopted, this could create a situation where the commercial red king crab fishery was open, but the personal use red king crab bag and possession limit was reduced because the regionwide red king crab GHL was less than 200,000 lb.

After the commercial red king crab GHL has been set, the department apportions that GHL to specific bays or sections based on estimated biomass in those locales. If the commercial red king crab fishery were opened with a regionwide GHL of less than 200,000 lb, it is possible that some of the bay or section GHLs would be too small for the department to effectively manage and would remain closed.

BACKGROUND:

Red king crab commercial fishery areas

In 1976, the department received funds to survey portions of Southeast Alaska that were not normally fished by the commercial fleet. The purpose was to find additional stocks to help support the commercial fishery. Three commercial fishermen were contracted to fish for 10 days each in districts 3 and 4 during February and March. While some small isolated stocks of red king crab were identified, the numbers of legal crab available were very few and insufficient to support a commercial fishery. Catch rates were less than 0.01 legal crabs per pot.

During the 1988 Southeast Alaska shellfish board meeting, the board adopted regulations allowing for experimental fishing in non-traditional areas by commercial king crab permit holders. These regulations required mandatory logbook completion. This experimental fishing effort was an attempt to find new and significant stocks to reach the threshold and reopen the commercial fishery. During the 1988/89 and 1989/90 seasons, the department issued experimental permits to 19 permit holders who fished at various times from July to January. Of

the 19 permits issued, seven resulted in landings. The total amount landed was 2,061 lb. Thirty-six subdistricts were fished, with harvests reported from ten subdistricts. After two seasons of exploratory fishing, it was obvious that interest in these fisheries was low, catches were poor, and no major unexploited populations of either species had been found. Due to poor fishing performance and violations of regulations, the board repealed regulations allowing for experimental king crab fishing in Southeast Alaska in 1990.

Guideline harvest levels and quotas for the commercial red king crab fishery

A quota of 1.5 million lb was provided for the king crab (all species combined) commercial fishery in 1970. Separate red and golden king crab fisheries were recognized with the adoption of distinct seasons and quotas in 1971. From 1971 through the 1978/79 season, the red king crab quotas, guideline harvest ranges (GHRs), or guideline harvest levels (GHLs) were based upon historical harvest and limited size distribution information obtained from the dockside sampling program. The first red king crab quota was set in 1971 at 400,000 lb per season. This was increased to 600,000 lb in 1974, and then reduced to 400,000 lb in 1977.

Quotas were replaced by GHRs after 1977. The first GHR of 200,000–400,000 lb was established in 1978. The GHR was increased to 300,000–600,000 lb in 1979 based on industry recommendations. Since the 1980/81 season, allowable harvests, expressed as either GHLs or GHRs, have been based on results from the red king crab index of abundance survey. Beginning in 1988 a threshold of 300,000 lb of surplus legal sized crab had to be available before the commercial fishery would be opened. In 2002, this threshold was reduced to 200,000 lb by the board based on industry-driven market considerations. Part of this threshold reduction included a three-year sunset clause. The sunset clause was removed in 2005 and the current threshold has been in place since that time.

History of the red king crab management plan

In 1993, the board adopted a comprehensive management plan for red king crab in Southeast Alaska. This management plan was designed to be consistent with the board's policy on "King and Tanner Crab Resource Management." Major elements of the plan include the following:

1. provisions to maintain an adequate abundance of various size classes of males and females necessary to provide for sustained harvests and stock conservation;
2. application of a harvest rate based on both legal males and mature males;
3. a GHL based on stock conditions for each fishing district;
4. a minimum harvest threshold of legal males;
5. conduct of an orderly fishery; and
6. conservative management when information is lacking.

Additional elements used to manage the fishery are included in regulations concerning allocation between commercial and personal use fishermen in Section 11-A, lawful gear, and closed waters. A mandatory call-in program was implemented for all seasons after success with a voluntary call-in program during 2001/02 season.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. The department has no information available by which to extend the current fishing areas into new areas or to establish associated GHRs and seasonal GHLs. In addition, the experimental fishing

provisions put into regulation after the 1988 board meeting showed that interest in these areas was low and that harvest was minimal during this period. There were also regulation violations that occurred during this time, which resulted in the board repealing the 1988 regulation in 1990. Since the 1969/70 season, less than three percent of the total harvest has occurred in districts 1–8 (Table 63-1).

The current 200,000-lb minimum GHL not only achieves market-driven and inseason management-related objectives previously established by the board, but is also likely to play an important stock conservation role by keeping the fishery closed during periods of low stock status.

The board has eliminated minimum GHLs for some king and Tanner crab fisheries where inseason management concerns have been alleviated through other regulatory action; however, management plans for those fisheries contain biomass- or abundance-based thresholds that serve as backstops in protecting stock reproductive potential. Similar backstops are not incorporated into the management plan for red king crab in Southeast Alaska.

Without abundance- or biomass-based thresholds, including a minimum GHL, explicitly defined in regulation, the department would use professional judgment in evaluating the best available information to establish a sustainable GHL. Before opening the Southeast Alaska red king crab fishery with a GHL of less than 200,000 lb, a red king crab harvest strategy with an abundance- or biomass-based fishery threshold should be developed and adopted by the board.

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 63-1.–Total historical commercial red king crab harvest (1969/70 through 2011/12) in districts proposed as exploratory areas and in all areas combined. At the time of this publication, there has not been a commercial red king crab fishery since the 2011/12 season.

Districts	Total Harvest (lb)	Number of Landed Permits
1	5,898	6
2	--	--
3	2,771	6
4	*	*
5	36,989	16
6	64,348	13
7	21,442	5
8	188,306	33
All areas combined	319,754	97**

*Confidential data; fewer than three permit holders participated in the fishery in this area.

**Maximum number of permits fished (1983/84 season).

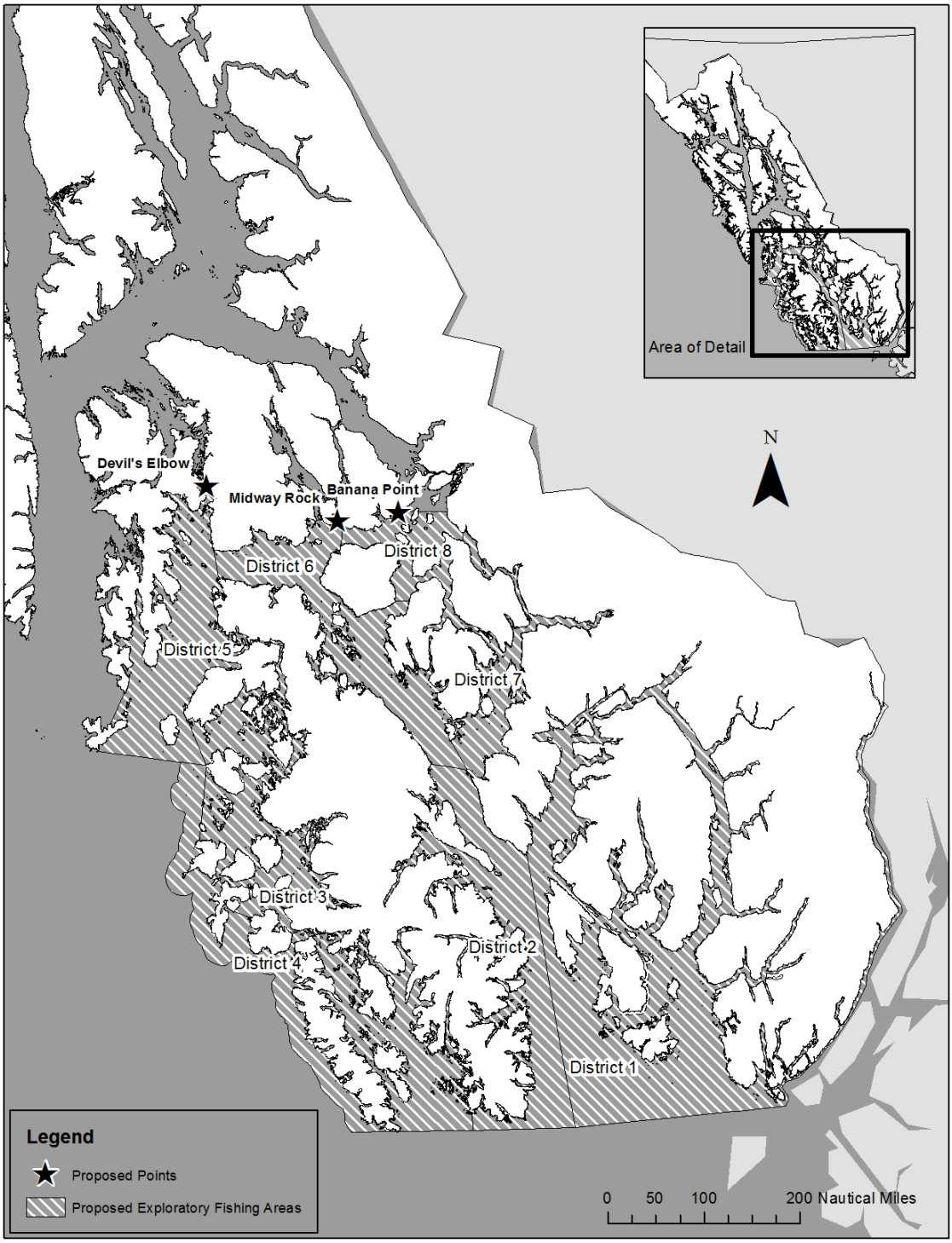


Figure 63-1.–Map showing the proposed areas that would open as an exploratory fishery if the department's estimate of the available commercial red king crab harvest were below 200,000 lb of legal red king crab.

PROPOSAL 64 – 5 AAC 34.113. Southeast Alaska Red King Crab Management Plan and 5 AAC 34.125. Lawful gear for Registration Area A.

PROPOSED BY: Petersburg Vessel Owner's Association.

WHAT WOULD THE PROPOSAL DO? This would modify the *Southeast Alaska Red King Crab Management Plan* (management plan) and create an equal quota share fishery if the GHL is greater than 50,000 lb and less than 200,000 lb. The minimum pot limit of 20 pots per vessel would apply to GHLs between 50,000 and 399,999 lb.

WHAT ARE THE CURRENT REGULATIONS? The management plan (5 AAC 34.113) does not allow for a commercial fishery if the GHL is less than 200,000 lb. Pot limits are established based on the GHL: 20 pots are allowed per vessel when the GHL is between 200,000 and 399,999 lb.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The department would determine an annual harvest objective (similar to a GHL) for red king crab and the annual harvest objective would be divided annually among all eligible red king crab permits so that each permit holder would know their harvest portion prior to opening of the fishery. Permit holders could fish any time during the season (November 1 –January 24). Under equal quota share management, pot soak times would increase, leading to reduced handling of female and prerecruit male crabs.

Opening the Southeast Alaska red king crab commercial fishery at GHLs between 50,000 and 199,999 lb would likely result in harvests that are not sustainable and would result in overfishing. The department would continue to conduct annual stock assessment surveys, evaluate other sources of data such as fishery performance, and use the best available information to determine what amount of commercial red king crab harvest, if any, is sustainable.

Harvest would be reallocated from the most efficient and highest performing vessels to vessels with below average harvest and harvesting costs would likely decrease.

Currently, if the red king crab commercial fishery is closed because the 200,000-lb minimum GHL is not met, the department may open the personal use red king crab fishery with reduced bag and possession limits, provided that the personal use red king crab fishery is not closed because of conservation concerns. The trigger for the department to consider reducing the personal use bag and possession limit is dropping below the 200,000 lb threshold, not the opening of the commercial fishery. If adopted this proposal could create a situation where the commercial red king crab fishery was open, but the personal use red king crab bag and possession limit was reduced because the regionwide red king crab GHL was less than 200,000 lb.

BACKGROUND: A quota of 1.5 million lb was provided for the king crab (all species combined) commercial fishery in 1970. Separate red and golden king crab fisheries were recognized with the adoption of distinct seasons and quotas in 1971. From 1971 through the 1978/79 season, the red king crab quotas, guideline harvest ranges (GHRs), or GHLs were based upon historical harvest and limited size distribution information obtained from the dockside sampling program. The first red king crab quota was set in 1971 at 400,000 lb per season. This was increased to 600,000 lb in 1974, and then reduced to 400,000 lb in 1977.

Quotas were replaced by GHRs after 1977. The first GHR of 200,000–400,000 lb was established in 1978. The GHR was increased to 300,000–600,000 lb in 1979 based on industry

recommendations. Since the 1980/81 season, allowable harvests, expressed as either GHLs or GHRs, have been based on results from the red king crab index of abundance survey. Beginning in 1988, a threshold of 300,000 lb of surplus legal sized crab had to be available for the commercial fishery to open. In 2002, the board reduced the threshold to 200,000 lb in response to an industry proposal that cited economic reasons. Part of this threshold reduction included a three-year sunset clause. The sunset clause was removed in 2005 and the current threshold has been in place since that time.

DEPARTMENT COMMENTS: The department is **OPPOSED** to allowing the red king crab fishery to open with a GHL of less than 200,000 lb.

After the commercial red king crab GHL has been set, the department apportions that GHL to specific bays or sections based on estimated biomass in those locales. If the commercial red king crab fishery were opened with a regionwide GHL of less than 200,000 lb, it is possible that some of the bay or section GHLs would be too small for the department to effectively manage and would remain closed. While there is little risk of exceeding a regionwide GHL under an equal quota share system, target harvest levels in a bay or section could be exceeded if too many permit holders choose to harvest their quota in the same locale.

The current 200,000-lb minimum GHL not only achieves market-driven and inseason management-related objectives previously established by the board, but is also likely to play an important stock conservation role by keeping the fishery closed during periods of low stock status.

The board has eliminated minimum GHLs for some king and Tanner crab fisheries where inseason management concerns have been alleviated through other regulatory action, however management plans for those fisheries contain biomass or abundance based thresholds that serve as backstops in protecting stock reproductive potential. Similar backstops are not incorporated into the management plan for red king crab in Southeast Alaska.

Without abundance or biomass-based thresholds, including a minimum GHL, explicitly defined in regulation, the department would use professional judgment in evaluating the best available information to establish a sustainable GHL. Before opening the Southeast Alaska red king crab fishery with a GHL of less than 200,000 lb, a red king crab harvest strategy with an abundance or biomass-based fishery threshold should be developed and adopted by the board.

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.

PROPOSAL 234 – 5AAC 77.664. Personal use king crab fishery.

PROPOSED BY: Alaska Board of Fisheries.

WHAT WOULD THE PROPOSAL DO? This would require a personal use fishing permit for the taking of king crab in all areas of Southeast Alaska and reduce the maximum bag and possession limit from six to three crab.

WHAT ARE THE CURRENT REGULATIONS? A personal use fishing permit is only required in Section 11-A. In Sections 11-A, 12-B, 15-B, and 15-C the maximum bag and possession limit is three crab per person. In all other waters the maximum bag and possession limit is six crab per person.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide personal use harvest and effort data for king crab throughout Southeast Alaska and reduce king crab harvest by an unknown amount. The regulatory maximum bag and possession limit outside of Section 11-A would be consistent across the region and the department would retain the ability to reduce bag limits or close areas due to conservation concerns. More accurate estimates of harvest by all user groups would improve red king crab stock assessment in surveyed areas because a key component of population modeling requires knowledge of all known mortality. The information collected would also show the relative importance of specific areas to personal use harvesters, which is currently unknown.

BACKGROUND: All noncommercial harvest of king crab in Southeast Alaska occurs under personal use regulations. The bag and possession limit for king crab in all of Southeast Alaska was six crab per person from 1971 to 1994. In 1995, the bag and possession limit was reduced to three crab in sections 11-A, 12-B, and 15-C; Section 15-B was added in 2005. In 2009, personal use regulations were amended to provide the department management flexibility for reduced bag limits when the threshold for a commercial fishery was not met.

The board initiated a management and allocation plan for commercial and personal use red king crab in Section 11-A beginning with the 1996/97 season. New regulations also required a personal use fishing permit for red and blue king crab in Section 11-A. Since that time, personal use harvest limits in Section 11-A have been adjusted to stay within an annual allocation.

DEPARTMENT COMMENTS: The department **SUPPORTS** requiring a personal use king crab permit in all areas of Southeast Alaska and is **NEUTRAL** on the allocative aspect of lowering the maximum bag and possession limit from six to three crab in areas outside of sections 11-A, 12-B, 15-B, and 15-C. Presently, data on personal use king crab harvest in the region are limited to the Section 11-A red king crab permit, information collected by the department in a statewide mail-out survey, and information from periodic household surveys. The statewide harvest survey is designed to estimate sport harvest and anglers are instructed to report only their sport harvest of shellfish species. Although the sport fishery for king crab is closed in Southeast Alaska, resident anglers occasionally report harvest of king crab, which could only have occurred under personal use regulations. The king crab harvest estimate derived through the statewide harvest survey averages 1,237 crab annually over the past ten years (Table 234-1) but this should only be considered a minimum estimate of king crab harvest.

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 234-1.–Estimates of Southeast Alaska king crab harvest from the statewide harvest survey, 2007–2016.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year average
Southeast Total	4,432	36	850	1,727	2,143	691	1,161	396	385	549	1,237

Golden King Crab (6 Proposals)

PROPOSAL 65 – 5 AAC 34.107. Description of Golden King Crab Fishing Areas within Registration Area A.

PROPOSED BY: Jared Bright, Frank Warfel, and Yancey Nilsen.

WHAT WOULD THE PROPOSAL DO? This seeks to add new or extend the range of golden king crab (GKC) management areas from the current seven areas.

WHAT ARE THE CURRENT REGULATIONS? Seven management areas for golden king crab are described in regulation: Northern, Icy Strait, North Stephens Passage, East Central, Mid-Chatham Strait, Lower Chatham Strait, and Southern (Figure 65-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would open waters of Southeast Alaska not currently open to the commercial golden kind crab fishery by either expanding current management areas and/or creating new management areas.

BACKGROUND: The commercial golden king crab fishery began in 1970 as a bycatch fishery to the red and blue king crab fisheries with a quota of 1.5 million lb. In 1971, golden king crab fisheries were recognized with the adoption of distinct seasons, and a quota of 600,000 lb was established and managed regionwide (Table 65-1). After 1977, GHRs replaced quotas and the fishery was split into traditional (GHR 200,000–500,000 lb) and nontraditional areas (no fixed GHR) that were managed regionwide until 1987 (Table 65-1).

From 1987 to 1994, due to the propensity of the fleet to concentrate fishing effort only in the most productive fishing grounds, and in order to prevent overexploitation on any single fishing ground, separate GHRs for three management areas were established and managed. All other undefined management areas were considered "exploratory areas" and had no fixed GHR (Table 65-1).

In 1994/95, exploratory areas closed due to insufficient harvest being retained from those areas. From 1994/95 through the 1999/00 season, five defined fishing areas and GHRs existed in regulation (Table 65-1).

From the 2001/02 season through the 2004/05 season, the original five management areas in regulation were managed as seven; Frederick Sound and Icy Strait areas were split and managed as two subareas each with their own GHRs (Table 65-1).

At the 2005 board meeting, the two unofficial subareas were formally added as separate management areas. In addition, the Icy Strait Area and West Icy Strait Subarea GHRs were altered to represent historical harvest. Lastly, all seven management areas were renamed and have remained the same since the 2005/06 season. The GHRs were last modified starting with the 2009/10 season (Figure 65-1, Table 65-1).

The historical harvest in statistical areas that are not currently open to the commercial golden king crab fishery is low, with landed historical harvest coming specifically from districts 7 (6,636 lb), 8 (5,322 lb), and 13 (2,249 lb).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The department has no information available by which to extend the current fishing areas into new areas or to establish associated GHRs and seasonal GHLs. In addition, fishery performance has declined in the major fishing areas since the 2012/13 season, suggesting that new fishery areas, and expanding the boundaries of current fishing areas, to increase harvest opportunity at this time is unwarranted. If new, exploratory harvest opportunity outside of the seven established fishery areas were to occur, the department would prefer this be done under the tightly controlled conditions of a permit issued by the commissioner rather than creating new fishing areas and associated GHRs and GHLs in regulation.

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

Table 65-1.–Description of historical management areas and their quota or guideline harvest ranges (GHRs).

Regulation/Management Years	Quotas, GHRs, and Management Areas	Area
<1969/70	No Limit	SEAK/Yakutat
1970/71	Quota: 1,500,000 lb of all king crab	SEAK/Yakutat
1971/72 to 1977/78	Quota: 600,000 lb of GKC	SEAK/Yakutat
1978/79 to 1983/84	GHR: 50,000 to 200,000 lb of GKC	SEAK/Yakutat
1984/85 to 1986/87	Traditional Fishing Grounds GHR: 200,000 to 500,000 lb of GKC	SEAK Only
	Nontraditional Fishing Grounds: No GHR	SEAK/Yakutat
1987/88 to 1993/94	Frederick Sound: 200,000 to 600,000 lb	SEAK Only
	Icy Straits: 150,000 to 250,000 lb	
	Chatham Straits: 200,000 to 350,000 lb	
	Exploratory Areas: No fixed GHR	
1994/95 to 1999/00	Frederick Sound: 0 to 350,000 lb	SEAK Only
	Icy Strait: 0 to 250,000 lb	
	Chatham Strait: 0 to 150,000 lb	
	Cape Ommaney: 0 to 100,000 lb	
	Clarence Strait: 0 to 25,000 lb	
2000/01 to 2004/05 (Unofficial Management Areas)	New Frederick Sound: 0 to 225,000 lb	SEAK Only
	North Frederick Sound: 0 to 25,000 lb	
	New Icy Strait: 0 to 25,000 lb	
	West Icy Strait: 0 to 90,000 lb	
	Chatham Strait (Same): 0 to 150,000 lb	
	Cape Ommaney (Same): 0 to 50,000 lb	
	Clarence Strait (Same): 0 to 25,000 lb	
2004/05 to 2008/09	East Central Area: 0 to 225,000 lb	SEAK Only
	North Stephens Passage Area: 0 to 25,000 lb	
	Northern Area: 0 to 145,000 lb	
	Icy Strait Area: 0 to 55,000 lb	
	Mid-Chatham Strait Area: 0 to 150,000 lb	
	Lower Chatham Strait Area: 0 to 50,000 lb	
	Southern Area: 0 to 25,000 lb	
2009/10 to Current	East Central Area: 0 to 300,000 lb	SEAK Only
	North Stephens Passage Area: 0 to 25,000 lb	
	Northern Area: 0 to 175,000 lb	
	Icy Strait Area: 0 to 75,000 lb	
	Mid Chatham Strait Area: 0 to 150,000 lb	
	Lower Chatham Strait Area: 0 to 50,000 lb	
	Southern Area: 0 to 25,000 lb	

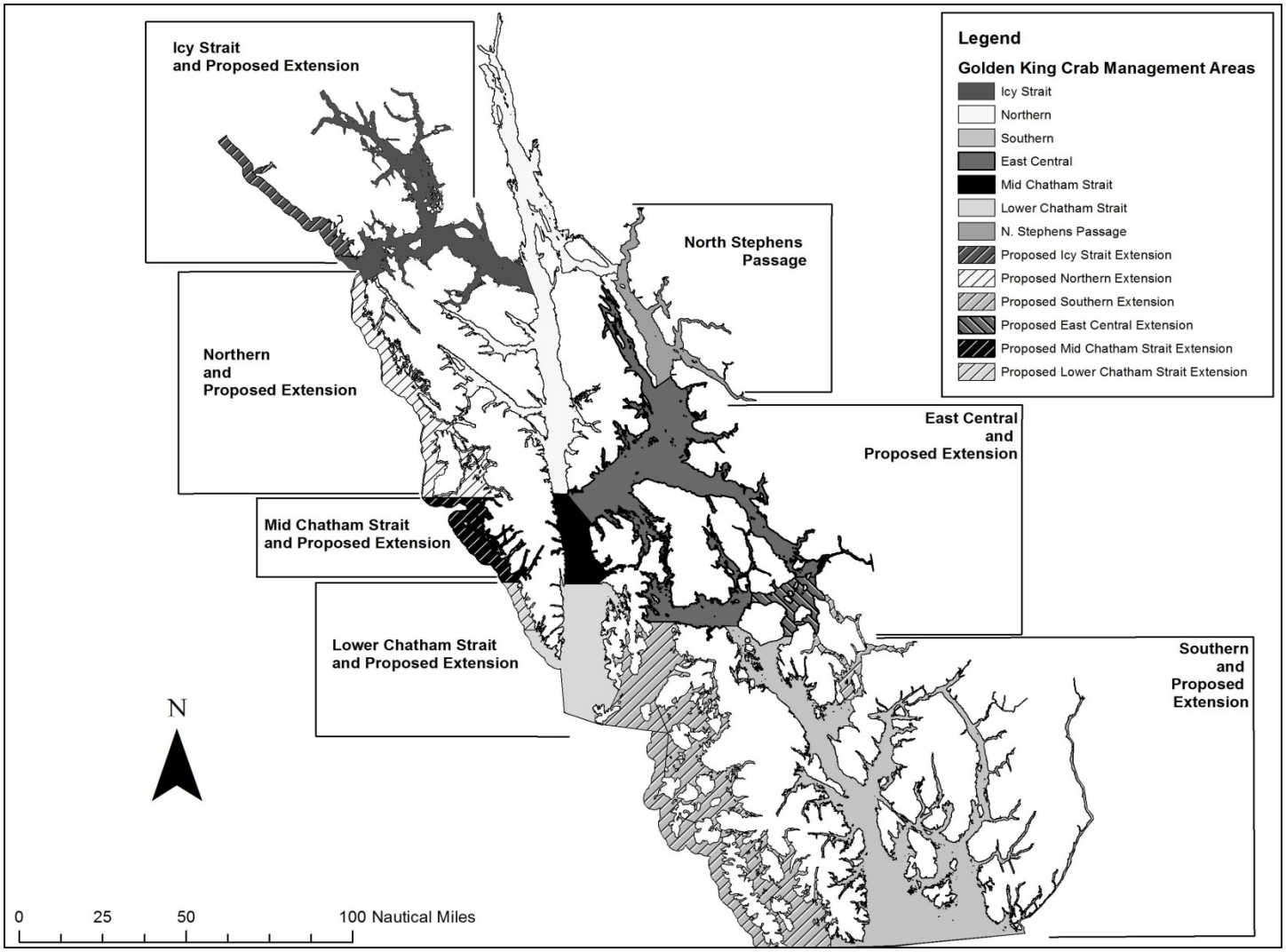


Figure 65-1.–Map showing the current seven golden king crab management areas and the proposed golden king crab areas as an extension of the current management areas.

PROPOSAL 66 – 5 AAC 34.110. Fishing seasons for Registration Area A.

PROPOSED BY: Yancey Nilsen.

WHAT WOULD THE PROPOSAL DO? This would implement weather-related king crab fishery closure delays if area forecasts contain gale force wind warnings of 35 knots and higher for the two days preceding and the day of an area closure in which case the closure will be delayed 24 hr, and potentially longer if gale force wind conditions persist.

WHAT ARE THE CURRENT REGULATIONS? Male golden king crab may be taken only from 12:00 noon on the date with the smallest Juneau tidal range between February 10–17, as announced by emergency order, until the season is closed by emergency order. The season opening may be delayed due to gale force winds: 35 knots and higher on the 4:00 a.m. forecast for the day preceding the opening date and the following day in Southern Lynn Canal, Northern Chatham Strait, Stephens Passage, and Frederick Sound. Season opening delays are for 24 hr and may continue on a rolling 24-hr basis.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Closure announcements made to target fishery area GHLs could be delayed. Closure delays built into regulation could cause fishery area GHLs to be exceeded more often. It is likely fishery managers would need to be more conservative and announce closures earlier than estimated to reach the GHL if adverse weather is anticipated.

BACKGROUND: The 2007/08 golden king crab fishery opened concurrent with the commercial Tanner crab fishery on February 14, 2008. The start date had originally been set for February 12, 2008, but the season was delayed for 48-hr due to adverse weather conditions. The department and the King and Tanner Task Force (KTTF) had previously jointly established criteria by which the Tanner and golden king crab fisheries could be delayed or extended due to bad weather. The criteria stipulated winds 40 knots or higher throughout the region in the 3–4 days preceding the start of the fishery. The department determined that these criteria had been met and that a delay to the start of the fishery was warranted. The department also consulted with NOAA meteorologists, AWT, the USCG, the KTTF, and crab permit holders and processors on the decision to delay the start date of both fisheries.

The 2010/11 golden king crab fishery opened concurrent with the commercial Tanner crab fishery on February 18, 2011. The start date had originally been set for February 15, 2011 but the season was delayed for 48 hr, and then another 24 hr due to adverse weather conditions. In considering the delay, the department referred to the weather criteria established by the KTTF. The department did not believe that the KTTF criteria had been met, but determined that a delay to the start of the fishery was warranted due to concerns from a majority of fishermen and processors, NOAA, AWT, and the USCG.

At the 2012 board meeting, the department submitted a proposal to implement criteria in regulation for managers to use in weather-related delays to the opening of the Tanner and king crab fisheries. During the committee process there was some discussion from the public about also adding a similar delay for closures. The department clarified that five to eight days' advanced notice is typically given prior to area closures in consideration of tides and weather forecasts. The proposal was carried as written, with delays to opening dates only.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The current limit of 100 pots in the golden king crab fishery makes it difficult to set closures to target GHLs, while

already allowing adequate time in consideration of weather and tides. Currently five to eight days' notice is given prior to area closures. Weather is considered by fishery managers when making closure decisions: building in further weather delay criteria would be redundant and further complicate targeting fishery area GHLs. When advance notice of a week or more is provided, vessel operators must plan their fishing activity in anticipation of weather and time needed to operate the gear.

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.

PROPOSAL 67 – 5 AAC 34.110. Fishing seasons for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would change the Southeast Alaska golden king crab season closing date from an undefined date announced by emergency order to November 15.

WHAT ARE THE CURRENT REGULATIONS? Male golden king crab may be taken only from 12:00 noon on the date with the smallest Juneau tidal range between February 10 and 17, as announced by emergency order, until the season is closed by emergency order. The season opening may be delayed further due to gale force winds.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This provides a nearly nine month season, if GHLs have not been reached and if conservation concerns do not force an earlier closure by emergency order. This would allow the department adequate time to assess fishery data, and would make the golden king crab fishery similar to red king crab and Tanner crab fisheries which have end dates in regulation.

BACKGROUND: The limited biological information on golden king crab life history timing in Southeast Alaska suggests that molting and mating may occur throughout the year, with a slight peak in molt timing in late spring and early summer. However, soft-shelled crab are frequently caught during the fishery starting in February. The presence of eggs in all stages of development throughout the year also supports the conclusion of no distinct molting or mating period. As a result, fishing seasons have been liberal. From 1961 to 1968 there was no closed season. Closures have been primarily established to provide fair start opportunities during red king crab and Tanner crab fisheries. Fishing has started on dates ranging from August 1 through mid-February. The fishery currently starts on the day with the smallest tidal range between February 10 and 17, concurrently with the start of the commercial Tanner crab fishery, and continues until the season is closed by emergency order due to resource conservation concerns or the attainment of established GHLs. In recent seasons, the fishery areas have closed between February and November, depending upon effort, harvests, harvest rates, and recruitment levels, and in some instances have been closed by emergency order due to conservation concerns (Table 67-1). Since 2006, there have been four seasons when the fishery was closed by emergency order after November 15: in 2006, 2007, 2013, and 2015. Fewer than three permit holders were active in the fishery after November 15 during these years, so post-November 15 harvest information is confidential.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The purpose of this proposal is to provide maximum fishing opportunity while allowing the department adequate time to assess fishery data after the season closes and prior to announcing the following season GHLs. The proposed season end date provides a three-month closure for processing and analysis of fishery data. Setting a fixed season end date also allows fishery participants to better plan their annual fishing operations.

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

Table 67-1.–Season closure dates by golden king crab management area for 2006–2017. Shaded cells indicate when season closure date was past the proposed date of November 15.

Year	Golden king crab fishery management area						
	East Central	Northern	Icy Strait	N. Stephens Passage	Southern	Mid-Chatham	Lower Chatham
2006	4/8	4/8	4/10	10/26	12/31	10/16	12/31
2007	4/8	3/15	3/2	5/19	12/5	9/25	12/5
2008	3/6	3/3	3/2	3/21	9/28	5/2	9/10
2009	2/26	3/4	3/12	5/15	11/5	4/17	8/10
2010	2/24	3/13	3/15	5/4	10/17	4/12	6/22
2011	3/9	4/1	3/16	6/12	6/10	4/13	9/23
2012	2/22	5/27	10/28	10/28	5/11	4/15	5/21
2013	4/23	5/3	5/6	6/15	11/26	11/26	11/26
2014	4/25	4/25	5/12	5/24	7/9	7/9	7/10
2015	3/17	3/17	4/3	4/3	6/5	6/29	11/24
2016	3/21	3/21	4/21	4/21	6/29	6/29	11/11
2017	3/25	4/7	4/7	3/8	6/6	7/6	7/6

PROPOSAL 68 – 5 AAC 34.114. Southeast Alaska Golden King Crab Management Plan.

PROPOSED BY: Petersburg Vessel Owner's Association and Southeast Alaska Fishermen's Alliance.

WHAT WOULD THE PROPOSAL DO? This would add language from the *Policy on King and Tanner Crab Resource Management* to the *Southeast Alaska Golden King Crab Management Plan.* Specific language would be added from the Management Measures section of the policy (Guideline Harvest Levels and Inseason Adjustments).

WHAT ARE THE CURRENT REGULATIONS? The management plan directs the department to manage the golden king crab fishery consistent with the board's *Policy on King and Tanner Crab Resource Management* (90-04-FB, March 23, 1990), which is adopted by reference, and according to the principles set out in regulation. To the extent possible, golden king crab shall be managed as a separate stock in each defined fishing area. The department shall close an area if the abundance of various sizes of male crabs is inadequate to provide for a sustained harvest, or when potentially high effort precludes an orderly fishery. Finally, the department shall base management on historical fishery performance, catch, and population structure information. A lack of adequate information will result in conservative management.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would mandate an inseason reassessment of the preseason fishery area GHLs. Stakeholders may not be able to gauge in advance when an area would likely close based on the amount of GHL remaining, since GHL levels would constantly be open to reinterpretation. Though not specifically addressed in the proposed language, the proposal would effectively change *Guideline harvest ranges for Registration Area A* (5 AAC 34.115) to increase the lower end of the GHRs for each fishery area from 0 to 10% of the upper end of the GHR.

BACKGROUND: Currently, the department adjusts fishery area GHLs within established GHRs based on past fishery performance, population size class composition, indicators of recruitment, and spatial distribution of harvest. Data are reviewed in detail annually and GHLs are maintained, increased, or decreased depending on trends in the available data. GHLs are set and announced preseason. Progress toward GHLs is targeted through a mandatory daily call-in program. Based on harvest and catch rates from fish tickets and call-ins, the department projects when harvest will reach the GHL. After consultation with permit holders on the grounds to confirm current effort and catch rates, expected future effort, and consideration of tides and weather conditions on gear removal, the department announces the closure date. Fishery areas may also be closed prior to reaching the GHL for conservation concerns (generally weak fishery performance).

Because of the allowable gear (100 pots maximum), depth in which gear is set, strong tidal currents, and weather considerations, a substantial advance notice is necessary before closing an area to allow permit holders time to operate their gear. Frequently, area closures must be delayed beyond the time needed to attain the GHL because large tidal ranges either slow the rate of gear recovery or make it impossible due to submerged buoys. In addition, catch rates and fleet movement may be different from what is projected between the announcement of a closure and the date and time a fishery actually closes.

No action was taken by the board on a similar proposal (Proposal 178) in 2009.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. There are no significant benefits to the management approach put forth in this proposal. If required to manage inseason and potentially adjust GHLs upwards or downwards based on catch rates and a host of other factors, the department would need to develop a standard for comparison, along with well-defined decision rules, to avoid the need to make highly subjective decisions under the pressure of the ongoing fishery. Catch rates would be compared to the standard and the season would be adjusted as necessary. Instead of using several years of data that have been carefully reviewed before making decisions, the department would be required to make rapid decisions based on a small amount of data with minimal opportunity for analysis. The risk of making the incorrect decision would increase under this approach. It is also likely that the department would not be able to provide as much advance notice for area closures, which has historically been a major concern of the fleet.

The Southeast Alaska *Golden King Crab Management Plan* states the fishery is to be managed according to the *Policy on King and Tanner Crab Resource Management*, managing by fishery area to the extent possible and closing areas if abundance of male crabs is inadequate to provide for sustainable harvest, and using fishery performance and population structure information and managing conservatively when information is lacking. To this end, with the golden king crab fishery in a precipitous decline in recent years, the department has reviewed data inseason and has closed fishery areas short of GHLs due to conservation concerns in order to protect the long-term reproductive potential of the stock. This proposal undermines the department's ability to manage conservatively by mandating the department consider adjusting GHLs inseason when no conservation concerns exist and does not allow the department to consider the seasonal closure of a specific fishery area by mandating a GHL that is at least 10% of the upper end of the GHR.

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.

PROPOSAL 69 – 5 AAC 34.115. Guideline harvest ranges for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Reduce the upper end of the GHRs for three of seven golden king crab management areas in Southeast Alaska. The upper end of the GHR in the Northern Area would be reduced from 175,000 lb to 145,000 lb. The upper end of the GHR in the Icy Strait Area would be reduced from 75,000 lb to 55,000 lb. The upper end of the GHR in the East Central Area would be reduced from 300,000 lb to 225,000 lb.

WHAT ARE THE CURRENT REGULATIONS? *Guideline harvest ranges for Registration Area A* establishes the GHRs in each management area as follows:

(1) Northern Area: 0 to 175,000 lb;

(2) Icy Strait Area: 0 to 75,000 lb;

(3) North Stephens Passage Area: 0 to 25,000 lb;

(4) East Central Area: 0 to 300,000 lb;

(5) Mid-Chatham Strait Area: 0 to 150,000 lb;

(6) Lower Chatham Strait Area: 0 to 50,000 lb;

(7) Southern Area: 0 to 25,000 lb.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would reduce golden king crab harvest in Southeast Alaska, promote stock rebuilding, and lessen the chance of experiencing episodic stock collapses in the future.

BACKGROUND: The commercial golden king crab fishery began in 1970 as a bycatch fishery to the red and blue king crab fisheries with a quota of 1.5 million lb. In 1971, golden king crab fisheries were recognized with the adoption of distinct seasons, and a quota of 600,000 lb was established and managed regionwide. After 1977, GHRs replaced quotas and the fishery was split into traditional (GHR 200,000–500,000 lb) and nontraditional areas (no fixed GHR) that were managed regionwide until 1987.

From 1987 to 1994, due to the propensity of the fleet to concentrate fishing effort only in the most productive fishing grounds, and in order to prevent overexploitation on any single fishing ground, separate GHRs for three management areas were established and managed. All other undefined management areas were considered "exploratory areas" and had no fixed GHR. In 1994/95, exploratory areas closed due to insufficient harvest being retained from those areas.

From the 2001/02 season through the 2004/05 season, the original five management areas in regulation were managed as seven: Frederick Sound and Icy Strait areas were split and managed as two subareas. At the 2005 board meeting, the two unofficial subareas were formally added as separate management areas. In addition, the Icy Strait Area and West Icy Strait Subarea GHRs were altered to represent historical harvest. Lastly, all seven management areas were renamed and have remained the same since the 2005/06 season.

The GHRs were last modified starting with the 2009/10 season.

East Central Area:	0 to 300,000 lb
North Stephens Passage Area:	0 to 25,000 lb
Northern Area:	0 to 175,000 lb
Icy Strait Area:	0 to 75,000 lb
Mid Chatham Strait Area:	0 to 150,000 lb
Lower Chatham Strait Area:	0 to 50,000 lb
Southern Area	0 to 25,000 lb

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. This proposal would bring the upper end of the GHRs for all seven management areas from the current level of 800,000 lb down to 675,000 lb.

Between the 1980/81 and 1989/90 seasons, annual harvests greatly exceeded harvests from the previous decade, averaging 824,865 lb. This intensification of the golden crab harvest in the 1980s was followed by a precipitous decline in golden king crab harvests in the 1990s, when the regional harvest averaged just 208,527 lb between the 1990/91 and 1999/00 seasons. Between the 2000/01 and 2009/10 seasons, annual harvests improved again; averaging 603,171 lb. Harvests in the most recent decade have again showed a precipitous decline, averaging 328,798 lb since the 2010/11 season (Figure 69-1).

The department prepared a preliminary report to the board in October 1999 that provided details of collapsed and recovered shellfish fisheries in Alaska, which included the Southeast Alaska golden king crab fishery. The department concluded that the collapse in the stocks during the period from the 1993/94 to 1997/98 seasons was due in part to overfishing. It is clear that golden king crab populations in Southeast Alaska recovered from that period of decline, but harvests in recent seasons are reminiscent of the fishery collapse in the mid-1990s (Figure 69-1). This decline is particularly acute in the larger fishery areas like the Northern, Icy Strait, and East Central areas. Last season fewer than 1,000 lb were harvested from the East Central Area (Table 69-1).

Beginning in 2015, declines in the golden king crab fishery enlisted a review of current management practices, specifically the biological relevance of the GHRs and GHLs. The goal of this analysis was to establish a biological-based maximum sustainable yield (MSY) from historical fisheries catch and effort data using biomass dynamic models. Biomass dynamic models are a simple fisheries model that applies basic population dynamics to harvest data. They are not ideal models for most assessments and management due to their many assumptions and caveats; however, they are useful because the only data needed are a time series of harvest and an index of abundance, which is generally fishery CPUE. These models assume that catch is related to available biomass, meaning that harvest is not limited by GHLs or number of days. Another major assumption is that the population remains in a similar "state of growth" during the entire time period. There is only one parameter estimated for growth of the population, or production of the population: this parameter incorporates all aspects of production— recruitment, growth of individuals, and mortality.

When many of the assumptions are not met these models are considered non-conservative and often provide over inflated estimates of MSY. Because of this, the MSY estimates obtained from these models are treated as an upper limit (i.e., upper end of the GHR) of sustainable harvest for each area. Results showed that MSY calculations for the Northern, Icy Strait, and East Central areas are more in line with the proposed reductions than the current upper limits of these GHRs (Table 69-2, Figure 69-2). The proposed reductions would return fishery area GHRs to what they were prior to 2009.

The upper end of the GHRs in the Mid-Chatham Strait and Lower Chatham areas are also higher than recommended based on the MSY analysis. These upper GHRs have remained consistent since the 1994/95 season for the Mid-Chatham Strait Area (formerly Chatham Strait Area) and since the 2000/01 season for the Lower Chatham Area (formerly Cape Ommaney Area). In contrast, the upper GHRs for the East Central, Icy Straits, and Northern areas were increased prior to the 2009/10 season and were therefore the main focus 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.

Table 69-1.–Guideline harvest ranges, guideline harvest levels, and harvest for golden king crab management units proposed for decreased GHRs.

Management Area	Season	GHR	GHL	Harvest	Permits	CPUE
Northern	2009/10	0–175,000	145,000	176,782	22	2.9
Proposed GHR:	2010/11	0–175,000	145,000	161,522	21	3.1
0–145,000	2011/12	0–175,000	145,000	150,453	19	2.0
	2012/13	0–175,000	105,000	102,351	12	1.9
	2013/14	0–175,000	105,000	39,802	9	1.3
	2014/15	0–175,000	65,000	7,226	11	0.7
	2015/16	0–175,000	15,000	6,939	7	1.1
	2016/17	0–175,000	10,000	5,610	8	1.1
Icy Strait	2009/10	0–75,000	45,000	42,136	9	2.5
Proposed GHR:	2010/11	0–75,000	45,000	44,882	10	2.0
0–55,000	2011/12	0–75,000	45,000	45,244	11	1.7
	2012/13	0–75,000	30,000	8,185	6	1.4
	2013/14	0–75,000	20,000	19,583	6	1.5
	2014/15	0–75,000	18,000	12,359	8	1.1
	2015/16	0–75,000	12,000	10,255	3	1.7
	2016/17	0–75,000	10,000	7,007	6	1.1
East Central	2009/10	0–300,000	260,000	308,013	24	4.9
Proposed GHR:	2010/11	0–300,000	260,000	305,659	20	5.0
0–225,000	2011/12	0–300,000	260,000	223,616	19	5.8
	2012/13	0–300,000	285,000	265,049	23	1.8
	2013/14	0–300,000	200,000	81,375	17	1.7
	2014/15	0–300,000	115,000	25,259	17	0.9
	2015/16	0–300,000	30,000	9,052	13	0.7
	2016/17	0–300,000	15,000	972	4	0.5

Table 69-2.–Maximum Sustained Yield calculations for Southeast Alaska commercial golden king crab fishery areas, current upper GHR, 2017 GHL and 2017 total harvest by management area.

Area	Current upper GHR (lb)	2017 GHL	2017 Harvest (lb)	Avg. harvest (2000-2017)	MSY (lb)	80% lower credible interval	80% upper credible interval
East Central	300,000	15,000	972	208,469	211,000	197,800	222,000
Northern	175,000	10,000	5,610	114,575	138,800	120,100	149,600
Icy Strait	75,000	10,000	7,007	43,604	53,800*	-	-
North Stephens Passage	25,000	8,000	16,558	16,386	22,800	18,500	39,200
Mid-Chatham Strait	150,000	20,000	**	79,810	90,600	72,900	104,600
Lower Chatham	50,000	23,000	**	15,518	21,700	17,410	30,840
Southern	25,000	19,000	16,722	15,078	22,800*	-	-

* Data contrast limited, no credible intervals are available.

** Data are confidential due to fewer than three permit holders.

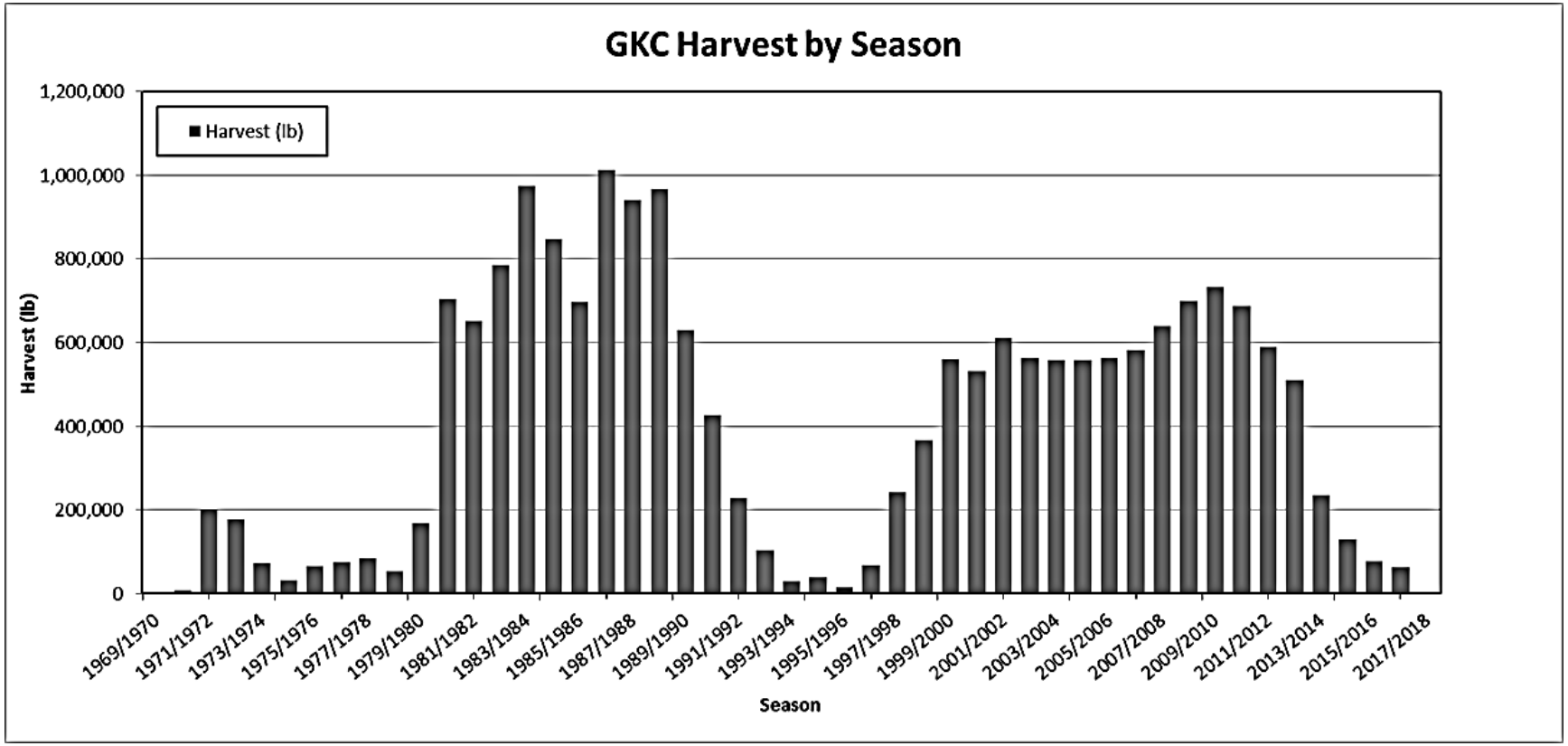


Figure 69-1.–Historical commercial harvest of golden king crab in Southeast Alaska by season (1969/70 through 2017/18).

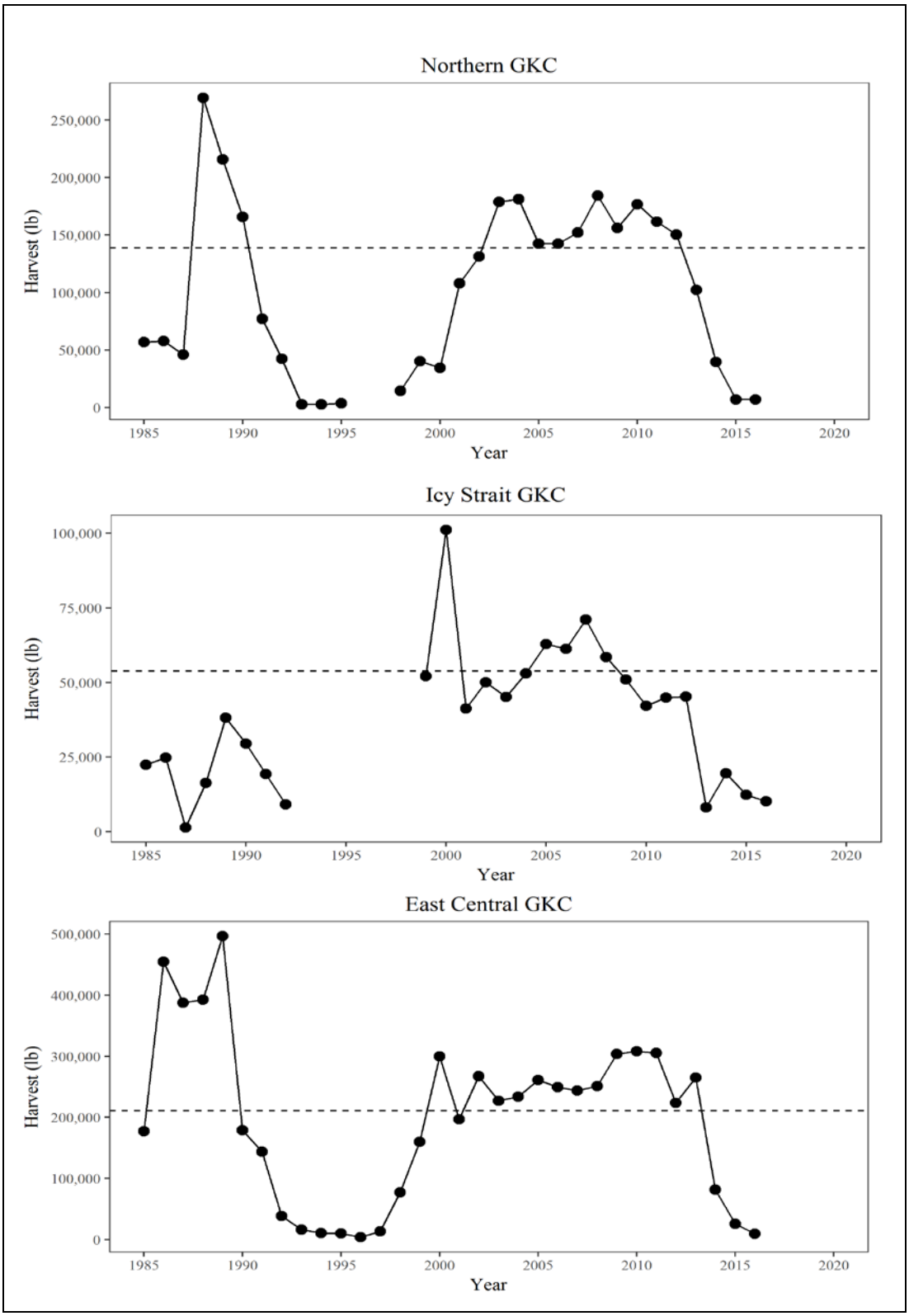


Figure 69-2.–Maximum Sustained Yield estimates (dotted line) for the East Central, Northern, and Icy Strait fishery areas and total harvest (solid line) from 1985 to 2016.

PROPOSAL 70 – 5 AAC 34.125. Lawful gear for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Reduce the pot limit for the golden king crab fishery in Southeast Alaska from 100 pots to 80 pots.

WHAT ARE THE CURRENT REGULATIONS? Pot limits in the commercial golden king crab fishery are 100 pots when the commercial red king crab or Tanner crab season is closed. If both the commercial golden king crab and Tanner crab seasons are open at the same time, an aggregate of no more than 80 king and Tanner crab pots may be operated from a vessel registered to fish for both king crab and Tanner crab. If the commercial red and golden king crab seasons are open at the same time, then the more restrictive pot limits for red king crab apply to any vessel registered to fish for king crab.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This will ease fishing pressure on the Southeast Alaska golden king crab stock and improve management precision in targeting fishery area GHLs. This will reduce fishermen's exposure to poor weather conditions when removing gear from the fishing grounds after a fishery closure is announced. There is unlikely to be negative impact on fishermen because the fishery will continue to be managed to achieve the GHLs.

BACKGROUND: From 1961 to 1967 there were no restrictions on the amount or type of gear that could be fished by a vessel participating in the king crab fishery. In 1968, a limit of 40 pots per vessel was established for Southeast Alaska waters. The maximum number of pots per vessel was increased to 60 in 1974 and to the current 100 for golden king crab in 1978. From the 2005/06 through the 2016/17 seasons, the average number of pot lifts per day was 33.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The current limit of 100 pots in the golden king crab fishery makes it difficult to set closures to target GHLs, while allowing adequate time for gear to be moved or stored in consideration of tides and weather. Currently a five to eight day advanced notice is typically given prior to area closures. A reduction to 80 pots would allow managers to manage more closely to fishery area GHLs before making closure announcements since less advanced notice would need to be given prior to closures due to less time required for fishermen to work deployed pots. Overall, management accuracy in targeting fishery area GHLs would improve with a lower pot limit, especially in the larger areas that typically see more effort. Table 70-1 shows management accuracy in the golden king crab fishery in the Mid-Chatham Strait, East Central, Northern, and Icy Strait areas since the 2005/06 season.

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 70-1.–GHLs, harvest (pounds), and management accuracy for the largest four fishery areas in the golden king crab fishery from the 2005/06 through 2016/17 seasons.

Fishery Area	Season	GHL	Harvest	% of GHL
Mid-Chatham Strait	2005/06	80,000	81,463	102
	2006/07	80,000	78,416	98
	2007/08	80,000	89,873	112
	2008/09	100,000	123,626	124
	2009/10	110,000	141,558	129
	2010/11	110,000	114,966	105
	2011/12	110,000	106,620	97
	2012/13	110,000	99,101	**90
	2013/14	110,000	43,475	**40
	2014/15	80,000	30,910	**39
	2015/16	40,000	9,228	**23
	2016/17	20,000	*	*
East Central	2005/06	225,000	249,330	111
	2006/07	225,000	243,675	108
	2007/08	225,000	251,004	112
	2008/09	225,000	303,811	135
	2009/10	260,000	308,013	118
	2010/11	260,000	305,659	118
	2011/12	260,000	223,616	86
	2012/13	285,000	265,049	93
	2013/14	200,000	81,375	**41
	2014/15	115,000	25,259	**22
	2015/16	30,000	9,052	**30
	2016/17	15,000	972	**6
Northern	2005/06	120,000	142,455	119
	2006/07	120,000	152,145	127
	2007/08	120,000	184,227	154
	2008/09	145,000	156,261	108
	2009/10	145,000	176,782	122
	2010/11	145,000	161,522	111
	2011/12	145,000	150,453	104
	2012/13	105,000	102,351	97
	2013/14	105,000	39,802	**38
	2014/15	65,000	7,226	**11
	2015/16	15,000	6,939	**46
	2016/17	10,000	5,610	**56

-continued-

Table 70-1.–Page 2 of 2.

Fishery Area	Season	GHL	Harvest	% of GHL
Icy Strait	2005/06	55,000	61,290	111
	2006/07	55,000	71,058	129
	2007/08	55,000	58,453	106
	2008/09	55,000	51,026	93
	2009/10	45,000	42,136	94
	2010/11	45,000	44,882	100
	2011/12	45,000	45,244	101
	2012/13	30,000	8,185	**27
	2013/14	20,000	19,583	98
	2014/15	18,000	12,359	**69
	2015/16	12,000	10,255	**85
	2016/17	10,000	7,007	**70

* Fewer than 3 permits were fished; information is confidential.

** Fishery area closed short of the GHL due to stock health concerns or low effort.

Tanner Crab (4 Proposals)

PROPOSAL 71 – 5 AAC 35.128. Operation of other gear in Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would allow a person or vessel that participated in the Tanner crab fishery to operate other commercial pots— as well as subsistence, sport, and personal use pots— in the 14 days immediately following the closure of the Tanner crab fishery, once their gear is put into storage and the vessel registration is invalidated by department staff.

WHAT ARE THE CURRENT REGULATIONS? Once a permit holder unregisters from the Tanner crab fishery, regulations allow for the operation of only commercial pots and not subsistence, sport, or personal use pots in the 14 days immediately following the closure of the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would allow Tanner crab fishery participants additional opportunity to participate in other sport, commercial, subsistence, or personal use crab fisheries using pot gear. This would likely increase crab harvest by a small, but unknown amount and would simplify and align regulations.

BACKGROUND: Statewide regulations for the *Operation of other pot gear* (5 AAC 35.053) prohibit the operation of commercial, subsistence, or personal use king or Tanner crab pots during the 14 days before the opening of the commercial Tanner crab season and in the 14 days following the closure of the commercial Tanner crab fishery. However, a person may operate other commercial pots in a Tanner crab registration area after pots are put in storage and once the commercial registration has been invalidated.

Beginning with the 1999/00 season, vessels and persons registered for the Southeast Alaska commercial Tanner crab fishery could not fish with any commercial, sport, subsistence, or personal use gear except for commercial Dungeness and shrimp pot gear for 30 days prior to the start of the season (5 AAC 35.128).

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.

PROPOSAL 72 – 5 AAC 35.113. Registration Area A Tanner crab harvest strategy.

PROPOSED BY: Jared Bright, Ty Barkhofer, Dale Bartells, John Berry, Charlie Christensen, Jerry Dahl, Troy Denkinger, Ken Eichner, Craig Evens, Jeremy Jensen, Aaron Miller, Mike Nilsen, Dennis O'Neil, Justin Peeler, Eric Rosvold, Aaron Severson, Mark Severson, Gary Slaven, Derek Thynes, Kory Versteeg, Dan Vick, Luke Whitethorn, Petersburg Vessel's Association, Southeast Alaska Fishermen's Alliance, Alaska Glacier Seafoods, Icicle Seafoods.

WHAT WOULD THE PROPOSAL DO? This seeks to modify the *Registration Area A Tanner crab harvest strategy* to re-define 'noncore' areas and define 'exploratory' areas to provide more opportunity to fish in areas not traditionally fished for Tanner crab (Figure 72-1).

WHAT ARE THE CURRENT REGULATIONS? In Registration Area A, the minimum stock threshold for a commercial Tanner crab fishery is 2.3 million lb of mature male Tanner crab, based on one-half of the long-term average (1997–2007) of mature male abundance. If the estimated abundance of mature male Tanner crab is below 2.3 million lb, the commercial Tanner crab fishery will remain closed.

If the threshold for mature male Tanner crab is met, then the fishery opens for a prescribed amount of time in core and noncore areas. The initial period of the commercial Tanner crab fishing season in the core areas and noncore areas are at least five days in length, and may be increased with additional fishing days based on the estimated biomass of mature male crab and the number of registered pots at the start of the fishery. At the end of the initial period, the core areas close to fishing, and the noncore areas remain open for an additional five days.

Thirteen core areas are defined and include waters of Icy Strait; St. James Bay; District 15; Section 11-A; Section 11-B; Seymour Canal; Port Snettisham; Endicott Arm and Tracy Arm; Gambier Bay; Pybus Bay; Section 13-C (excluding Sitkoh Bay); Keku Strait, Port Camden and associated bays; and Frederick Sound. The noncore areas include all other waters of Registration Area A that are not described as core areas.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would significantly increase commercial Tanner crab fishing opportunity without biological justification and could lead to overfishing and create a conservation concern for this stock.

BACKGROUND: In 1988, in response to shorter seasons and requests by crab fishermen, the board adopted regulations for exploratory Tanner and red king crab fisheries so the fishing fleet could help the department assess the status of small stocks that were not fished during the short, regular seasons. In areas from which low harvests or no landings were reported during the regular fishery, fishing was allowed from July 1 to March 31, under conditions of a special permit. The board also established procedures for managing these fisheries.

In general, these fisheries were scheduled during periods of the year to minimize overlapping with traditional fisheries for red king and Tanner crab. A major assumption was that these fisheries would be of such low intensity that mortality associated with fishing during known molting and mating periods would be minimal. Special permits and logbooks were required because the primary purpose of this fishery was to provide information from areas that were not surveyed by the department.

After two seasons of exploratory fishing, it was obvious that interest in these fisheries was low, harvests were poor, and major unexploited populations had not been discovered. In addition, violations of regulations and permit conditions occurred. As a result, the board decided during its winter meeting in 1990 to revoke the regulations that provided for these fisheries.

Until the 1990/91 season, no management plan or harvest strategy had been in place for the commercial Tanner crab fishery. From the 1990/91 to 1998/99 seasons, a maximum allowable harvest was set in regulation as 2.0 million lb. During the 1999 board meeting, the maximum allowable harvest was changed to a 2.0 million lb guideline harvest level, which was never met after it went into effect.

In 2003/04, the department began setting different season lengths in the currently designated core and noncore areas. Core areas were defined as areas which had a historically high level of effort and Tanner crab harvest, and noncore areas were designated as zones, which were given an extended amount of fishing time to allow for exploratory fishing in nontraditional fishing grounds. Table 72-1 shows the non-core statistical areas where no fishing has occurred during the last five seasons and Table 72-2 details the noncore statistical areas in the last five seasons in which harvest has occurred. For the past five commercial Tanner crab seasons, the noncore areas have been open between 11 and 12 days, which equate to five additional days after the core areas closed (Table 72-3).

In 2009 board passed an amended proposal that modified the *Registration Area A Tanner crab harvest strategy* (5 AAC 35.113), currently in place. Under the harvest strategy, a regional GHL is no longer targeted. The harvest strategy includes a mature male abundance threshold that is one-half of the long-term average (1997–2003). The commercial Tanner crab season length is determined by the mature male abundance estimate and the number of registered pots at the start of the fishery.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. Since 2009, the department has estimated an annual target GHL using harvest rates ranging from 0 to 20% based on stock health ratings. Since the 2009/10 season, the harvest strategy has allowed for harvests exceeding these target GHLs every season (Table 72-4). Since the current harvest strategy already allows for harvests that exceed recommended limits, the department is opposed to implementing more fishing time to the harvest strategy. Managing the Tanner crab fishery inseason for a target GHL would be difficult given the 80 pot gear limit and fast-pace of the Tanner crab 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.

Table 72-1.–Noncore Tanner crab areas that have not had any landed harvest from 2012/13 through 2016/17 and would be considered exploratory areas under this proposal.

101-11	Revilla Channel to Pearse Canal	103-23	Nutkwa Inlet/Keete Inlet	112-14	Hanus Reef
101-13	Pearse Canal to Lower Portland	103-25	Hetta Inlet/Sukkwan Strait	112-16	West Mansfield Peninsula
101-15	Portland Canal	103-30	Kaigani Strait	112-17	Angoon to Hepburn
101-21	Southern Duke Island	103-40	Tlevak Strait	112-18	Angoon to Whitewater Bay
101-22	Bee Rocks	103-50	Bucareli Bay	112-19	Wilson Cove Area
101-23	Outside Boca De Quadra	103-60	Big Salt/Trocadero Bay	112-22	Hidden Falls
101-25	Percy Islands	103-65	Klawock	112-41	Outer Tenakee Inlet
101-27	Nichols Passage	103-70	11-Mile	112-44	Saltery Bay
101-28	West Annette Island	103-80	St Phillips/Warmchuck	112-46	Seal Bay
101-29	Gravina Shore	103-90	Sea Otter Sound	112-47	Long Bay
101-30	Boca De Quadra	104-10	Security Shore	112-67	Kootznahoo Inlet
101-40	Herring Cove	104-20	Bazan/Gooseneck Shore	112-72	N Arm Hood Bay
101-41	Alva to Sykes	104-30	Felix/Meaves Pass	112-80	Chiak Bay
101-42	North Annette Island	104-35	Granite Point Shore	113-11	Lower Outside Baranof Island
101-43	Thorne Arm	104-40	Noyes Island	113-12	Big Branch Bay
101-44	George Inlet	104-50	West of Maurelle Islands	113-13	Redfish Bay
101-45	Mountain Point to Carroll Point	105-10	Affleck Canal/Louise Cove	113-21	Lower Baranof/Whale Bay
101-46	Carroll Inlet	105-20	Port Beauclerc	113-22	Whale Bay
101-47	Tongass Narrows	105-32	Rocky Pass/Threemile Arm	113-31	Outside Crawfish Inlet
101-51	Fox Point/Winstanley	105-41	Port Protection/Hole In Wall	113-32	WestCrawfish Inlet
101-53	Roe Point Shore	105-42	Shakan Bay/El Capitan Pass	113-34	Necker Bay
101-55	Smeaton Bay	105-43	Shipley Bay	113-35	Silver Bay
101-60	Rudyerd Bay	105-50	Warren Is/Cape Pole	113-38	Deep Inlet
101-71	Walker Cove/Chichamin	106-10	Ratz Harbor Shore	113-41	Sitka Sound South
101-73	Walker Cove	106-20	Rocky Bay/McHenry	113-45	Outer Kruzof Island
101-75	Back Behm Canal	106-35	SSRAA NECK LAKE SHA	113-61	Outer Salibury Sound
101-77	Burroughs Bay	108-45	Ohmer Creek	113-62	Inner Salisbury Sound
101-80	Bell Island/North Behm Canal	109-10	Southeast Baranof Island	113-66	St John The Baptist Bay
101-85	Caamano Pt/Pt Steward	109-20	Red Bluff Area	113-71	Khaz Bay
101-90	Higgins Pt/Traitors	109-44	Saginaw Bay	113-72	Klag Bay
101-95	Neets Bay	109-45	Security Bay	113-73	Slocum Arm
102-10	Bronson/McLean	109-50	Southwest Frederick Sound	113-81	Portlock Harbor
102-15	Kendrick Bay	109-51	Kingsmill/Washington Bay	113-91	Lisianski Inlet
102-20	Scot Point Shore	109-52	Rowan Bay and Bay of Pillars	113-92	Takanis Bay
102-30	Moira Sound	109-61	Chatham St to Pt Ellis	113-93	Surge Bay
102-40	Cholmondeley Sound	109-62	Tebenkof Bay	113-96	Stag Bay
102-50	Outside Cholmondeley	109-63	Port Malmsbury	114-71	Berg Bay
102-60	Kasaan Bay	110-15	Cape Fanshaw to Bay Point	114-72	Fingers Bay
102-70	Tolstoi Shore	110-16	Schooner Is/Portage Bay	114-73	Geikie Inlet
102-80	Ship Island Shore	110-17	Turnabout Is/Pinta Rocks	114-74	Scidmore Bay
103-11	Lower Cordova Bay	110-24	Southern Seymour Canal	114-75	Upper Glacier Bay
103-15	Klakas Inlet	112-12	W Chatham Peril to Wukuktook	114-77	Muir Inlet
103-21	Upper Cordova Bay	112-13	False Bay		

Table 72-2.–Noncore Tanner crab areas that have had landed harvest from 2012/13 to 2016/17 and would remain as noncore management areas.

Statistical Area	2012/13	2013/14	2014/15	2015/16	2016/17	Total
105-31	--	*	--	--	--	*
106-22	--	--	--	--	*	*
106-30	--	--	*	--	*	1810
106-41	--	*	--	--	*	1,734
107-10	--	--	--	--	*	*
107-20	--	--	*	--	--	*
107-30	*	*	*	*	--	3,685
107-35	--	--	*	--	--	*
107-45	--	*	*	*	--	3,174
109-30	*	*	*	3,205	*	13,163
110-21	--	--	--	--	*	*
110-31	8,147	3,160	5,664	2,127	1,896	20,994
110-32	1,143	1,458	2,196	2,562	655	8,014
110-33	8,375	3,552	6,725	10,429	1,216	30,297
110-34	4,586	8,908	18,938	15,834	5,511	53,777
111-20	*	*	--	*	--	5,638
111-31	20,423	11,671	*	*	*	106,715
111-90	--	--	--	*	--	*
112-11	--	*	--	--	--	*
112-15	--	*	*	*	*	800
112-21	*	*	*	*	5,229	23,260
112-42	3,684	*	*	2,856	*	13,105
112-43	--	*	--	--	*	2,998
112-45	11,071	15,210	*	*	*	42,759
112-48	*	*	*	*	--	33,593
112-50	*	4,402	*	*	*	38,248
112-61	*	3,970	*	*	*	5,979
112-63	--	*	*	*	--	1,124
112-65	*	1,927	*	*	*	5,350
112-71	*	*	*	*	*	14,743
112-73	*	*	--	--	--	1,137
112-90	--	--	--	*	*	554
113-33	--	--	--	*	--	*
113-40	--	--	--	*	--	110
113-42	*	*	--	--	--	*
113-43	*	1,326	*	*	--	2,467
113-44	--	*	--	--	--	*
113-59	--	*	*	*	*	6,863
113-63	*	--	--	--	--	*
113-64	--	--	*	--	--	*
113-65	--	*	*	--	--	*
113-95	*	--	*	*	*	2,476
113-97	*	--	--	--	--	*
114-21	*	*	*	*	*	46,286

-continued-

Table 72-2.–Page 2 of 2.

Statistical Area	2012/13	2013/14	2014/15	2015/16	2016/17	Total
114-40	--	--	--	--	*	*
114-50	*	--	--	*	*	12,994
114-60	--	--	*	--	--	*
114-25**	*	--	--	*	--	*
114-27**	*	--	--	--	--	*
115-11	--	--	--	*	--	*
115-31	*	16,881	45,389	46,213	34,140	*
115-32	6,880	9,781	20,828	6,830	6,828	51,147
115-33	--	*	*	*	*	10,448
115-34	*	31,899	83,796	*	30,755	200,166
115-35	*	--	--	*	--	6,551
116-11	--	--	--	--	*	*
116-12	--	--	--	--	*	*
116-13	--	--	--	--	*	*

* Confidential data; fewer than three permit holders made landings.

** Portion of this statistical area is also part of the core management areas; however, this poundage is from landed harvest after the core management area had closed.

Table 72-3.–Opening dates for the commercial Tanner crab fishery in both the current core and noncore management areas.

Season	Core Dates	# Days	Non-Core Dates	# Days
2012/13	02/17/2013–02/23/2013	6 Days	02/17/2013–02/28/2013	11 Days
2013/14	02/12/2014–02/18/2014	6 Days	02/12/2014–02/23/2014	11 Days
2014/15	02/13/2015–02/19/2015	6 Days	02/13/2015–02/24/2015	11 Days
2015/16	02/17/2016–02/24/2016	7 Days	02/17/2016–02/29/2016	12 Days
2016/17	02/17/2017–02/23/2017	6 Days	02/17/2017–02/28/2017	11 Days

Table 72-4.–Target GHL in pounds, actual harvest in pounds, and the percentage of actual landed harvest in regards to the target GHL.

Season	Target GHL (lb)	Actual Harvest (lb)	% Actual Harvest/ Target GHL
2009/10	709,437	961,681	136%
2010/11	567,673	891,344	157%
2011/12	615,246	1,109,784	180%
2012/13	791,636	1,242,433	157%
2013/14	805,701	1,256,739	156%
2014/15	919,852	1,421,863	155%
2015/16	1,059,008	1,306,416	123%
2016/17	932,661	993,614	107%

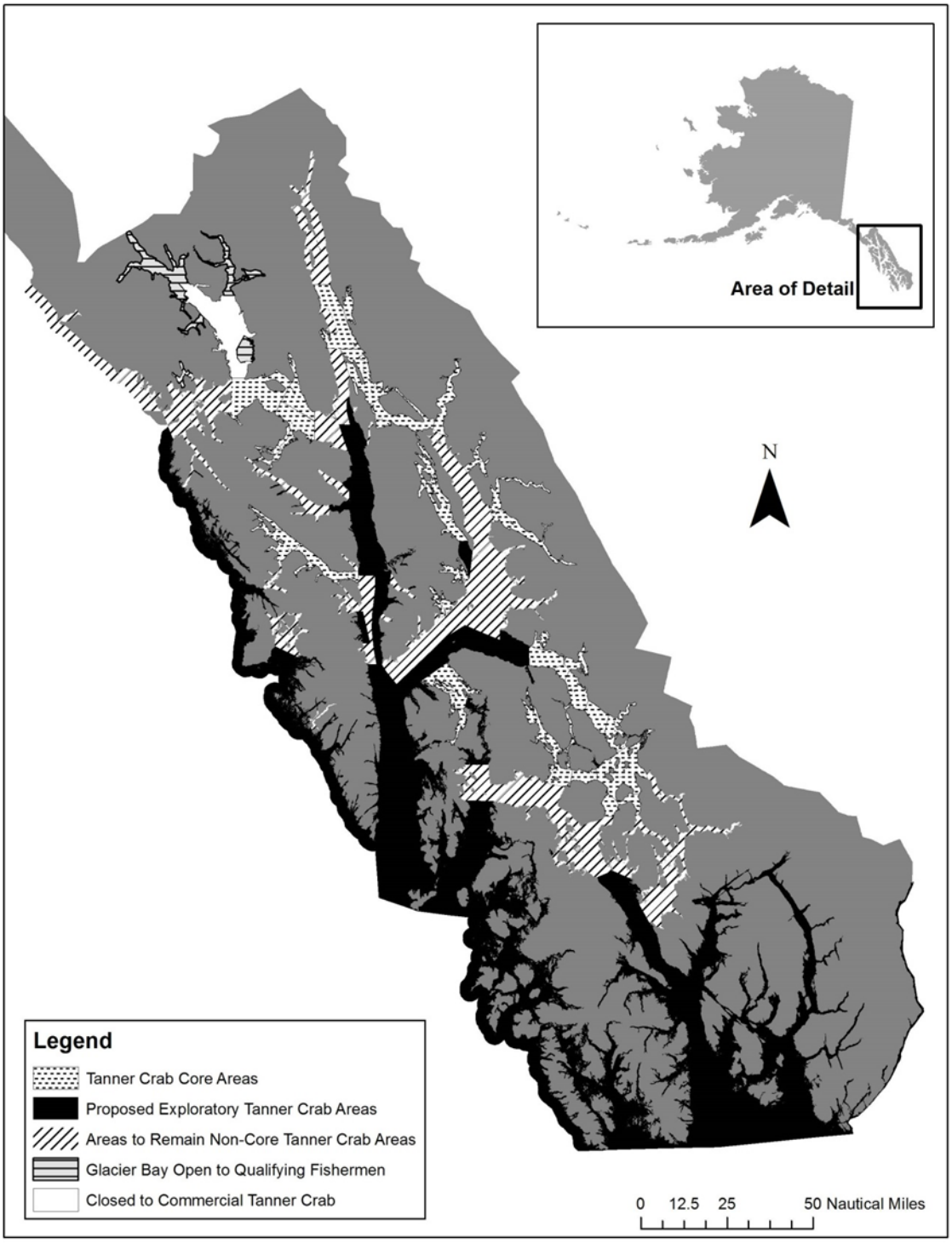


Figure 72-1.–Map showing areas that will remain noncore Tanner crab management areas, proposed exploratory Tanner crab management areas, as well as the current Tanner crab core areas.

PROPOSAL 73 – 5 AAC 35.113. Registration Area A Tanner crab harvest strategy.

PROPOSED BY: Andrew Kittams.

WHAT WOULD THE PROPOSAL DO? This would modify the *Registration Area A Tanner crab harvest strategy* and create an equal quota share among applicable commercial Tanner crab permit holders in Southeast Alaska.

WHAT ARE THE CURRENT REGULATIONS? In Registration Area A, the minimum stock threshold for a commercial Tanner crab fishery is 2.3 million lb of mature male Tanner crab, based on one-half of the long-term average (1997–2007) of mature male abundance. If the estimated abundance of mature male Tanner crab is below 2.3 million lb, the commercial Tanner crab fishery will remain closed.

If the threshold for mature male Tanner crab is met, then the fishery opens for a prescribed amount of time in core and noncore areas. The initial period of the commercial Tanner crab fishing season in the core areas and noncore areas is at least five days in length, and may be increased with additional fishing days based on the estimated biomass of mature male crab and the number of registered pots at the start of the fishery. At the end of the initial period, the core areas close to fishing, and the noncore areas remain open for an additional five days.

The Registration Area A Tanner crab fishery is also prosecuted as an open access fishery with ring net gear. The *Tanner crab ring net harvest management policy for Registration Area A* (5 AAC 35.116) states that the Tanner crab fishery is to be regulated in a manner that will result in no less than 96 percent of the Tanner crab catch being taken by the pot fishery and no more than four percent by the ring net fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The department would determine an annual harvest objective (similar to a GHL) for Tanner crab and the annual harvest objective would be divided annually among all eligible Tanner crab permits so that each permit holder would know their harvest portion prior to opening of the fishery. Permit holders could fish any time between the fishery opening (a date between February 10 and 17) through May 1. Under equal quota share management, pot soak times generally increase leading to reduced handling of female and pre-recruit male crabs.

Harvest would be reallocated from the most efficient and highest performing vessels to vessels with below average harvest and harvesting costs would likely decrease.

Since the implementation of the harvest strategy in 2009, the annual stock assessment has produced a target GHL using harvest rates that range from 0-20% based on stock health ratings. Since the 2009/10 season, the guidelines within the harvest strategy have allowed for harvests that have exceeded these target GHLs every season (Table 73-1). If this proposal were adopted the department would likely manage the Tanner crab fishery for these target GHLs with harvest rates based on stock health ratings.

BACKGROUND: For most of its history, the Southeast Alaska commercial Tanner crab fishery has been managed by allowing male-only harvest, setting a minimum size limit, limiting pots, and adjusting season length to target a guideline harvest level. From the 1968/69 through 1973/74 seasons, the fishery was open year round. During the 1980s, the season length was determined in-season by using harvest recorded on fish tickets to develop depletion estimates of harvest rate. In 1987, a GHL was established at 2 million lb and season length was reduced to keep harvest within this level.

During the 1995/96 through 2005/06 seasons, the department established the season length prior to the fishery opening based on the estimated time to reach the 2.0 million lb level if stock strength appeared to be average. In 1997, the department initiated the Tanner crab stock assessment survey to better gauge stock strength, with a goal of estimating biomass to calculate preseason GHLs as specified in the harvest strategy regulation (5 AAC 35.080). Based on declining trends, the season has been further reduced to between five and seven days in core areas since the 1997/98 season. Shortened seasons lead to increased fishing effort in the most productive, or "core" fishing areas, and increased concern of overharvest in these core areas.

In 2003, the department attempted to reduce harvest rates in core areas by initiating an extended season only in the "noncore" areas. The intent was to provide an incentive for permit holders to fish outside of the core areas by allowing more time to seek out crab in lesser known fishing grounds. The noncore extended season has been conducted every year since 2003.

Tanner crab stock abundance was estimated for the first time in 2006 based on the data from the stock assessment survey. For the 2006/07 and 2007/08 seasons, GHLs were calculated by applying a harvest rate to estimates of mature male abundance. An abundance-based management strategy was used to manage the commercial Tanner crab fishery starting with the 2007/08 season. A GHL of 987,000 lb was targeted by applying a 20% harvest rate to the mature male biomass estimate from catch-survey modeling and setting the season length preseason to allow for the targeted harvest.

In 2009 the board passed an amended proposal that modified the *Registration Area A Tanner crab harvest strategy* (5 AAC 35.113), currently in place. Under the harvest strategy, a regional GHL is no longer targeted. The harvest strategy includes a mature male abundance threshold that is one-half of the long-term average (1997–2003). The commercial Tanner crab season length is determined by the mature male abundance estimate and the number of registered pots at the start of the fishery.

There are currently 76 active permanent and interim Tanner crab pot permits available to be fished in Southeast Alaska (Table 73-2). During the most recent fishing season, 59 Tanner crab pot permits and 14 ring net permits made landings. An average of 59 pot permits and 18 ring net permits were fished during the last five seasons. Since the *Registration Area A Tanner crab harvest strategy* was implemented in 2009, an average of 98% of the total harvest has been taken by pots and 2% has been taken by ring nets (Table 73-3).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The Tanner crab fishery has two commercial user groups: pot permits, which are limited entry, and ring net permits, which are open access. Presumably, this proposal would affect both user groups, so ring net permits would be allowed a portion of the harvestable surplus identified through the survey. The board would need to provide direction as to how the open access ring net fishery would be managed if this proposal is adopted.

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 73-1.–Target GHL in pounds, actual landed harvest in pounds, and the percentage of actual landed harvest in regards to the target GHL.

Season	Target GHL (lb)	Actual Harvest (lb)	% Actual Harvest/ Target GHL
2009/2010	709,437	961,681	136%
2010/2011	567,673	891,344	157%
2011/2012	615,246	1,109,784	180%
2012/2013	791,636	1,242,433	157%
2013/2014	805,701	1,256,739	156%
2014/2015	919,852	1,421,863	155%
2015/2016	1,059,008	1,306,416	123%
2016/2017	932,661	993,614	107%

Table 73-2.–Permit type and total potential permit holders for Southeast Alaska Tanner crab fisheries.

Permit Type	Species Privileges	Active Permanent and Interim Permits
T10A (open access)	Tanner Ring	N/A
T19A (limited entry)	Tanner Only	24
K49A (limited entry)	Red/Blue/Tanner	16
K59A (limited entry)	Brown/Tanner	6
K69A (limited entry)	Red/Blue/Brown/Tanner	30
Total Permits:		76

* Current information available from the CFEC as of 2016.

Table 73-3.–Total commercial Tanner crab harvest in pounds and percentage of taken by pots versus ring nets for the past eight seasons.

Season	Total Harvest (lb)	% Pot Harvest	% Ring Net Harvest
2009/2010	961,681	98%	2%
2010/2011	891,344	97%	3%
2011/2012	1,109,784	98%	2%
2012/2013	1,242,433	98%	2%
2013/2014	1,256,739	98%	2%
2014/2015	1,421,863	99%	1%
2015/2016	1,306,416	99%	1%
2016/2017	993,614	98%	2%
8-yr Avg.	1,147,984	98%	2%

PROPOSAL 74 – 5 AAC 35.165. Description of Registration Area D districts.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? A new section, including statistical areas 183-10, 183-11, 183-20, 183-30, and 183-40 (Figure 74-1), would be created within the Yakutat District Tanner crab fishery and this new section would be opened to fishing to gain relative abundance information.

WHAT ARE THE CURRENT REGULATIONS? There are two Tanner crab districts in Registration Area D: the Yakataga and Yakutat districts. The Yakataga District contains all waters of Alaska between the longitude of Cape Suckling (144° W. long.) and the longitude of Icy Cape (141° 42' W. long.). The Yakutat District contains all waters of Alaska between the longitude of Icy Cape (141° 42' W. long.) and a line projected southwest from the westernmost tip of Cape Fairweather.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would likely result in increased Tanner crab harvest near Yakutat. The magnitude of that harvest is unknown as is the effect on the Tanner crab stock because the department does not survey this area and is unable to estimate annual sustainable harvest.

BACKGROUND: The first documented Tanner crab harvests in Area D were during the 1972/73 season. Harvest peaked in 1979/80 at just over one million lb (Table 74-1). The fishery has been closed since the 1999/00 season and was designated as 'collapsed and recovering' at the January 2000 board meeting. The fishery was reopened for a 14-day fishing period within the waters of Yakutat Bay and 30-day period elsewhere during the 2003/04 season. Participation was limited, no crab were landed, and there was no evidence of stock recovery. There are no stock assessment surveys for the Yakutat Tanner crab stock and dockside sampling effort has been extremely limited. The only sources of information at present are the sport fishing Statewide Harvest Survey, periodic subsistence household surveys, the bycatch of juvenile Tanner crab from the Yakutat scallop observer program, and anecdotal information from crabbers who set personal use or subsistence pots. None of these data sources suggest a significant recovery.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the creation of a new section within the Yakutat District for the Tanner crab fishery, but is **OPPOSED** to any action that would reopen any portion of Registration Area D to commercial Tanner crab fishing without fishery independent survey results that demonstrate a stock recovery in all of Registration Area D that was historically fished. Unlike the Southeast Alaska (Registration Area A) Tanner crab fishery where permit numbers are limited by CFEC, the Registration Area D Tanner crab fishery is open access. Historically, effort in the Registration Area D Tanner crab fishery took place in 15 distinct statistical areas, both inside and outside of the three mi limit defined in 5 AAC 35.160 (Table 74-2). Yakutat Bay and associated waters (statistical areas 183-10, 183-20, and 183-30) comprised 24% of the historical harvest (Table 74-2). The Tanner crab fishery in Registration Area D was closed by EO in 2000 because the stock had been overfished and the department lacked basic research information and stock assessment data to sustainably manage the fishery. Because the department does not have a stock assessment program for Yakutat Tanner crab these data gaps remain a barrier to reopening this 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.

Table 74-1.–Commercial Tanner crab harvests in numbers and pounds, number of permits, pounds per permit, and average crab weight in Registration Area D, 1972/73 season to present.

Year/Season	Number			Lb per permit	Average weight
	Permits	Crabs	Lb		
1972/73	7	74,636	222,441	31,777	3.0
1973/74	11	934,100	1,872,357	170,214	2.0
1974/75	13	876,889	1,972,752	151,750	2.2
1975/76	5	861,569	1,762,589	352,518	2.0
1976/77	7	433,994	966,650	138,093	2.2
1977/78	8	437,542	1,003,116	125,390	2.3
1978/79	15	753,248	1,691,941	112,796	2.2
1979/80	23	1,089,820	2,435,123	105,875	2.2
1980/81	14	289,880	642,608	45,901	2.2
1981/82	7	32,521	71,302	10,186	2.2
1982/83	10	72,784	151,621	15,162	2.1
1983/84	4	4,958	11,142	2,786	2.2
1984/85	5	1,728	3,665	733	2.1
1985/86	5	1,185	2,379	476	2.0
1986/87	3	23,575	48,877	16,292	2.1
1987/88	*	*	*	*	*
1988/89	5	73,179	155,528	31,106	2.1
1989/90	5	35,135	76,816	15,363	2.2
1990/91	7	19,260	41,749	5,964	2.2
1991/92	4	18,493	39,495	9,874	2.1
1992/93	5	53,167	116,718	23,344	2.2
1993/94	11	154,921	364,365	33,124	2.4
1994/95	14	45,749	107,010	7,644	2.3
1995/96	7	12,352	27,828	3,975	2.3
1996/97	8	7,686	16,733	2,092	2.2
1997/98	4	4,330	9,559	2,390	2.2
1998/99	5	3,742	8,528	1,706	2.3
1999/2000	*	*	*	*	*
2000–2003	Seasons Closed				
2003/04	*	0	0	0	*
2004–2017	Seasons Closed				

* Fewer than three permits were fished; information is confidential.

Table 74-2.–Commercial Tanner crab harvest in pounds and percentage of total harvest by statistical area in Registration Area D for all seasons in combination 1972/73 to 1999/00 seasons (shaded statistical areas would fall into the proposed Yakutat Bay Section).

Statistical Area	Total Harvest	% of Total Harvest
181-10	1,123,640	8.1%
181-40	2,495,902	17.9%
181-50	1,886,481	13.6%
181-60	1,699,883	12.2%
182-10	*	*
183-10	3,198,653	23.0%
183-20	71,522	0.5%
183-30	21,073	0.2%
183-40	*	*
185-10	*	*
189-30	402,094	2.9%
189-40	499,168	3.6%
189-50	*	*
191-10	1,788,644	12.9%
191-20	573,165	4.1%
Total	13,905,868	–

* Confidential data, fewer than three permits fished.

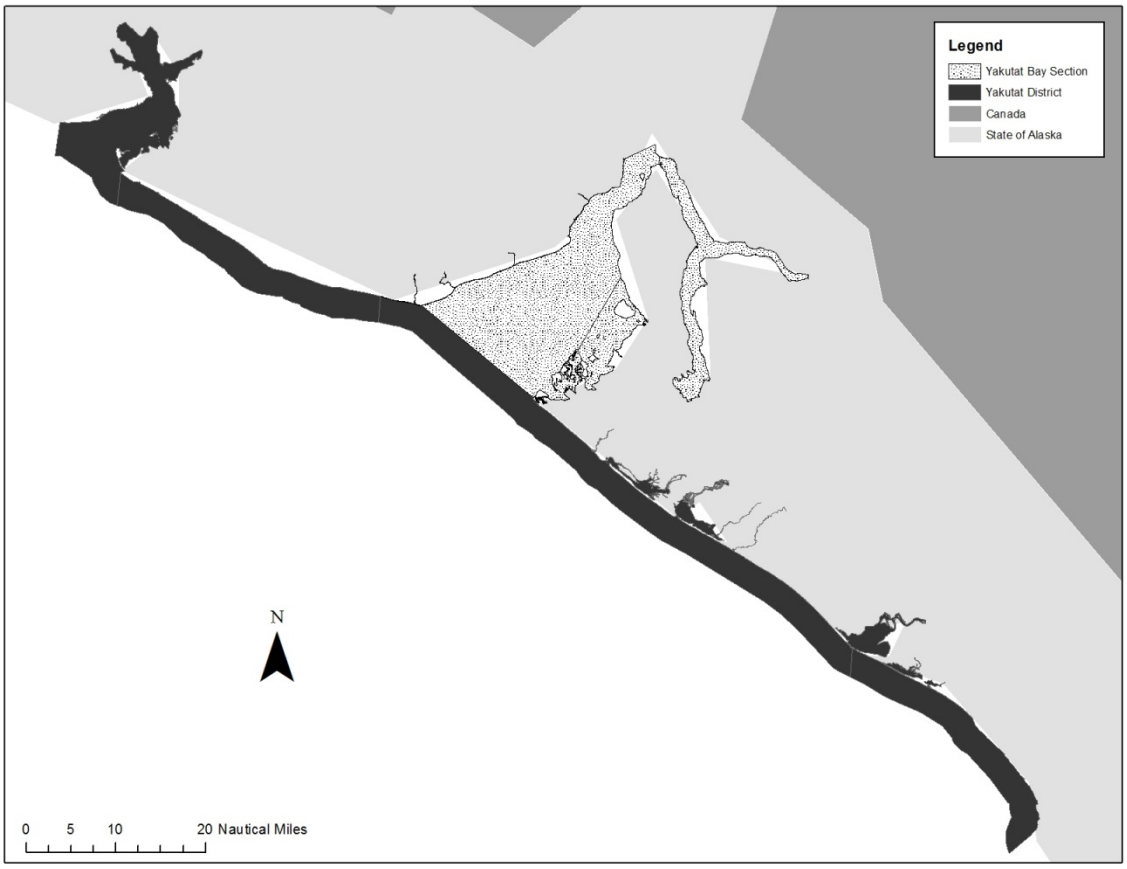


Figure 74-1.–Proposed new Yakutat Bay Section within the Yakutat District of Registration Area D.

COMMITTEE OF THE WHOLE GROUP 2: Shrimp, Miscellaneous Shellfish (19 proposals: Chair - TBD)

Personal Use/Sport (3 Proposals)

PROPOSAL 75 – 5 AAC 77.660. Personal use shrimp fishery.

PROPOSED BY: Nick Yurko.

WHAT WOULD THIS PROPOSAL DO? This would reopen Section 11-A to personal use shrimping by regulation.

WHAT ARE THE CURRENT REGULATIONS? In Section 11-A, a permit is needed to take shrimp for personal use. Pots and ring nets may be used and the bag and possession limit is one gallon of spot shrimp whether whole or de-headed.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? There would be no effect if this proposal is adopted. By regulation, the Section 11-A personal use shrimp fishery is open, but has been closed by emergency order since 2013. If there is a conservation concern, the department will continue to be able to close and reopen the area by emergency order.

BACKGROUND: Section 11-A is within the Juneau Nonsubsistence Area and commercial, personal use, and sport fishing for shrimp occurs here. Fisheries utilizing pot gear target spot and coonstripe shrimp, and fisheries utilizing trawl gear target pink and sidestripe shrimp. In 2015, the board adopted proposal 93, submitted by the department, to require a harvest reporting permit for Juneau Area personal use and sport pot shrimp fisheries.

The seasonal GHL for the District 11 commercial pot shrimp fishery had been 20,000 pounds of spot and coonstripe shrimp since the 1995/96 fishing season. Beginning with the 2012/13 season, Section 11-D, Seymour Canal (where the majority of District 11 harvest occurs), was separated from the remainder of District 11 and given its own GHL. The remainder of District 11 is comprised of Sections 11-A, 11-B, and 11-C, and was given a combined exploratory GHL of 7,500 pounds of spot and coonstripe shrimp. Over the last ten years the commercial harvest has averaged 5,000 pounds of spot and coonstripe shrimp.

In Section 11-A, commercial pot shrimp fishery catch per unit effort (CPUE) was consistent for several seasons in the early 2000s. After rising from 2005 through 2009, CPUE dropped dramatically during the 2009 through 2012 seasons. In the spring of 2013, based on declining trends in commercial harvests and comparison of commercial harvest to personal use and sport fish catch, the department closed Section 11-A to the commercial, personal use, and sport pot shrimp fisheries. Section 11-A has remained open to commercial and personal use trawl fisheries. In order to determine the contribution of personal use and sport fisheries to the spot shrimp harvest in Section 11-A, sport fish statewide harvest survey (SWHS) information and comprehensive sport fish creel survey data from 2003 through 2007 was utilized. SWHS information is not adequate to determine the amount of shrimp harvested is Section 11-A, but area specific information collected was utilized to estimate the Section 11-A proportion of the Juneau Area harvest. The comprehensive creel survey data for the Juneau Area was reported in numbers of shrimp, and the average whole weight of spot shrimp from the department's annual shrimp surveys were utilized to estimate the pounds of whole shrimp harvested in Section 11-A

in the sport and personal use fisheries. Compared with commercial fish ticket information, the Section 11-A spot shrimp harvest was approximately 44% commercial and 56% personal use/sport.

Following the closure in 2013, the intent was to reopen pot shrimp fisheries after a period of three years. In early 2016, the department postponed reopening of pot shrimp fishing in Section 11-A. Without any direct harvest information from Section 11-A, this decision was based on commercial fishery performance in nearby areas open to commercial pot shrimp, as well as data from the annual long-term pot shrimp abundance survey conducted in Tenakee Inlet. The nearby districts had both closed for a period of three years due to rapidly decreasing commercial spot shrimp CPUE and when re-opened, the CPUE was at lower levels than the previous time the district had been fished, suggesting three years is inadequate for spot shrimp stocks to recover in Northern Southeast Alaska Inside (NSEI) waters. Tenakee Inlet had commercial pot shrimp fisheries until a stock collapse led to commercial closures, and further declines indicated by annual survey performance led to personal use and sport fisheries closures in order to rebuild the stock. Survey results showed several years of very small improvements followed by increasingly larger gains in survey CPUE, suggesting that recovery to baseline levels for spot shrimp populations in NSEI waters will likely take up to six years with no fishing pressure.

DEPARTMENT COMMENTS: The department **OPPOSES** establishing regulations requiring specific personal use shrimp areas be opened and prefers managing by emergency order based on the best available data of shrimp abundance. Historical fishery performance indicates the productivity of shrimp populations in NSEI waters are not as robust as shrimp populations in the southern portions of Southeast Alaska and these stocks likely require conservative management actions to ensure sustainability.

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.

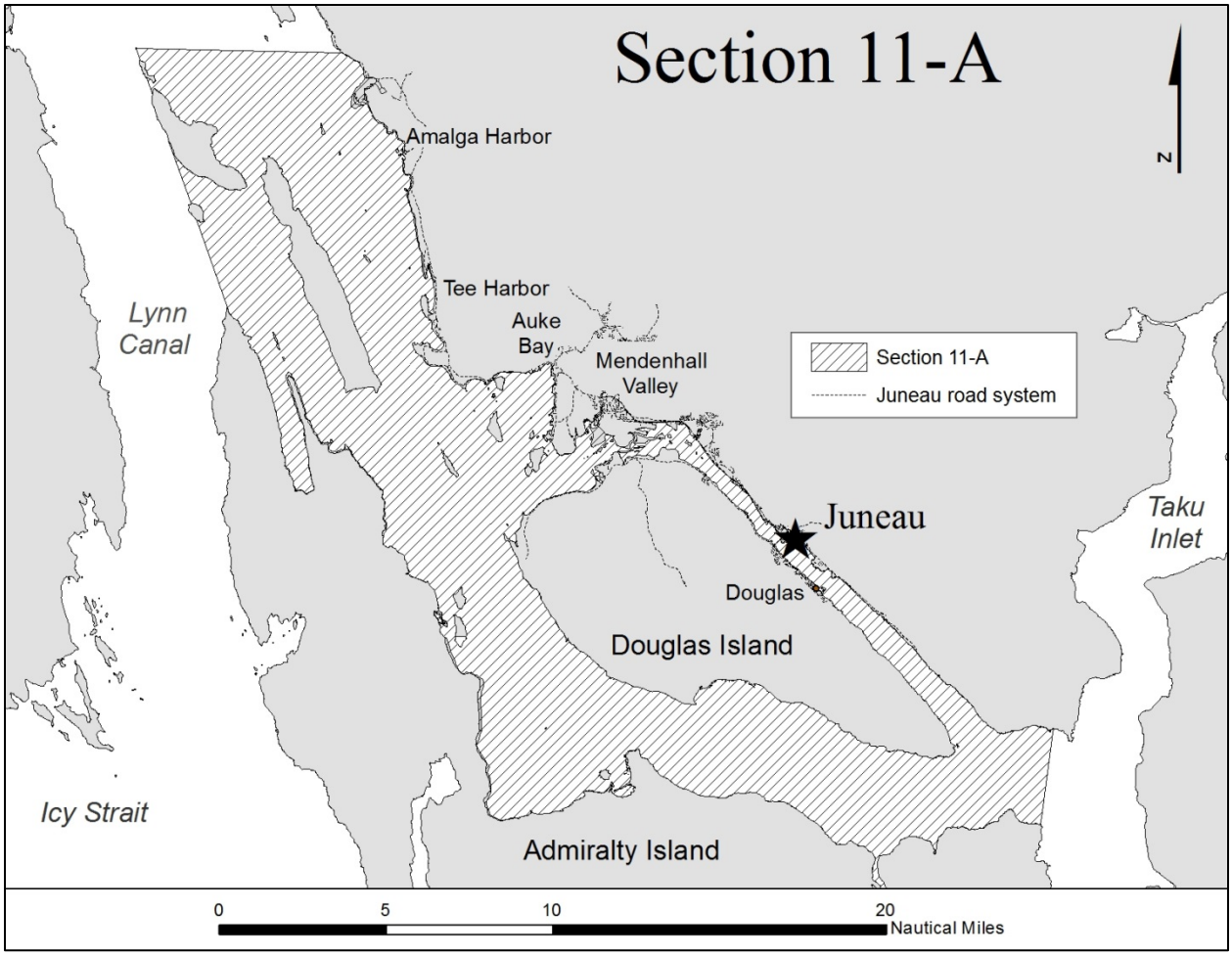


Figure 75-1.–Map of Section 11-A and locations on the Juneau road system.

PROPOSAL 76 – 5 AAC 47.035. Methods, means, and general provisions – Shellfish.

PROPOSED BY: Aaron Woodrow.

WHAT WOULD THE PROPOSAL DO? This would establish a minimum mesh size for sport shrimp pots in Southeast Alaska.

WHAT ARE THE CURRENT REGULATIONS? There is no mesh size requirement for sport shrimp pots in Southeast Alaska.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Anglers fishing under sport fishing regulations would be required to use shrimp pots that have a minimum mesh size of 7/8 inch covering 50% of the pot wall. This would create disparity with anglers fishing under personal use regulations, which have no minimum mesh size requirements.

The harvest of large spot shrimp in the sport fishery would likely remain stable while harvest of juvenile spot shrimp would likely decrease. Opportunity to harvest smaller species of shrimp (coonstripe, sidestripe, pink and northern shrimp) would be reduced.

BACKGROUND: A mesh size opening of 7/8 inch allows the escapement of shrimp below approximately 30 mm in carapace length. This reduces the harvest and handling of juvenile spot shrimp and smaller shrimp species while selecting for large shrimp species, primarily spot shrimp. This management measure is currently used in the Southeast commercial shrimp pot fishery.

The minimum mesh size requirements of 7/8 inch, referenced by the proposer, was implemented in the Prince William Sound sport, personal use and subsistence shrimp fishery in 1996. This minimum mesh size requirement was adopted to reduce the mortality of juvenile spot shrimp as part of the Prince William Sound spot shrimp stock rebuilding process. In this fishery the noncommercial harvest of shrimp is the largest source of harvest.

While mesh size restrictions have not been used in the Southeast Alaska sport shrimp fishery, other recent management measures to reduce harvest have included: reducing the bag and possession limit from 10 lb or quarts to three lb or quarts (2009), reducing the number of shrimp pots allowed in the sport fishery from 10 per person and 20 per vessel to five per person and 10 per vessel (2012), and area closures: Sitka Sound Special use area (2006), Twelve-mile Arm (2006), Indian point-Survey Point (2006), Tenakee inlet (2012), and area 11-A (2013).

Alaska residents may harvest shrimp under personal use regulations and through subsistence regulations in areas with a customary and traditional use finding. The greatest noncommercial harvest of shrimp in Southeast occurs from Alaska residents. On average (2012–2016), only 7.1% of nonresident sport anglers in Southeast Alaska participate in a shellfish fishery and nonresidents harvest an average of 3,123 gallons of shrimp or 26% of the total harvest estimated by the statewide harvest survey.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal without a conservation need. In areas where shrimp stocks are depressed the sport fishery has been closed. A minimum mesh size requirement may unnecessarily restrict the harvest of smaller species of shrimp for the sport fishery only. Inconsistencies in lawful gear requirements between sport, personal use, and subsistence fisheries will complicate participation in, and enforcement of, the noncommercial shrimp fisheries.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Existing shrimp pots may need to be modified or new pots purchased to comply with the proposed mesh size restriction.

PROPOSAL 77 – 5 AAC 47.035. Methods, means, and general provisions – Shellfish.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would clarify sport fishing regulations by defining the methods and means which can be used to harvest those shellfish species for which no bag or possession limit has been established in Southeast Alaska and by removing unnecessary regulatory language.

WHAT ARE THE CURRENT REGULATIONS? In the Southeast Alaska sport fishery, shellfish may only be taken by the methods and means described in 5 AAC 47.035(b). This section specifically describes the allowable gear for shrimp, crab, clams, abalone, and scallops but fails to address what gear may be used to harvest unlisted shellfish species which do not have a bag and possession limit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would clarify that a wide variety of gear may be used to harvest shellfish species for which there is no bag or possession limit. The methods and means regulations for abalone will be removed as they are now unnecessary since the abalone sport fishery has been closed by regulation since 2012. Redundant regulations for shrimp, crab, and clams will be removed from Southeast Alaska regulations but remain in statewide regulations.

BACKGROUND: The sport harvest of unlisted shellfish species for which there is no bag or possession limit is very low. The most commonly harvested unlisted shellfish species is likely squid and octopus.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal which seeks to clarify sport fishing regulations.

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.

Commercial Pot Shrimp (7 Proposals)

PROPOSAL 78 – 5 AAC 31.105. Description of Registration Area A districts and sections, and 5 AAC 31.115. Shrimp pot guideline harvest ranges for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This will add section definitions and guideline harvest ranges (GHR) to redefine boundaries of pot shrimp fisheries in Districts 6, 8, and 10.

WHAT ARE THE CURRENT REGULATIONS? Districts 6, 8, and 10 are managed on guideline harvest levels (GHL) set within district wide GHRs specific to each district.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would allow the department to manage the pot shrimp fisheries in eastern Sumner Strait and eastern Frederick Sound based on the shrimp stocks in those areas rather than a fishing area based solely on individual district or section boundaries.

BACKGROUND: Pot shrimp fishing areas with distinct GHRs are primarily based on district, section, and/or subdistrict boundaries. These lines were developed for the salmon fisheries, and in some areas do not work well for managing shrimp stocks. District 8 borders District 10 in Frederick Sound and District 6 in Sumner Strait. District 8 encompasses two distinct water bodies, Frederick Sound (Section 8-A) and Sumner Strait (Section 8-B) that have minimal water exchange between them as they are separated by Mitkof Island (Figure 78-1).

Over the past 20 years, Section 8-A harvest averages 3,500 pounds, or about 21% of the District 8 total harvest and Section 8-B harvest averages 13,200 pounds, or about 79% of the District 8 total harvest. In recent years, closer to 40% of the harvest has come from Section 8-A.

Districts 6 and 10 encompass distinct water bodies and fishing areas as well. The Sumner Strait portion of District 6 (Section 6-A) averages 3,900 pounds harvested, or about 7% of the District 6 harvest. Often fishermen utilize Section 8-B and Section 6-A simultaneously if both are open. District 10 is not currently divided into sections. However, there are distinct fishing areas within District 10. The Frederick Sound portion of District 10 east of Cape Fanshaw typically has a harvest of 4,700 pounds, or about 10% of the District 10 shrimp harvest. Usually, when District 10 closes many boats fishing in the eastern portion of District 10 will move to Section 8-A to continue fishing.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Separating District 8 and combining with portions of Districts 6 and 10 will allow the department to better manage shrimp populations in those areas.

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.

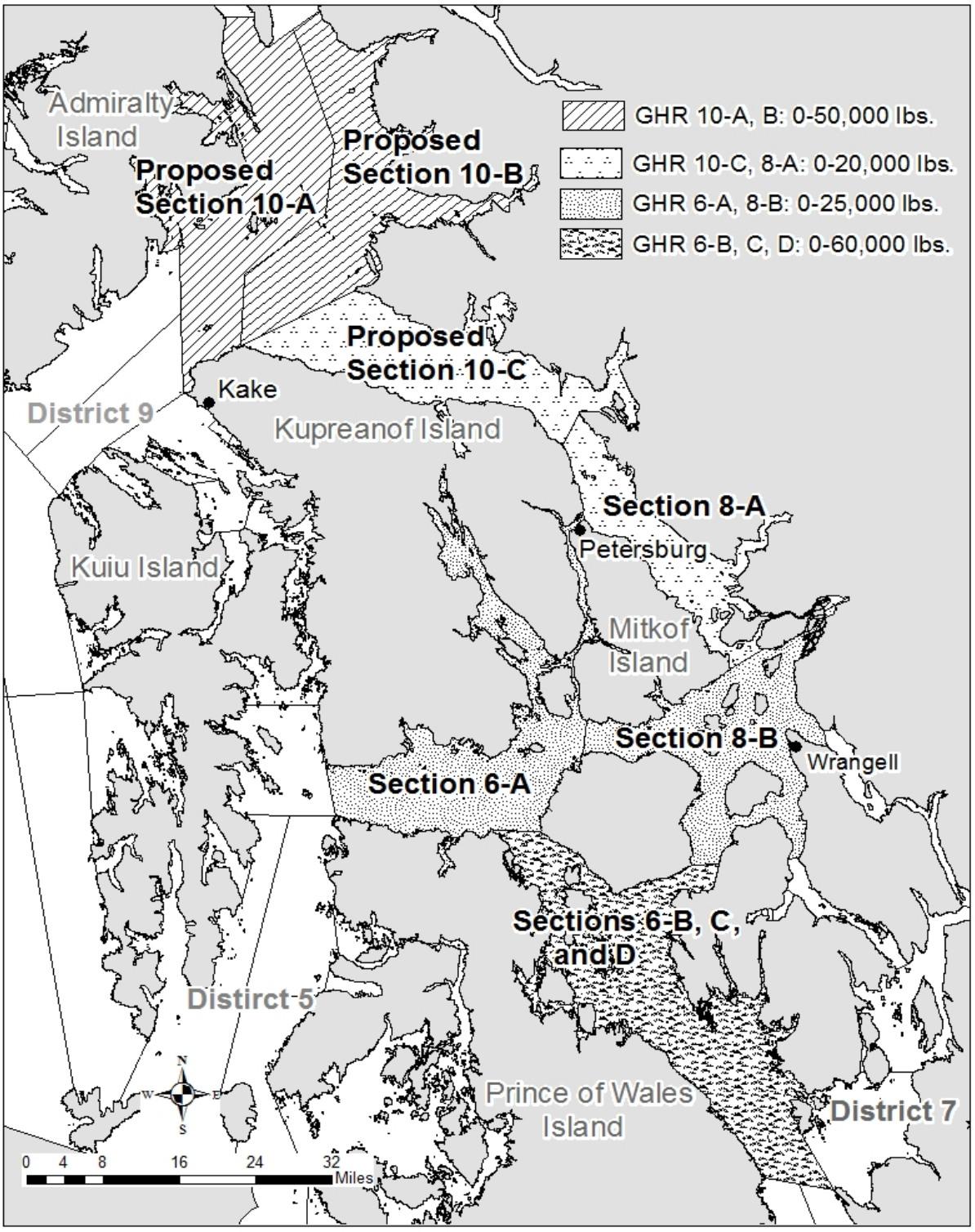


Figure 78-1.–Districts 6, 8, and 10 proposed pot shrimp fishery areas.

PROPOSAL 79 - 5 AAC 31.110. Shrimp pot fishing seasons and periods for Registration Area A.

PROPOSED BY: Nick Yurko.

WHAT WOULD THE PROPOSAL DO? This would shift the commercial pot shrimp opening from October 1 to an unspecified date in April.

WHAT ARE THE CURRENT REGULATIONS? Current regulations open the commercial pot shrimp fishery from October 1 to February 28 (5 AAC 31.11). The department may reopen the fishery from May 15 to July 31 in districts where the GHL was not reached during the winter fishery (5 AAC 31.145 (d)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? There may be a greater abundance of shrimp because the fishery would occur after egg hatching but before the increased natural mortality that occurs during oogenesis, mating and egg extrusion. In addition it would allow the department to utilize the results of the fall pot shrimp survey to manage the spring fishery, which increases the reliability of the data managers use to set GHLs. Currently the survey ends just prior to the fishery opening and survey results are not available for use until the following season.

BACKGROUND: The current seasons were established by the board based on allocative and biological concerns. The current closure between the winter and summer seasons (March 1–May 15) protects the stock during the egg hatch period.

DEPARTMENT COMMENTS: The department **SUPPORTS** the concept of this proposal, but notes that egg hatching for spot shrimp often occurs in mid to late April and recommends the board consider an opening date of May 15 in order to maximize potential benefits of this proposal.

Changing the initial season start date to May 15 would enhance biological conservation and fishery management. Fishing during this time period may allow for increased GHLs in the future because the fishery would occur before the high natural mortality periods of molting, mating, egg development, and egg extrusion. The current fall fishery occurs after these processes are complete.

Fishing on the stock in the spring would also allow females carrying eggs in the fall to brood and hatch their eggs before being subject to fishing mortality, which may enhance long term stock resilience. A spring fishery would allow the department to better utilize the pot shrimp preseason survey data. The survey occurs in September and is temporally confined by the summer molt (finishing in mid-August) and the fishery opening (October 1). The results of the survey are not available to managers until after the fishery has opened, thus data collected in the survey are used for stock assessment the following year. This is suboptimal because shrimp populations fluctuate annually. A spring fishery opening would allow survey results from the fall to be used to set GHLs for the following spring. The change in fishery opening date would make Southeast Alaska spot shrimp fisheries consistent with both the British Columbia (mid-May) and Prince William Sound (April 15) fishery openings.

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.

PROPOSAL 80 - 5 AAC 31.124. Lawful shrimp pot gear for Registration Area A.

PROPOSED BY: Don Westlund.

WHAT WOULD THE PROPOSAL DO? This would decrease the commercial shrimp fishery pot limit to 100 small pots or 75 large pots, standardize the number of pots fished per string as well as the distance between pots, and establish a maximum number of strings that can be fished. This also limits the hauling of each pot to once per day.

WHAT ARE THE CURRENT REGULATIONS? Current regulations limit participants to 140 small pots or 100 large pots. The fishery is open from 8:00 a.m. to 4:00 p.m. daily. Current regulations do not limit the number or distance of pots that can be deployed on a string, the number of strings that can be deployed, or the number of times a pot may be hauled in a day.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would reduce the catch efficiency of the pot shrimp fleet and may slow the overall pace of the fishery. The number of small shrimp harvested or handled would likely decrease by limiting the number of times a pot may be pulled to once per day which may increase stock health and resilience. The proposal may alter competitive advantages in the fishery between small-boat and large-boat operations.

BACKGROUND: Commercial harvest of shrimp in Southeast Alaska utilizing pot gear began in the late 1960s and continued sporadically with low effort until the mid-1980s, peaking in the mid-1990s. In 1995, the CFEC was petitioned to include pot gear for shrimp into the limited entry program. The pot shrimp fishery is now limited entry and there are currently 256 active and interim permits of the 329 originally issued. In 1997, regulations were adopted that significantly affected the Southeast Alaska Pot Shrimp fishery. These regulations include the current daily fishing periods, pot sizes, and pot limits. These restrictions had several effects: 1) decreased efficiency of the fleet, producing a slower-paced and more orderly fishery; 2) reduced the harvest of small shrimp by limiting fishing hours, leading to longer soak times which allows mesh size to passively sort out smaller shrimp; and 3) provided for gear standardization, allowing fishery performance data to be utilized by managers.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as written but supports the concept of establishing regulations that reduce capture of small shrimp. Pot limits are generally allocative between small boat and large boat operations. There may be benefits in slowing the pace of the fishery in some regions. However, the department has been able to effectively manage the faster paced fisheries by achieving the GHL with a fair degree of accuracy.

Limiting the number of times pots can be hauled in a day may increase soak times and allow the regulatory mesh size to passively sort out smaller shrimp. However, this limitation would be difficult to enforce and other management mechanisms exist that would meet the same goal of catching fewer small shrimp: the simplest, least intrusive, and likely most effective would be to increase the minimum mesh size. Extra enforcement effort would be required to verify compliance with the single haul regulation. In the Canadian shrimp fishery the fleet contributes around $60,000 annually to help fund enforcement of their single haul regulation.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Fishermen may have to buy more buoy line and

buoys since the number of strings deployed would likely increase due to restrictions on the number of pots on a string.

PROPOSAL 81 - 5 AAC 31.124. Lawful shrimp pot gear for Registration Area A, 5 AAC 31.126. Shrimp pot marking requirements for Registration Area A, and 5 AAC 31. 141. Logbooks.

PROPOSED BY: James E. Smith.

WHAT WOULD THE PROPOSAL DO? This would limit pot shrimp fishery participants to hauling each pot only once a day, limit the number of sets they may deploy to 10, limit the number of buoys each boat may use to 20, and require all vessels to complete logbooks with additional reporting requirements.

WHAT ARE THE CURRENT REGULATIONS? Current regulations do not restrict fishery participants to hauling each pot only once a day: rather, the fishing hours are limited, in part, to constrain how often the gear is hauled. There are no restrictions on the number of sets a participant may make or buoys they may use, though they are limited to either 100 large class or 140 small class pots. Logbooks are mandatory for catcher processor vessels only and do not include the information the proposer requests.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would reduce the capture and handling of small shrimp in the fishery which may increase stock health and resilience. The single haul requirement combined with the ten sets per day limit would likely reduce fleet efficiency and prolong the fishery duration, easing management of the fishery.

BACKGROUND: Commercial harvest of shrimp in Southeast Alaska utilizing pot gear began in the late 1960s and continued sporadically with low effort until the mid-1980s, peaking in the mid-1990s. In 1995, the CFEC was petitioned to include pot gear for shrimp into the limited entry program. The pot shrimp fishery is now limited entry and there are currently 256 active and interim permits of the 329 originally issued. In 1997, regulations were adopted that significantly affected the Southeast Alaska pot shrimp fishery. These regulations include the current daily fishing periods, pot sizes, and pot limits. These restrictions had several effects: 1) decreased efficiency of the fleet, producing a slower-paced and more orderly fishery; 2) reduced the harvest of small shrimp by limiting fishing hours, leading to longer soak times which allows mesh size to passively sort out smaller shrimp; and 3) provided for gear standardization, allowing fishery performance data to be utilized by managers.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as written but supports the concept of establishing regulations that reduce capture of small shrimp. Although we cannot quantify how damaging the practice of hauling pots after a short soak time is to stock health, it is well documented that longer soak times allow a higher percentage of small shrimp to escape through the pot mesh. Although the limited hours of the fishery do reduce the practice of short soak times, it is common practice for participants to haul some and/or all of their pots twice a day.

The department is opposed to additional restrictions on gear deployment that would limit a participant's ability to fish variable terrain or available area. Extra enforcement effort would be required to verify compliance with the single haul regulation. In the Canadian shrimp fishery the fleet contributes around $60,000 annually to help fund enforcement of their single haul regulation.

Other management mechanisms exist that would meet the same goal of catching fewer small shrimp: the simplest, least intrusive, and likely most effective would be to increase the minimum mesh size.

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.

PROPOSAL 82 – 5 AAC 31.136. Closed waters in Registration Area A.

PROPOSED BY: Nick Yurko.

WHAT WOULD THIS PROPOSAL DO? This would close the waters of Section 11-A to commercial shrimp fishing. Currently, beam trawl and pots are allowed gear types to fish for shrimp in Section 11-A. The proposal does not specify if Section 11-A should be closed to just one or both gear types.

WHAT ARE THE CURRENT REGULATIONS? There are no regulatory closed waters to shrimp fishing in District 11. The pot shrimp season is October 1–February 28 unless closed earlier by emergency order. The fishery may open May 15–July 31 (summer season) if the guideline harvest level (GHL) was not reached during the winter season. The District 11 pot shrimp fishery is managed based on the harvest of spot and coonstripe shrimp and the guideline harvest range (GHR) for Sections 11-A, 11-B, and 11-C combined is 0–15,000 pounds of spot and coonstripe shrimp. The beam trawl fishery in District 11 is open May 1–28 and the Section 11-A GHR is 25,000–75,000 pounds of shrimp, with bycatch limits for spot and coonstripe shrimp under 60 count per pound of 1,000 pounds of spot shrimp and 4,000 pounds of coonstripe shrimp for Sections 11-A and 11-B combined.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? The sport and personal use shrimp fisheries in this area would remain unchanged and would reopen when shrimp stocks in the area are of sufficient abundance to sustain fisheries.

BACKGROUND: Section 11-A is within the Juneau Nonsubsistence Area and commercial, personal use, and sport fishing for shrimp occurs here (Figure 82-1). Fisheries utilizing pot gear target spot and coonstripe shrimp, and fisheries utilizing trawl gear target pink and sidestripe shrimp. In 2015, the board adopted proposal 93, submitted by the department to require a harvest reporting permit for Juneau Area personal use and sport pot shrimp fisheries.

The seasonal GHL for the District 11 commercial pot shrimp fishery had been 20,000 pounds of spot and coonstripe shrimp since the 1995/96 fishing season. Beginning with the 2012/13 season, Section 11-D, Seymour Canal (where the majority of District 11 harvest occurs), was separated from the remainder of District 11 and given its own GHL. The remainder of District 11 is comprised of Sections 11-A, 11-B, and 11-C, and was given a combined exploratory GHL of 7,500 pounds of spot and coonstripe shrimp. Over the last ten years the harvest has averaged 5,000 pounds of spot and coonstripe shrimp.

In Section 11-A, commercial pot shrimp fishery catch per unit effort (CPUE) was consistent for several seasons in the early 2000s. After rising from 2005 through 2009, CPUE dropped dramatically during the 2009 through 2012 seasons. In the spring of 2013, based on declining trends in commercial harvests and comparison of commercial harvest to personal use and sport fish catch, the department closed Section 11-A to the commercial, personal use, and sport pot shrimp fisheries. Section 11-A has remained open to commercial and personal use trawl fisheries. In order to determine the contribution of personal use and sport fisheries to the spot shrimp harvest in Section 11-A, sport fish statewide harvest survey (SWHS) information and comprehensive sport fish creel survey data from 2003 through 2007 was utilized. SWHS information is not adequate to determine the amount of shrimp harvested is Section 11-A, but area specific information collected was utilized to estimate the Section 11-A proportion of the Juneau Area harvest. The comprehensive creel survey data was reported in numbers of shrimp,

and the average whole weight of spot shrimp from the department's annual shrimp surveys was utilized to estimate the pounds of whole shrimp harvested in Section 11-A in the sport and personal use fisheries. Compared with commercial fish ticket information, the Section 11-A spot shrimp harvest was approximately 44% commercial and 56% personal use/sport.

Following the closure in 2013, the original intent was to reopen pot shrimp fisheries after a period of three years. In early 2016, Juneau commercial and sport fish area managers and research staff decided to postpone reopening of pot shrimp fishing in Section 11-A. Without any direct harvest information from Section 11-A, this decision was based on commercial fishery performance in nearby areas open to commercial pot shrimp, as well as data from the annual long-term pot shrimp abundance survey conducted in Tenakee Inlet. The nearby districts had both closed for a period of three years due to rapidly decreasing commercial spot shrimp CPUE and when re-opened, the CPUE was at lower levels than the previous time the district had been fished, suggesting three years is inadequate for spot shrimp stocks to recover in Northern Southeast Alaska Inside (NSEI) waters. Tenakee Inlet had commercial pot shrimp fisheries until a stock collapse led to commercial closures, and further declines indicated by annual survey performance led to personal use and sport fisheries closures in order to rebuild the stock. Survey results showed several years of very small improvements followed by increasingly larger gains in survey CPUE, suggesting that recovery to baseline levels for spot shrimp populations in NSEI waters will likely take up to six years with no fishing pressure.

Figure 82-2 shows the District 11 sections including Section 11-A, and the Juneau Nonsubsistence Area.

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.

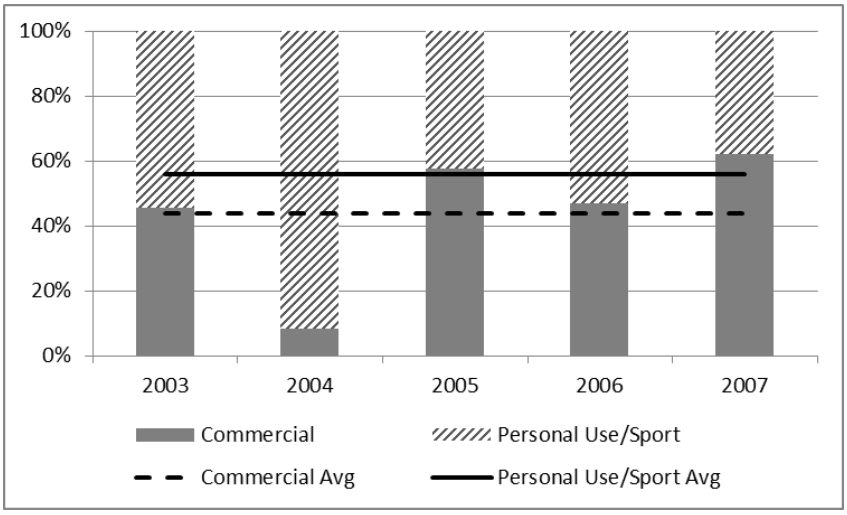


Figure 82-1.–Percentage of shrimp harvest in Section 11-A by the commercial, and personal use/sport sectors, and averages over time based on 2003–2007 sport fish creel survey data, sport fish Statewide Household Survey data, and confidential commercial pot shrimp fish ticket data. Total harvests for this time series range between 4,600 and 9,600 pounds of shrimp.

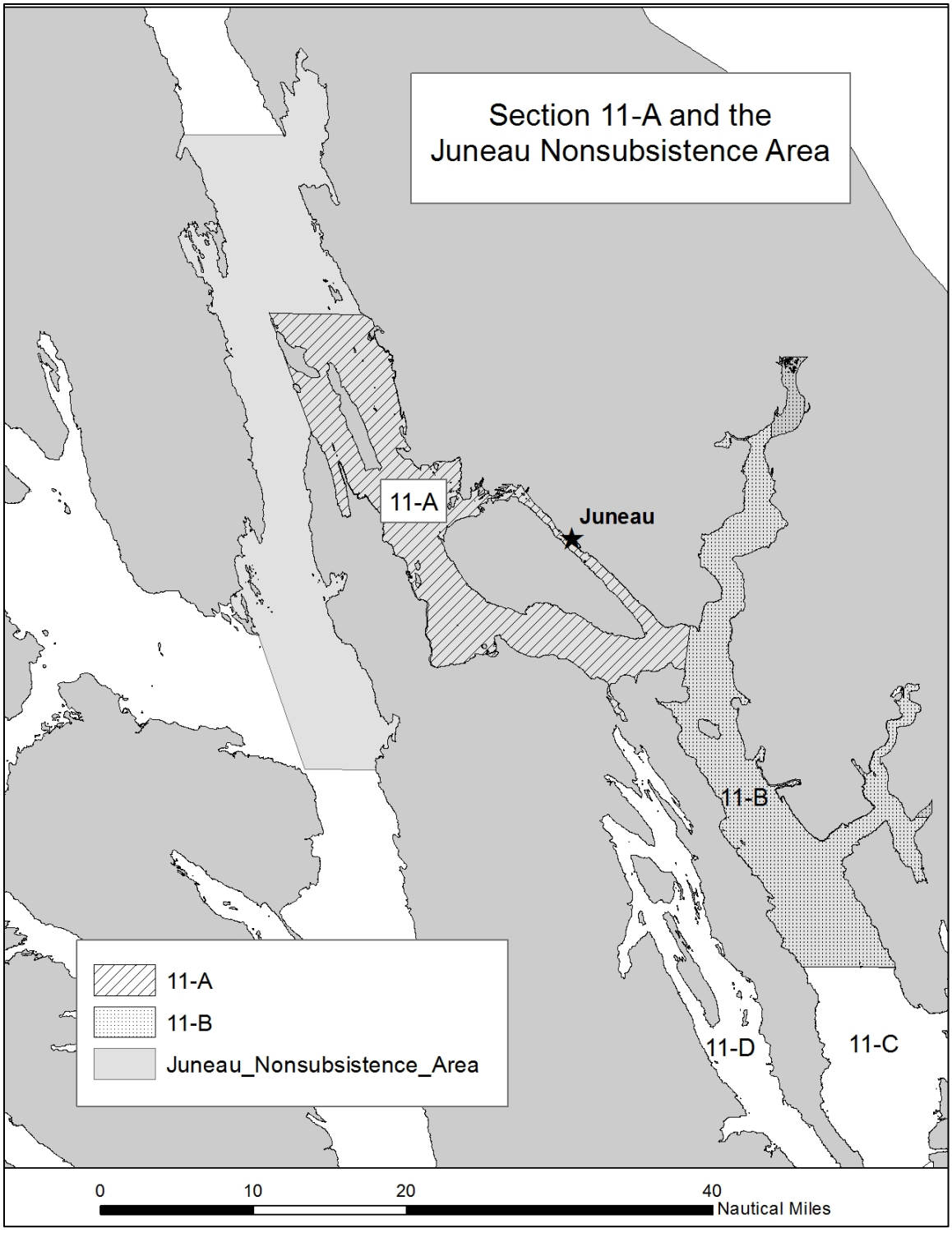


Figure 82-2.–District 11 including Section 11-A and the Juneau Nonsubsistence Area.

PROPOSAL 83 – 5 AAC 31.136 and 5 AAC 34.150. Closed waters in Registration Area A.

PROPOSED BY: Greg Gallant.

WHAT WOULD THIS PROPOSAL DO? This would close the waters of Section 11-A to commercial shrimp and red king crab fishing. Currently, beam trawl and pots are allowed gear types to fish for shrimp in Section 11-A.

WHAT ARE THE CURRENT REGULATIONS? There are no regulatory closed waters to shrimp fishing in District 11. The pot shrimp season is October 1–February 28 unless closed earlier by emergency order. The fishery may open May 15–July 31 (summer season) in a district or section where the guideline harvest level (GHL) was not reached during the winter season. The District 11 pot shrimp fishery is managed based on the harvest of spot and coonstripe shrimp and the guideline harvest range (GHR) for Sections 11-A, 11-B, and 11-C combined is 0–15,000 pounds of spot and coonstripe shrimp. The beam trawl fishery in District 11 is open May 1–February 28 and the Section 11-A guideline harvest range is 25,000–75,000 pounds of shrimp, with bycatch limits for spot and coonstripe shrimp that are under 60 count per pound of 1,000 pounds of spot shrimp and 4,000 pounds of coonstripe shrimp for Sections 11-A and 11-B combined.

Southeast Alaska king crab regulations acknowledge the competing demands between the personal use and commercial user groups for red and blue king crab in Section 11-A in 5 AAC 34.111 *Section 11-A Red and Blue King Crab Management and Allocation Plan*. In the plan, the historical use of the red and blue king crab resource in Section 11-A for personal use is recognized, as well as the economic importance of the red and blue king crab commercial fishery. The plan allocates 40% of the resource to the commercial fishery and 60% of the resource to the personal use fishery. The plan further splits the personal use allocation into summer and winter components, and demands that both summer and winter fisheries remain open as long as possible within the allocation plan guidelines. Regulations specific to the personal use fishery in Section 11-A mandate that crab may only be taken under the authority of a permit issued by the department, and allow for flexibility in setting bag and possession limits, seasonal limits, and gear (pots and ring nets) limits.

Southeast Alaska king crab regulations also make a portion of Section 11-A off limits to commercial fishing. Regulation defines the waters of Gastineau Channel, Barlow Cove, Auke Bay, and Favorite Channel as closed to commercial fishing (Figure 83-1).

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? Participants in the commercial shrimp and red king crab fisheries would lose harvest opportunity in Section 11-A. Because Section 11-A contributes significantly to the regionwide red king crab estimate of harvestable surplus, closure of the commercial red king crab fishery in Section 11-A would likely reduce the probability that the commercial red king crab fishery in Southeast Alaska would open in any given year.

BACKGROUND: Section 11-A is within the Juneau Nonsubsistence Area and commercial, personal use, and sport fishing for shrimp occurs here (Figure 83-1). Fisheries utilizing pot gear target spot and coonstripe shrimp, and fisheries utilizing trawl gear target pink and sidestripe shrimp. In 2015, the board adopted proposal 93, submitted by the department to require a harvest reporting permit for Juneau Area personal use and sport pot shrimp fisheries.

The seasonal GHL for the District 11 commercial pot shrimp fishery had been 20,000 pounds of spot and coonstripe shrimp since the 1995/96 fishing season. Beginning with the 2012/13 season, Section 11-D, Seymour Canal (where the majority of District 11 harvest occurs), was separated from the remainder of District 11 and given its own GHL. The remainder of District 11 is comprised of Sections 11-A, 11-B, and 11-C, and was given a combined exploratory GHL of 7,500 pounds of spot and coonstripe shrimp. Over the last ten years the harvest has averaged 5,000 pounds of spot and coonstripe shrimp.

In Section 11-A, commercial pot shrimp fishery catch per unit effort (CPUE) was consistent for several seasons in the early 2000s. After rising from 2005 through 2009, CPUE dropped dramatically during the 2009 through 2012 seasons. In the spring of 2013, based on declining trends in commercial harvests and comparison of commercial harvest to personal use and sport fish catch, the department closed Section 11-A to the commercial, personal use, and sport pot shrimp fisheries. Section 11-A has remained open to commercial and personal use trawl fisheries. In order to determine the contribution of personal use and sport fisheries to the spot shrimp harvest in Section 11-A, sport fish statewide harvest survey (SWHS) information and comprehensive sport fish creel survey data from 2003 through 2007 was utilized. SWHS information is not adequate to determine the amount of shrimp harvested is Section 11-A, but area specific information collected was utilized to estimate the Section 11-A proportion of the Juneau Area harvest. The comprehensive creel survey data was reported in numbers of shrimp, and the average whole weight of spot shrimp from the department's annual shrimp surveys was utilized to estimate the pounds of whole shrimp harvested in Section 11-A in the sport and personal use fisheries. Compared with commercial fish ticket information, the Section 11-A spot shrimp harvest was approximately 44% commercial and 56% personal use/sport.

The original intent was to reopen pot shrimp fisheries after a period of three years. In early 2016, Juneau commercial and sport fish area managers and research staff decided to postpone reopening of pot shrimp fishing in Section 11-A. Without any direct harvest information from Section 11-A, this decision was based on commercial fishery performance in nearby areas open to commercial pot shrimp, as well as data from the annual long-term pot shrimp abundance survey conducted in Tenakee Inlet. The nearby districts had both closed for a period of three years due to rapidly decreasing commercial spot shrimp CPUE and when re-opened, the CPUE was at lower levels than the previous time the district had been fished, suggesting three years is inadequate for spot shrimp stocks to recover in Northern Southeast Alaska Inside (NSEI) waters. Tenakee Inlet had commercial pot shrimp fisheries until a stock collapse led to commercial closures, and further declines indicated by annual survey performance led to personal use and sport fisheries closures in order to rebuild the stock. Survey results showed several years of very small improvements followed by increasingly larger gains in survey CPUE, suggesting that recovery to baseline levels for spot shrimp populations in NSEI waters will likely take up to six years with no fishing pressure.

For red and blue king crab, one of the actions taken by the board at the 1995 Statewide King and Tanner Crab meeting was to expand the area closed to commercial fishing from the current (at the time) regulatory closed waters of Auke Bay and Gastineau Channel, to also include the area from Outer Point to the mouth of Bear Creek on Admiralty Island,and from Symonds Point on Admiralty Island to the southeasternmost tip of Shelter Island, and a line from Halibut Cove to the southernmost point of Amalga Harbor, as well as all waters of Barlow Cove south of the latitude of Barlow Point (Figure 83-2). The board initiated a management and allocation plan for

red king crab in Section 11-A beginning with the 1996/1997 season. Commercial fishing regulation 5 AAC 34.111 allocated 45% of the available harvest to the commercial fishery with a season from November 1 until closed by emergency order, 46% to the summer personal use fishery from July 1 to September 30, and 9% to the winter personal use fishery from October 1 to March 31. One of the reasons the board separated the personal use allocation into summer and winter seasons was to provide crab for dive fishermen who traditionally harvest during the winter when crab migrate into shallow waters. This allocation plan was revised in March of 1999 to an allotment of 40%, 50%, and 10% of the available harvest to the commercial, summer personal use, and winter personal use fisheries respectively. The entire commercial fisheries share was to be reallocated to the personal use fishery if the regionwide commercial fishery was not opened. In 2009, the board repealed this reallocation and if the regionwide commercial fishery is not opened, the commercial allocation is left unharvested.

The department estimates the mature and legal male biomass annually in Section 11-A, as well as in the rest of Southeast Alaska, and determines the stock status for each survey area to determine an appropriate harvest rate and guideline harvest level. The department combines estimates of available harvest for all surveyed and non-surveyed areas. By regulation, a commercial fishery may be permitted if the department's estimate of available harvest for the entire region meets or exceeds a 200,000 pound threshold. There is no established threshold that must be met to conduct a personal use fishery. Rather, personal use fishery decisions for Section 11-A are based on the amount of harvestable surplus, and the bag and possession limits, seasonal limits, and gear limits necessary to target the harvestable surplus.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. If the board were to adopt this proposal it should consider whether the 200,000 pound minimum guideline harvest level for the commercial red king crab fishery in Southeast Alaska is still appropriate.

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.

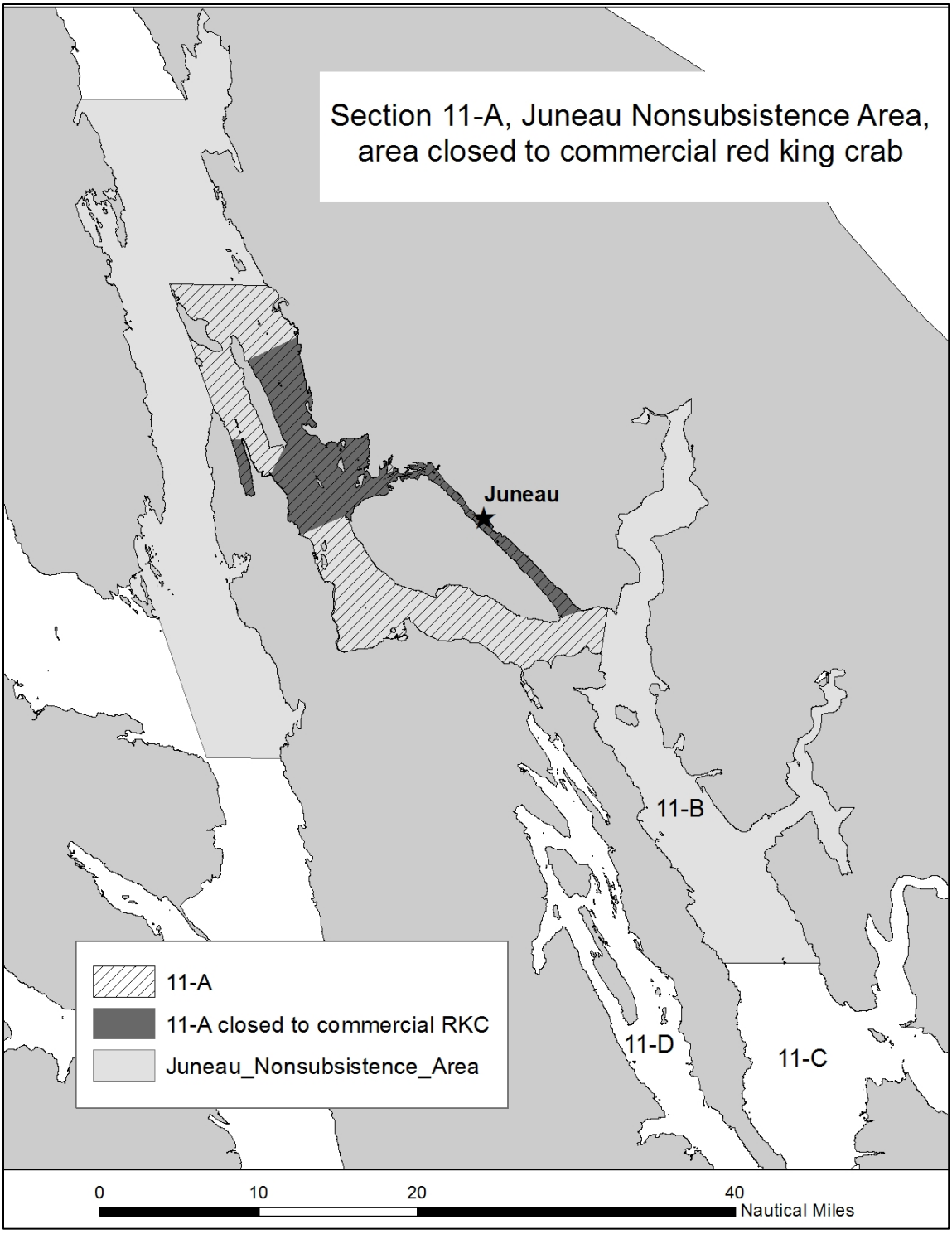


Figure 83-1.–District 11 including Section 11-A, the Juneau Nonsubsistence Area, and the area closed to commercial red king crab.

PROPOSAL 84 – 5AAC 31.136. Closed waters in Registration Area A.

PROPOSED BY: Hollis Community Council, Inc.

WHAT WOULD THE PROPOSAL DO? Commercial pot shrimp fisherman would be prohibited from fishing in the waters of Kasaan Bay north and west of a line from the northernmost tip of Daisy Island to a point on the Kasaan Peninsula (Figure 84-1).

WHAT ARE THE CURRENT REGULATIONS? Current regulations close a small portion of Twelve-mile Arm to the commercial and sport harvest of shrimp.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would close an area in Kasaan Bay to commercial pot shrimp fishing, while still providing for a personal use and sport fishery. This may result in foregone yield in the commercial fishery and increased harvest in the sport, personal use, and subsistence fisheries.

BACKGROUND: The commercial pot shrimp fishery opens by regulation on October 1 of each year. Districts or sections of districts are managed to a guideline harvest level (GHL) and once a GHL is reached, these areas are closed by emergency order. Commercial pot shrimp fishing has occurred in Kasaan Bay since 1981. Significant commercial harvest did not occur until 1983 when 9,982 pounds were harvested. Annual harvest in Kasaan Bay has averaged 26,332 pounds since the commercial fishery began. The most recent 10-year average harvest is 33,826 pounds with an average effort level of 14 permits. Kasaan Bay has averaged 43% of the total annual GHL for District 2 since the 2000/2001 season.

In 2000, the board closed a small portion of Twelvemile Arm based on concerns from the communities of Hollis and Kasaan.

The GHL for the 2000/2001 season in District 2 was 86,000 pounds. The GHL in District 2 was reduced to 65,000 pounds in the 2009/10 season due to excessive exploitation rates, declining CPUE, and a decrease in mean carapace length (CL). The GHL was reduced in the 2014/15 season to 52,000 pounds, and again in the 2015/16 season due to sharp declines in the commercial CPUE in Kasaan Bay. Due to extremely poor preseason survey results, Kasaan Bay was closed prior to the 2015/16 season and remains closed. In response to the closure of Kasaan Bay, a further GHL reduction was instituted to alleviate some of the harvest pressure on Cholmondeley Sound and Moira Sound. The current GHL for District 2 is 30,000 pounds.

The department has enacted a commercial fishery closure in Kasaan Bay, Skowl Arm, and contiguous waters for the last three seasons based on both commercial harvest and the department's pre-season shrimp pot survey in District 2. The most recent pre-season pot survey indicated a slight improvement in population health. The annual harvest of shrimp by sport and personal use shrimp fishermen in the proposed area is unknown. There is no C&T finding for shrimp in District 2.

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.

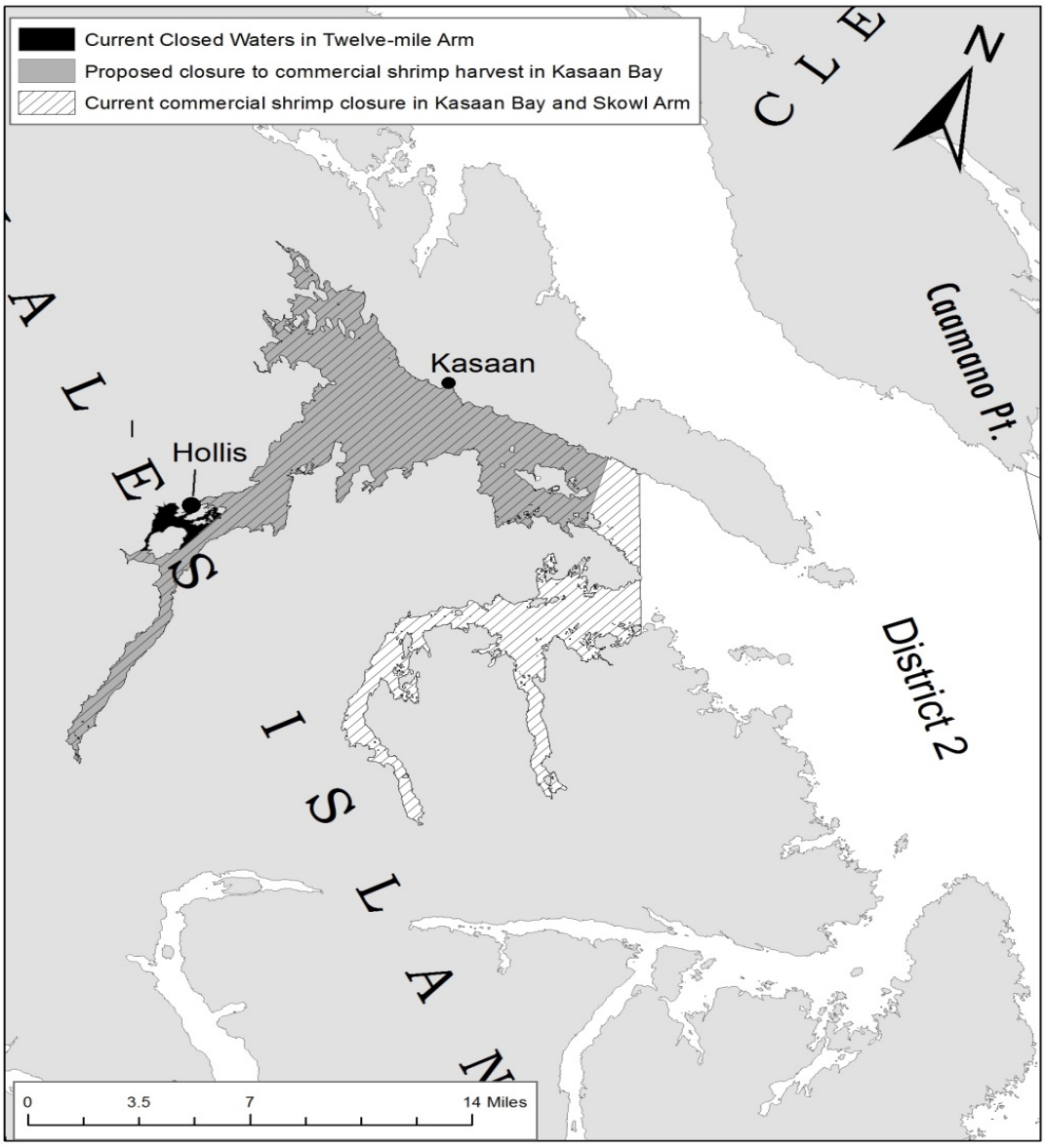


Figure 84-1.–Map of Kasaan Bay (102-60) shrimp closures including the current closed waters in regulation, the current closed waters the department has utilized under EO authority since the 2015–16 season, and the proposed closed waters.

Commercial Beam Trawl Shrimp (1 Proposal)

PROPOSAL 85 – 5AAC 31.111. Shrimp beam trawl fishing seasons and logbook requirements for Registration Area A.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would require logbooks fishing activity in all fishing areas of the commercial beam trawl shrimp fishery in Registration Area A.

WHAT ARE THE CURRENT REGULATIONS? Current regulations require logbooks to be completed only when fishing areas outside of the main historical footprint of the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide important fishery performance data to the department, which would assist in setting appropriate harvest levels for the fishery.

BACKGROUND: Harvest in the southeast shrimp beam trawl fishery most recently peaked in the mid-1990s at approximately 3,000,000 lb. Due to a poor market, catch subsequently dropped to less than 100,000 lb by 2007. In recent seasons catches have been expanding and additional information for management is needed.

Current regulations require logbooks only in areas with a history of low effort and the majority of trawl shrimp are landed from districts with no logbook requirement. In areas where most of the harvest occurs, the department receives fish ticket information with the number of pounds harvested by species. Without the corresponding effort data there is no way to calculate CPUE for the fishery. Without this basic stock health metric the department must manage the fishery based on harvest levels that allowed for fishery expansion over 30 years ago.

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.

Sea Cucumbers (3 Proposals)

PROPOSAL 86 – 5 AAC 38.140. Southeastern Sea Cucumber Management Plan.

PROPOSED BY: Southeast Alaska Regional Dive Fisheries Association (SARDFA).

WHAT WOULD THE PROPOSAL DO? This would reduce the frequency of required pre-fishery stock assessment surveys from once every three years to once every six years in sea cucumber management areas where populations are judged to be stable.

WHAT ARE THE CURRENT REGULATIONS? A commercial sea cucumber fishery may not be opened unless the department has conducted a biomass assessment in that area within the preceding two years.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Areas with sea cucumber populations deemed to have a stable historical pattern would be identified to forego a maximum of one survey rotation. This would allow one fishery to be conducted in the fall following a summer survey, and then also allow a subsequent fishery three years later based on the same survey from three years prior. The department would obtain population biomass estimates to monitor trends and calculate guideline harvest levels once every six years instead of every three years. All else being equal, the overall cost of surveys would be reduced, and the amount of data to manage the fishery would be reduced, which has potential to be harmful to the resource.

BACKGROUND: The *Southeastern Alaska Sea Cucumber Management Plan*, established in 1990, outlines a rotational fishery where individual commercial fishery areas are opened for one season and then remain closed for the following two seasons, after which they may be opened again. To minimize the effort and cost of management, the region's approximately 52 fishery areas are divided into three rotating groupings, each of which are surveyed and then opened simultaneously during its planned rotational year once every three years. The department conducts surveys to estimate biomass in each individual fishery management area and applies an annual harvest rate of 6.4% by regulation. To account for the following two years of fishery closure, the guideline harvest level (GHL) is calculated as three times the annual rate so that a total of 19.2% of the estimated biomass is available for harvest during one fishery. The use of a three-year rotation system allows the same amount of GHL to be available as if each area was surveyed and harvested every year, but at about one-third of management effort and lower cost.

Sea cucumber populations are difficult to accurately assess due to large gaps in their life-history data and understanding of their biology and ecology. No practical method exists to age sea cucumbers, which is fundamental to many population models. Further, rates of recruitment, growth, and mortality are all unknown. Reasons for population fluctuations are poorly understood. Based on department surveys, population biomass has been found to increase or decrease up to 40% over a three-year period. By skipping a survey and carrying-over a GHL, harvest rates would be unknown for the second fishery period but could substantially exceed current maximums. In addition to population swings, commercial catch could exceed GHLs, and because there is no overage/underage policy in place, this could potentially compound overharvest.

Most commercially harvested species in Southeast Alaska that are assessed are done so on an annual basis, including salmon, herring, sablefish, red king crab, and Tanner crab. Very few

examples exist where surveys are conducted with the lower frequency that is proposed. Red sea urchin areas in Southeast Alaska are surveyed at a minimum once every three to six years; however, the six-year survey frequency is implemented only if very little or no fishing effort has occurred since the last survey. Geoducks in Southeast Alaska must be surveyed at a minimum of once every eleven years; however, in practice, geoducks are surveyed more frequently whenever possible. Less frequent surveys are permitted for geoducks because they are very long-lived, completely sessile, live deep in the substrate, and are not as prone to large population swings in the absence of sea otters.

The cost of fishery management for dive fisheries is about average compared to management of other species in the region when compared to the value of the fisheries. Survey costs average about 3% of the combined exvessel value of the dive fisheries. The department has worked hard to reduce survey costs by increasing survey efficiency and has not asked industry to increase the rate at which it contributes to management for decades, which has directly spared the industry higher costs over the years. However, due to the state's current financial challenges, there is a hovering threat of reduced state budgets which creates the possibility of closing fishery areas if survey funds are reduced and not replaced.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The sea cucumber fishery has been successful for many years in part because of the regular surveys of the population. The risk of potential overharvest due to lack of information is not worth the relatively small savings that might be achieved from reducing the frequency of surveys in a small number of areas deemed to be stable.

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.

PROPOSAL 87 – 5 AAC 38.140. Southeastern Alaska Sea Cucumber Management Plan.

PROPOSED BY: Southeast Alaska Regional Dive Fisheries Association (SARDFA).

WHAT WOULD THE PROPOSAL DO? This would repeal the closed water designations for most areas that are currently closed to commercial fishing, thereby expanding the commercial fishery by allowing potential commercial fisheries to be conducted in these areas. Although the intent of the proposal may be to open all areas closed by state regulation with the exception of the five areas that the department currently monitors as control areas (for comparisons to areas where commercial harvest is open), the proposal would open closed waters including some control areas.

WHAT ARE THE CURRENT REGULATIONS? The *Southeastern Alaska Sea Cucumber Management Plan* identifies a total of 16 areas as closed to commercial sea cucumber fishing. These areas are spread through Southeast Alaska, with some that are adjacent to or nearby communities and some that are not. Figure 87-1 shows all closed areas in the region.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would expand the commercial fishery into areas that have been closed to commercial harvest since 1990. Commercial harvest opportunities would likely increase. For those areas near communities, there is potential for conflicts between commercial and subsistence or personal use fisheries. Opening closed waters may also potentially have a negative impact on populations of other areas by removing refugia that protect source stock that provide seed for other areas. If control areas are opened, the department would lose important study areas that help gauge the impacts of fisheries and environment to sea cucumber populations.

BACKGROUND: The *Southeastern Alaska Sea Cucumber Management Plan*, established in 1990, included closures to commercial harvest for 16 areas distributed throughout the region, which are still in effect today. These closures were originally included to provide refugia to protect against overharvest and to protect subsistence opportunities. Some of the original closed areas have been reduced in size by converting portions to commercial fishery areas after the Board of Fisheries accepted proposals from the commercial fleet in 2003 and 2006. These closed waters, which are all around Prince of Wales Island, include Kasaan Bay, Nutkwa and Hetta Inlets, and water around the communities of Craig and Klawock (Figure 87-2).

At least four of the closed areas are located in proximity to communities where subsistence uses occur. These include the communities of Hydaburg, Kasaan, Angoon, and Hoonah. It is expected that the closed waters located around these communities represent the most productive sea cucumber areas of all the closed waters that are requested to be opened by the proposal.

Several of the closed areas are located in locales where sea cucumber productivity and population size is low, as determined by surveys or fisheries in adjacent waters, and where there would be very little chance of commercial harvest opportunity. Reasons for low population levels include either poor habitat or recolonization of sea otters, which are major predators of sea cucumbers. These areas include many of the closed waters found in the northern half of Southeast Alaska.

Five of the closed areas are monitored by the department as control areas to compare biological trends of populations to areas that are commercially exploited (Figure 87-1). These control areas are important for better understanding the impacts of harvest. These five areas are also open to subsistence and personal use fisheries.

Many studies of other marine populations in waters closed to fishery exploitation have shown that closed waters benefit fisheries by enhancing populations that are open to fishing. This is because marine populations living in protected waters may grow larger in numbers and individual size, and produce offspring that may settle as larvae in adjacent commercial areas or they may emigrate as adults. The impact would be unknown, but opening closed waters could potentially reduce population sizes and consequently guideline harvest levels of existing commercial areas by some degree.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal because it includes control areas in the list of areas to open, and because it would remove the benefits of sea cucumber refuge areas.

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.

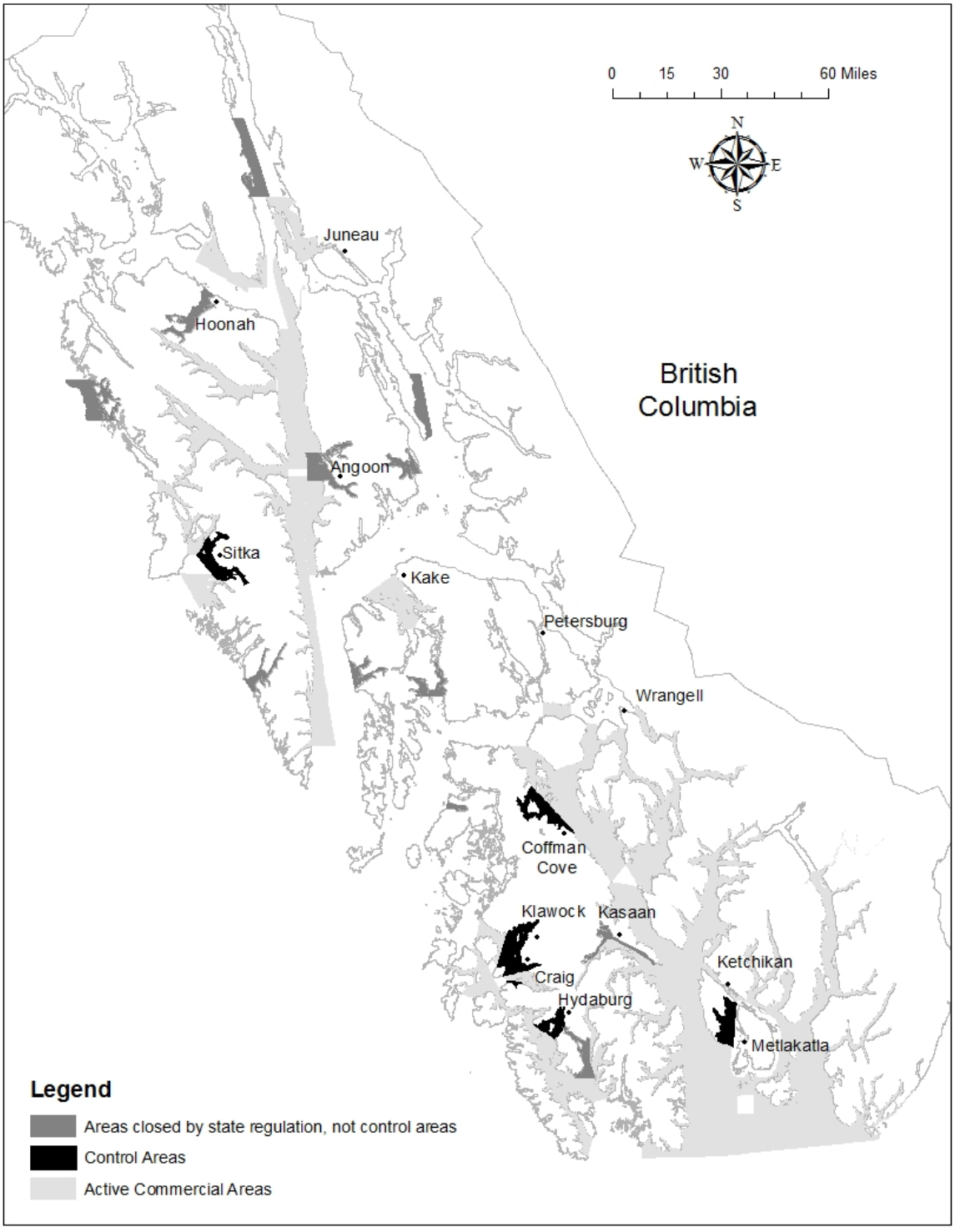


Figure 87-1.–Waters in Southeast Alaska closed to commercial sea cucumber fishing by state regulation, including control areas, and waters actively fished commercially. Waters not shaded are either not productive fishing areas or are closed by regulations other than state.

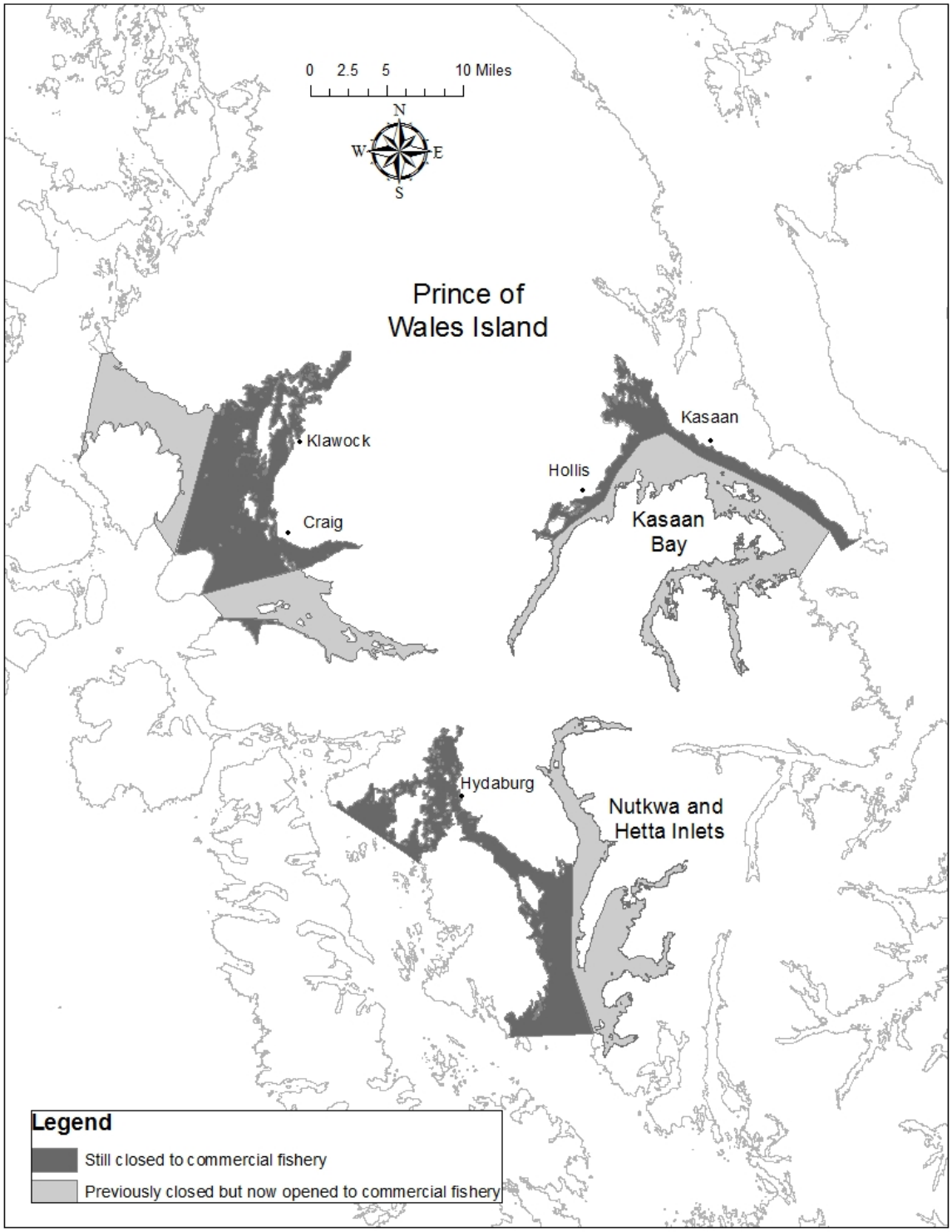


Figure 87-2.–Waters previously closed to commercial sea cucumber fishing that were subsequently opened to commercial fishing.

PROPOSAL 88 – 5 AAC 38.140. Southeastern Alaska Sea Cucumber Management Plan.

PROPOSED BY: Southeast Alaska Regional Dive Fisheries Association (SARDFA).

WHAT WOULD THE PROPOSAL DO? This would require that a guideline harvest level (GHL) be calculated as 19.2% of the mid-point population estimate.

WHAT ARE THE CURRENT REGULATIONS? The GHL is calculated as 19.2% of the lower bound of the one-sided 90 percent confidence interval. The 19.2% harvest rate is derived from the product of 0.4 (CF, scaling factor) x 0.5 (GF, correction factor) x 0.32 (M, estimated natural mortality rate) x 3 (number of years).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would eliminate one of the main elements that provide a conservative cushion to offset uncertainty around the department's population estimate, which is directly used to calculate guideline harvest levels. Guideline harvest levels would immediately rise for all fishery areas and the safeguard to protect against erroneous estimates would be removed.

BACKGROUND: The *Southeastern Alaska Sea Cucumber Management Plan* describes in detail how guideline harvest levels shall be calculated. The calculation is based on a simple surplus production model, which assumes that sustainable harvest rates may be set equal to some fraction of the natural mortality rate. The natural mortality rate is not known for sea cucumbers and it is roughly estimated using data from other species. The current allowable annual harvest rate is 6.4%; however, due to the three-year rotational fishery, annual harvest rates are tripled to 19.2% and fisheries are opened once every three years. Guideline harvest levels are calculated as the product of the harvest rate and the lower bound of the confidence interval surrounding the department's estimate of biomass.

The use of the lower bound of a biomass estimate is a way to reduce risk of overharvest due to uncertainty in the estimate. The department's estimated biomass for each fishery area is calculated using sea cucumber density data collected during dive surveys of transects systematically spaced out along the shoreline. Typically about 20 transects may be positioned along a shoreline of 100 miles or more. Because sea cucumber distribution is often patchy along the shoreline, transects might land on a variety of density zones, ranging from very high to very low. However, since no data is collected for large areas between transects, an assumption is made that the transect data is representative of these areas. A "midpoint" (i.e. mean estimate) can easily be calculated as the product of density and shoreline length, but this does not reflect the uncertainty of the estimate that arises from a highly patchy distribution of sea cucumbers, or from transects landing disproportionately in areas that do not necessarily well represent the true density, simply due to chance. To express that uncertainty, a one-sided confidence interval is calculated with a lower bound (lower end of range) such that we would be 90% sure that true mean value of the population is greater than what is used to calculate the GHL.

The effect of using this method is that if a survey produces an estimate with low certainty (e.g. highly patchy or unpredictable density), then the confidence interval would be wide, reducing the lower bound value and thereby lowering the GHL; however, if there is high certainty (e.g. very evenly distributed or predictable density), then the confidence interval would be narrow, raising the lower bound closer to the midpoint, and thereby raising the GHL. This approach is designed to protect against setting harvest levels too high unknowingly due to uncertainty of the true population size.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Uncertainty in biomass estimates will always be present and sometimes high and the current approach is an effective way to protect against setting unsustainable harvest levels. The department does not support more liberal management in areas where sea otters have recolonized as sea cucumber populations in those areas are considered to be at greater risk of depletion and additional harvest pressure could reduce chances of or prolong population recovery.

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.

Geoducks (3 Proposals)

PROPOSAL 89 – 5 AAC 38.142. Southeastern Alaska Geoduck Fishery Management Plan.

PROPOSED BY: Southeast Alaska Regional Dive Fisheries Association (SARDFA).

WHAT WOULD THE PROPOSAL DO? This would require that guideline harvest levels (GHLs) be calculated as 2% of the midpoint of the population estimate instead of the current practice of 2% of the lower bound of the one-sided 90 percent confidence interval of the population estimate.

WHAT ARE THE CURRENT REGULATIONS? The GHL for each area will be calculated as 2% of the most recent estimated biomass per year. The commissioner may modify these procedures by regulation based on new information regarding geoduck productivity.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would eliminate one of the main elements that provide a conservative cushion to offset uncertainty around the department's population estimate, which is directly used to calculate guideline harvest levels. Guideline harvest levels would immediately rise for all fishery areas and the safeguard to protect against erroneous estimates would be removed.

BACKGROUND: The *Southeastern Alaska Geoduck Fishery Management Plan* describes how guideline harvest levels shall be calculated. The calculation requires two values: 1) the harvest rate of 2%, which is a value that is assumed to be sustainable in Alaska because when adopted in 1985, it was similar to harvest rates used in British Columbia and the State of Washington and 2) the most recent population estimated biomass. The harvest rate is not based on data from Alaska geoducks because no studies of this have been completed in Alaska. Instead the harvest rate was based on decrementing the value of 2.8%, which is a value that was estimated as a sustainable rate for Washington geoducks. This value is decremented to 2.0% because geoduck populations in Alaska are at the extreme northern end of their range and therefore thought to be less productive than southern stocks.

The department's estimated biomass for each fishery area is calculated using geoduck density data collected during dive surveys of transects systematically laid out along the length of known geoduck beds. Because geoduck distribution is often patchy, transects might land on a variety of density zones, ranging from very high to very low. A "midpoint" or mean estimate can easily be calculated as the product of density and bed area, but this does not reflect the uncertainty of the estimate that arises from a highly patchy distribution of geoducks or from transects landing disproportionately in areas that do not necessarily well represent the true density, simply due to chance. To express that uncertainty, a one-sided confidence interval is calculated with a lower bound (lower end of range) such that we would be 90% sure that true mean value of the population is greater than what is used to calculate the GHL.

The effect of using this method is that if a survey produces an estimate with low certainty (e.g. highly patchy or unpredictable density), then the confidence interval would be wide, reducing the lower bound value and thereby lowering the GHL; however, if there is high certainty (e.g. very evenly distributed or predictable density), then the confidence interval would be narrow, raising the lower bound closer to the midpoint and thereby raising the GHL. This approach is designed to protect from setting harvest levels too high due to uncertainty of the true population size.

Although the use of the lower bound is not described in regulation for geoducks, the department has used this approach for many years and it is the same approach that is used to calculate GHLs for sea cucumbers and red urchins, both of which are described in regulation. The department is currently working on a study to better estimate appropriate harvest rates based on Alaska data. If a more appropriate harvest rate can be calculated, the department will have less concern about having conservative measures in place.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Uncertainty in biomass estimates will always be present and is sometimes high. The current approach is an effective way to protect against setting unsustainable harvest levels. Geoducks are particularly long-lived animals, reaching > 160 years, with low and irregular recruitment rates, which make them vulnerable to overfishing; therefore, it is prudent to be conservative when using uncertain values to estimate sustainable harvest levels.

If there is confusion over how the department calculates GHLs, then the current practice could be included in regulation, as is currently done for both sea cucumbers and red urchins.

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.

PROPOSAL 90 – 5 AAC 38.142. Southeastern Alaska Geoduck Fishery Management Plan.

PROPOSED BY: Southeast Alaska Regional Dive Fisheries Association (SARDFA).

WHAT WOULD THE PROPOSAL DO? This would make an exception to the current requirement of surveying all areas prior to allowing commercial fisheries, by allowing the department the option of opening new areas that have not been surveyed to conduct exploratory fisheries to evaluate the commercial potential of such areas.

WHAT ARE THE CURRENT REGULATIONS? The department establishes a guideline harvest level (GHL) for each area based on a biomass stock assessment survey conducted within 12 years of a commercial fishery opening that is calculated as 2% of the most recent biomass estimate.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Fisheries might be conducted on stocks with no prior information about population size or appropriate GHL, which could potentially result in exceeding the maximum 2% annual harvest rate currently in regulation. The proposal states that after one exploratory fishery, no further fishing would be allowed unless the area was deemed commercially viable and a stock assessment was conducted.

BACKGROUND: Past practice for evaluating the commercial potential of new areas has been to conduct reconnaissance surveys to judge whether the areas contain geoduck beds with space and densities sufficient for supporting commercial harvest. Surveys have typically been conducted by experienced commercial geoduck fishermen, contracted by SARDFA or the department. If reconnaissance surveys indicated that there was commercial potential, then the department would follow-up with a complete stock assessment survey to estimate biomass and determine a guideline harvest level based on an annual harvest rate of 2%. The proposal's aim is to forego reconnaissance surveys and instead conduct commercial fisheries from which data would be gleaned to determine locations of beds and presumably a collective decision on whether the area should be surveyed by the department to potentially allow additional commercial fisheries. A benefit of this approach may be avoiding the direct cost of contracting divers to conduct reconnaissance surveys. The costs of obtaining the information would instead be paid indirectly though permit holders landing geoducks and being paid for their harvest and the information that would be obtained through fish tickets and logbooks. Conversely, there are many downsides to the approach: 1) an estimate of pristine density would not be possible after a fishery occurred, 2) harvesters might only target areas of high density and not fully identify the extent of geoducks beds, requiring recon surveys anyway, and 3) logbook compliance has been poor in general, and this approach would depend on logbooks.

To conduct such fisheries, and gain meaningful information, the department would have to collect detailed information from logbooks, which are already required by regulation. Additionally, the department would need to set limited, albeit arbitrary, GHLs to try to limit the risk of excessive harvest. Another consideration is that a means to achieve consensus on whether to pursue additional fisheries would need to be developed. Also, if a decision was made to pursue additional fisheries in an area, then it should be clear that harvest from the exploratory fishery would be included in the estimation of initial biomass and counted toward the 2% annual maximum harvest rate.

Geoducks are generally considered vulnerable to overfishing due to their longevity, low recruitment rate, sessile life history, and substantial gaps in knowledge of their biology. The

most productive geoduck areas have already been identified and remaining areas are thought to contain low concentrations of geoducks. Foregoing stock assessment surveys prior to fisheries would further increase risk to these stocks.

DEPARTMENT COMMENTS: The department **OPPOSES** 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.

PROPOSAL 91 – 5 AAC 38.142. Southeastern Alaska Geoduck Fishery Management Plan.

PROPOSED BY: Cornelis Bakker.

WHAT WOULD THE PROPOSAL DO? This would establish a weekly harvest limit of 1,000 pounds per permit holder in the Southeast Alaska geoduck fishery. It also seeks to direct funds from confiscated geoduck overages to the department.

WHAT ARE THE CURRENT REGULATIONS? Current regulations allow the department to set a harvest limit for conservation, law enforcement, and waste reduction, or to assist in the development of the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would slow the pace of the geoduck fishery.

BACKGROUND: The department has worked cooperatively on geoduck management with the Southeast Alaska Regional Dive Fishery Association (SARDFA), which is made up of all permit holders in Southeast Alaska dive fisheries. The department, with recommendations from SARDFA, developed the *Southeastern Alaska Geoduck Fishery Management Plan* and the board adopted it into regulation in 2000. The department currently uses harvest limits to remain within guideline harvest levels (GHL).

Harvest limits were initially implemented by the department for what SARDFA described as market conditions, based on a unanimous vote by the SARDFA Geoduck Committee. However, it soon became apparent that the industry did not fully support the concept of using harvest limits in response to what was broadly defined by SARDFA as market conditions. In 2013, the department informed SARDFA that without clear direction from the board, harvest limits would only be used for conservation purposes. Proposal 112 submitted during the 2015 board cycle was similar to this proposal and was not adopted.

Under the current paralytic shellfish poison (PSP) testing program, geoduck clams may only be harvested for the more valuable live market from the release of PSP test results on Monday until Thursday evening each week. Geoduck clams harvested outside of this period must be sold on the processed market.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Harvest limits are allocative in nature because fishermen who prefer a competitive environment may sacrifice harvest. If the board determines that harvest limits are needed, the department recommends additional regulation with clear direction on how harvest limits would be implemented.

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.

Scallops (1 Proposal)

PROPOSAL 92 – 5 AAC 38.168. Guideline harvest range for the taking of scallops in Registration Area D.

PROPOSED BY: Alaska Scallop Association.

WHAT WOULD THE PROPOSAL DO? This would combine the District 16 and Yakutat area GHRs into a single GHR for Scallop Registration Area D.

WHAT ARE THE CURRENT REGULATIONS? The *Alaska Scallop Fishery Management Plan* (5 AAC 38.076) defines Registration Area D as all waters of Registration Area D and all waters of District 16 as described in 5 AAC 31.105(p).

The GHR for District 16 is 0–35,000 lb of shucked meats and the GHR in the remainder of Registration Area D is 0–250,000 lb of shucked meats.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This may shift scallop harvest out of District 16 into areas of higher scallop abundance in Registration Area D. This would allow the scallop population near Yakutat to be managed as a single unit, rather than with boundary line bisecting the stocks as is currently the case. The annual GHL would be set to account for harvest in the combined area.

BACKGROUND: In 1993, a GHR of 250,000 lb of shucked meats was established for Scallop Registration Area D. In 1994, a separate GHR of 0–35,000 lb of shucked meats was implemented for the District 16 portion of Scallop Registration Area D. There have been no modifications to these GHRs since that time.

Under current regulations the most southern scallop bed in Registration Area D is bisected by the District 16 regulation line (Figure 92-1). The department must manage a portion of the southern bed under the District 16 GHL and the remainder of the same bed with the other scallop beds in Registration Area D. There is no evidence that scallops in District 16 are a separate population requiring distinct management. Catch rates in District 16 have been highly variable over the past 15 years because both the population and product quality varies from year to year (Figure 92-2).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Combining the District 16 and Area D GHRs would allow the fleet to harvest from other portions of Registration Area D when the abundance is low in District 16, relieving fishing pressure on a stressed stock. The scallop resource in this area would be managed as one unit and annual GHLs would continue to be set to reflect expected harvest potential.

Onboard observers are required on all fishing trips and the department has the authority to close portions of a registration area to prevent localized depletion if conservation concerns exist. Harvest limits are a Category 1 management measure delegated to the state for implementation under the *Fishery Management Plan for the Scallop Fishery off Alaska* (FMP; FMP Section 3.2.1).

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.

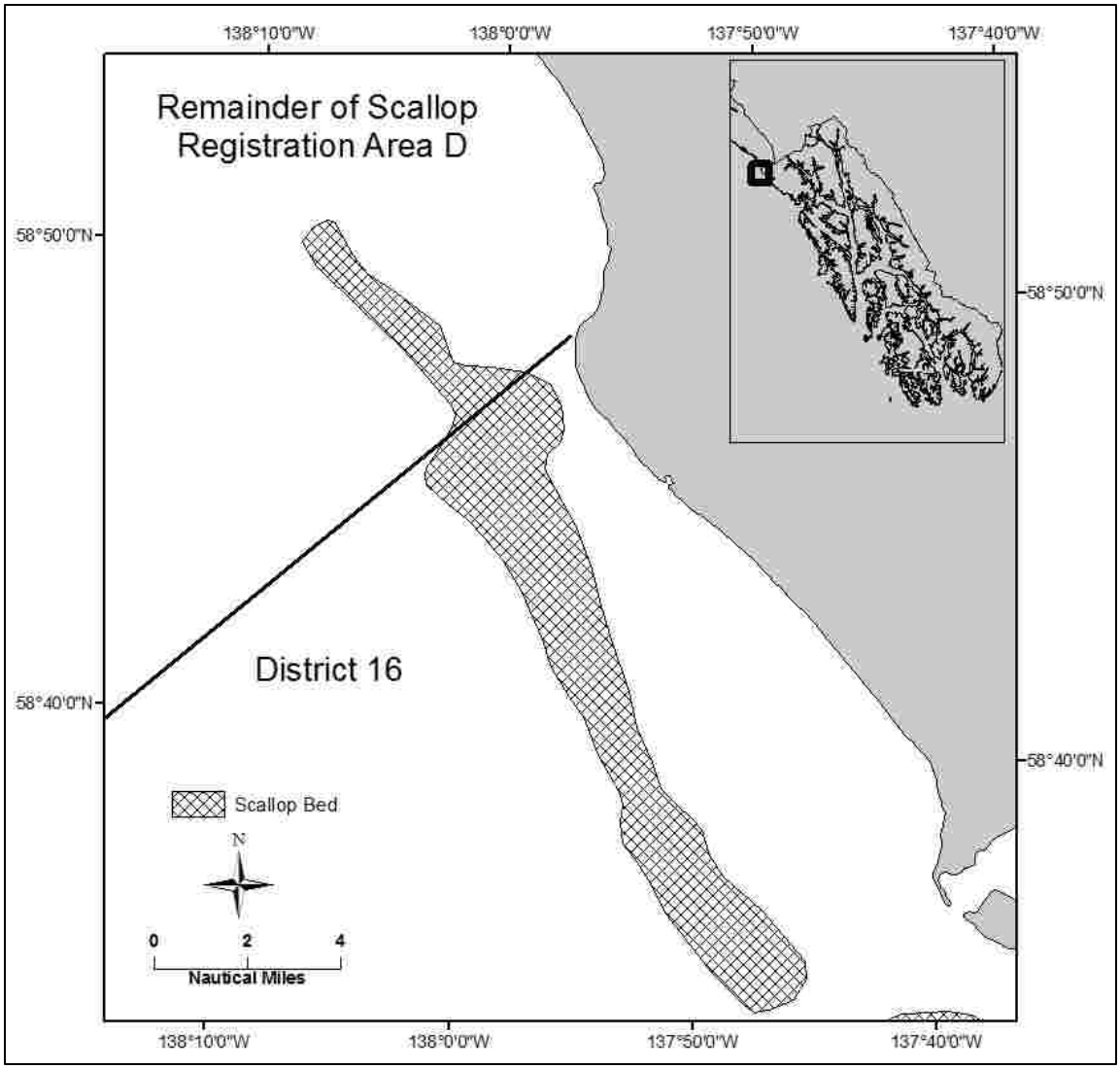


Figure 92-1.–Map showing southern scallop bed in Registration Area D that is bisected by the District 16 regulatory line.

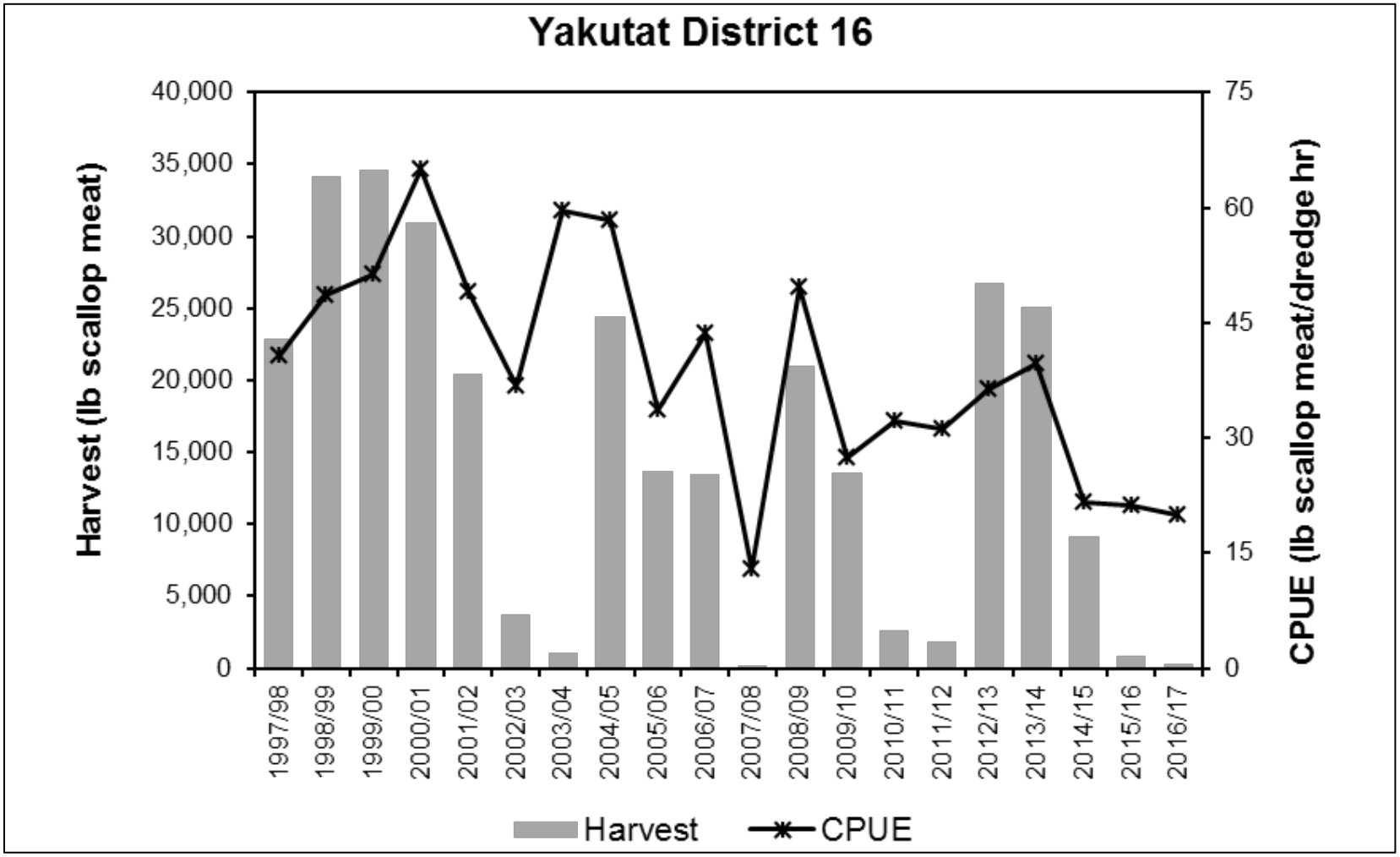


Figure 92-2.–Yakutat District 16 Scallop Harvest and CPUE, 1997/98–2016/17 seasons.

Squid (1 Proposal)

PROPOSAL 93 - 5 AAC 38.XXX. Directed purse seine squid fishery in Registration Area A (New Regulation).

PROPOSED BY: Justin Peeler.

WHAT WOULD THE PROPOSAL DO? This would create a directed fishery for market squid (*Doryteuthis opalescens) in Southeast Alaska* state waters using purse seine gear.

WHAT ARE THE CURRENT REGULATIONS? Purse seines are an allowable gear type to harvest squid and there is no closed season. Squid may be taken only under the conditions of a permit issued by the commissioner. No squid-specific regulations exist for Southeast Alaska.

In federal waters, squid species are managed as a non-target species under the *Gulf of Alaska Groundfish Fishery Management Plan* and are caught incidentally in the prosecution of directed fishing for other groundfish species. In June 2017 the North Pacific Fishery Management Council took final action to designate squid as a non-target 'Ecosystem Component Species'. Additional federal regulations will be implemented that prohibit directed fishing for squid in federal waters and establish a maximum retainable amount at 20% when directed fishing for other fisheries to discourage retention.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would substantially increase harvest of squid and could result in unsustainable harvests.

BACKGROUND: Market squid grow to a length of approximately 7.5 inches and can be found in the eastern Pacific from Mexico's Baja California peninsula to Alaska. They are a short-lived (6–9 months), highly productive species, and have formed the basis for important commercial seine fisheries in California since the 1850s. Market squid spawn at night and deposit eggs on soft bottom at depths of 10–40 fathoms.

The Alaska Fisheries Development Foundation conducted a two week squid fishery development project in Southeast Alaska in 1983. They found spawning aggregations of *Doryteuthis opalescens but could not determine if the abundance was adequate to allow for commercial harvest.*

Three Commissioner's permits have been issued allowing fishing of market squid using purse seine gear in Southeast Alaska. The first was issued in 2014, but no fishing occurred. The remaining permits were issued in October 2017; fishing under these permits is expected sometime before the end of 2017.

Another species of squid, *Berryteuthis magister* (armhook squid), have been harvested using jig gear in Southeast Alaska under the conditions of a Commissioner's permit. From 2012 to 2017, a total of 31 Commissioner's permits have been issued for *Berryteuthis magister*, with combined total landings of 2,300 lb.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. The department does not have a stock assessment program for market squid in Southeast Alaska and does not support establishing a market squid fishery prior to development of a biologically-sound management plan. Commissioner's permits for market squid in Southeast Alaska are available under existing regulations.

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.

FINFISH PROPOSALS (111 PROPOSALS)

COMMITTEE OF THE WHOLE GROUP 3: King Salmon: (9 proposals: Chair - TBD)

Chilkat River King Salmon (2 Proposals)

PROPOSAL 130 – 5 AAC 01.725. Waters closed to subsistence fishing.

PROPOSED BY: William Prisciandaro.

WHAT WOULD THE PROPOSAL DO? This would close subsistence fishing for salmon in Chilkat Inlet through July 15, and in the Chilkat River from June 15 to August 1

WHAT ARE THE CURRENT REGULATIONS? Salmon may only be taken under the authority of a subsistence use fishing permit designating the species and numbers of fish to be harvested, time and area for taking, the type and amount of fishing gear, and other conditions necessary for management or conservation purposes. Under *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716), in District 15, salmon in all the waters of the Chilkat River and Chilkat Inlet north of the latitude of Glacier Point (Figure 130-1) were found to be customarily and traditionally taken or used for subsistence. The subsistence net fishery season in Haines Area salt water, including Chilkat Inlet, starts on the third Saturday of June and ends on September 30, with weekly openings concurrent with section 15-A commercial openings. The subsistence net fishery season in the Chilkat River opens June 1 and closes September 30. The *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) specifies two subsistence net fishing area closures: in the northern portion of Chilkat Inlet from the season start through July 15, and in the Chilkat River from the mouth to Haines Highway mile 19 from the third week of June through the fourth week of July. The subsistence net fishery in the portion of the Chilkat River from Haines Highway mile 19 to the Well's Bridge remains open from June 1 to September 30.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would eliminate opportunity to harvest salmon for subsistence uses in the Chilkat River and Chilkat Inlet during a large portion of the summer. This proposal would close the entire Chilkat River to subsistence fishing from June 15 to August 1. The Chilkat River would still be open for subsistence fishing between June 1 and June 14, and from August 1 to at least September 30. The Chilkat Inlet subsistence net fishery season would be delayed from the third Saturday of June to July 16, a period of approximately 4 weeks. These closures would eliminate the subsistence harvest of all salmon during the time period when king salmon are most likely to be present in Chilkat Inlet and Chilkat River.

BACKGROUND: Subsistence fisheries in Southeast Alaska are managed under a subsistence/personal use permit program that includes an annual harvest assessment component. The department retains discretionary permit authority to modify open dates in each management area. Through the use of emergency orders, the department can also change the time and area opened for subsistence during the salmon season, responding to conservation concerns as needed.

Despite restrictive time and area closures that have been implemented in upper Lynn Canal subsistence, sport, and commercial fisheries since 2008, the Chilkat River king salmon runs have

continued to decline in abundance. Five of the most recent six escapements of Chilkat River king salmon were below the goal range, with the 2016 and 2017 escapements being the lowest estimated since the inriver mark-recapture study was started in 1991. The great majority of the mature king salmon move through Chilkat Inlet by July 15 and through the portion of the Chilkat River open to subsistence fishing by August 1. A department king salmon radio tagging study conducted in 2005 indicated that close to 90% of the king salmon transited upstream of the area of the Chilkat River open to subsistence fishing by August 1.

In response to Chilkat River king salmon conservation concerns, the department has implemented time and area restrictions on the subsistence fisheries in Chilkat Inlet and in the Chilkat River (Figure 130-1). This has been a public process involving Haines community discussions and meetings in Klukwan, an Alaska Native village on the banks of the Chilkat River between Haines Highway mile 19 and the Well's Bridge. In recent years, the department has closed part or all of Chilkat Inlet to subsistence net fishing during the time king salmon are present. The department has also closed most of the Chilkat River to subsistence fishing between June 15 and July 31. In 2017, the department implemented a three-day-a-week closure of the section of the Chilkat River between Haines Highway mile 19 and the Well's Bridge between June 15 and July 31. This area is specified as open to subsistence fishing all season in the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan*. Also in 2017, the department kept all of Chilkat Inlet closed to subsistence fishing through July 14, and the northern portion closed through July 22 by emergency order.

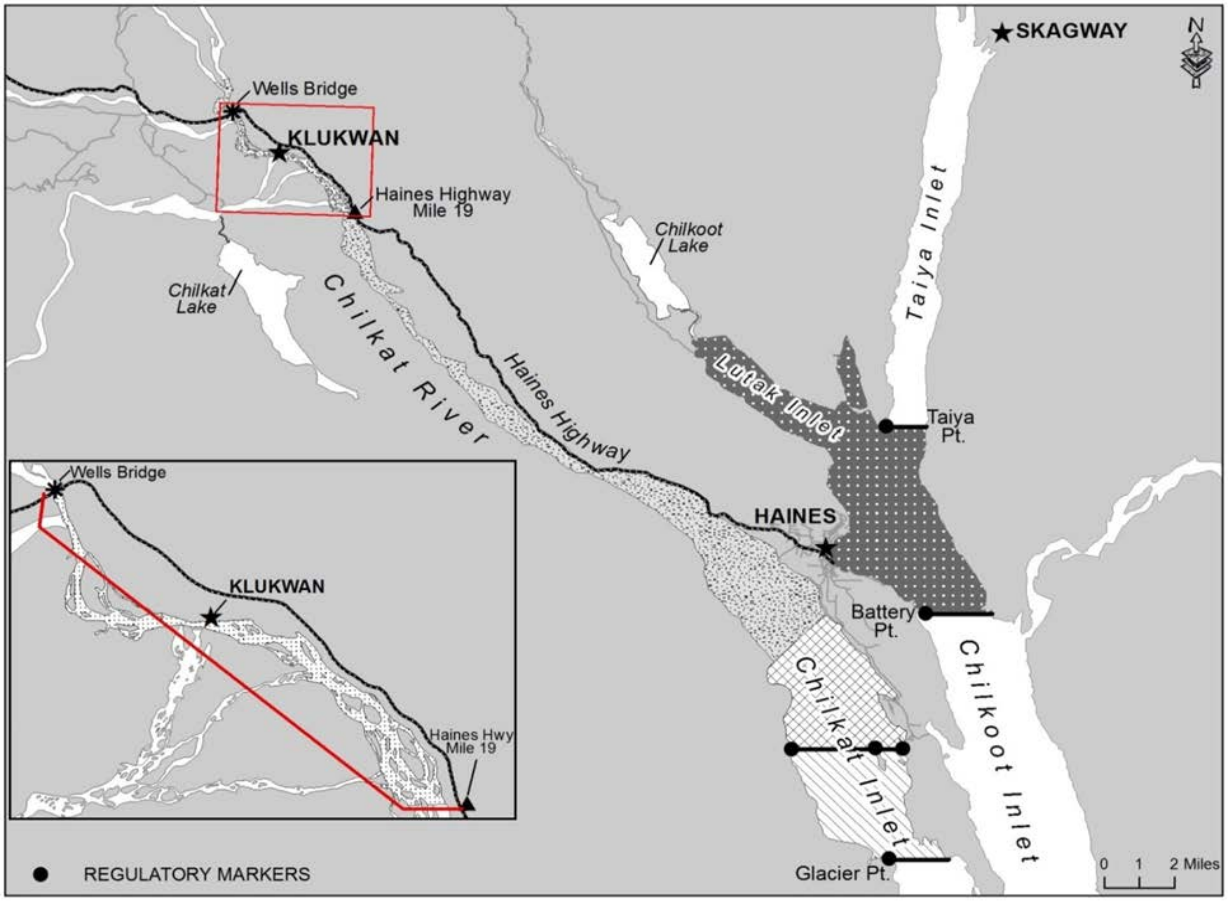
DEPARTMENT COMMENTS: The department **OPPOSES** this proposal as a conservation measure. The department is **NEUTRAL** on the allocative aspects of this proposal.

The department currently has the ability to respond to conservation concerns with time and area restrictions on the subsistence, sport, and commercial fisheries. This proposal removes the flexibility the department currently possesses and would limit the department's ability to respond to variations in salmon run strength.

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.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is this stock customarily and traditionally taken or used for subsistence? The board has determined under 5 AAC 01.716(a)(13)(A)(i) that in District 15 salmon in all waters of the Chilkat River and Chilkat Inlet north of the latitude of Glacier Point are customarily and traditionally taken or used for subsistence.
3. Can a portion of the stock be harvested consistent with sustained yield? Yes.
4. What amount is reasonably necessary for subsistence uses? The board has established a range of 7,174–10,414 salmon reasonably necessary for subsistence uses (5 AAC 01.716(c)(6)).
5. Do the regulations provide a reasonable opportunity for subsistence uses? This is a board determination.
6. Is it necessary to reduce or eliminate other uses to provide a reasonable opportunity for subsistence use? This is a board determination.



CHILKAT RIVER OPEN TO SUBSISTENCE FISHING JUNE 1- JUNE 14 AND AUGUST 1–SEPTEMBER 30.

CHILKAT RIVER OPEN TO SUBSISTENCE FISHING **ONLY FROM MILE 19 TO WELLS BRIDGE** AND **ONLY WEDNESDAY THROUGH SATURDAY** JUNE 15–JULY 31. (Inset map)

LUTAK INLET AND CHILKOOT INLET NORTH OF BATTERY POINT OPEN TO SUBSISTENCE FISHING WEEKLY STARTING JUNE 17.

CHILKAT INLET SOUTH OF THE MARKER ON NORTH KOCHU ISLAND AND NORTH OF GLACIER POINT OPEN TO SUBSISTENCE FISHING STARTING JULY 15.

ALL OF CHILKAT INLET NORTH OF GLACIER POINT OPEN TO SUBSISTENCE FISHING WEEKLY STARTING JULY 22.

Figure 130-1.–Map and description of the Haines salmon subsistence areas as opened in 2017.

PROPOSAL 131 – 5 AAC 01.720. Lawful gear and gear specifications.

PROPOSED BY: Upper Lynn Canal Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would implement a maximum allowable gillnet mesh size of 5 3/8" prior to August 1 in the District 15 subsistence fishery in the waters of Chilkat Inlet and Chilkat River (Figure 130-1).

WHAT ARE THE CURRENT REGULATIONS? Salmon may only be taken under the authority of a subsistence use fishing permit designating the species and numbers of fish to be harvested, time and area for taking, the type and amount of fishing gear, and other conditions necessary for management or conservation purposes.

The type of gear used for the taking of subsistence fish may be restricted under the terms of the subsistence fishing permit for a specific area. In the Haines Management Area, the subsistence salmon fishing permits specify the type of gear that may be used as follows:

> Set and drift gillnets are the type of gear allowed in the Haines Subsistence Fishery. Drift and set gillnets may not exceed 50 feet in length when fishing in the Chilkat River and drift gillnets fished in marine waters cannot exceed 50 fathoms in length.

Mesh size used in Haines Area subsistence nets is not specified in regulation. Set and drift gillnets are generally defined under *Types of legal gear* (5 AAC 39.105). Under *Methods, means, and general provisions* (5 AAC 01.010), the legal types of gear that can be used for subsistence fishing are further defined. Specifically, the length of gillnets is addressed, as is the number and size of the filaments used to make up the gillnet web.

The *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) specifies commercial, sport, and subsistence fishery time and area closures in Chilkat Inlet to reduce the harvest of king salmon during periods of low abundance. The plan also specifies annual closure of a portion of the Chilkat River to subsistence net fishing from the third week of June through the fourth week of July to prevent incidental harvest of king salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would likely reduce the incidental harvest of mature king salmon in the subsistence fisheries in Chilkat Inlet and Chilkat River. It would prevent any targeting of large king salmon by the use of large mesh nets.

BACKGROUND: The Chilkat River king salmon stock has been in decline for a number of years. Despite restrictive time and area closures that have been implemented in the subsistence, sport, and commercial fisheries since 2008, this stock has continued to decline in abundance. Five of the most recent six escapements of Chilkat River king salmon were below the BEG range, with the 2016 and 2017 escapements being the lowest on record. Chilkat River king salmon were designated a Stock of Management Concern in 2017.

The great majority of the mature king salmon have moved through the lower Chilkat Inlet by July 15, and through the portion of the Chilkat River open to subsistence fishing by August 1. A king salmon radio tagging study conducted in 2005 indicated that close to 90% of the king salmon have transited the area of the Chilkat River open to subsistence fishing by August 1. In recent years, the department has closed Chilkat Inlet to subsistence fishing during the time period when king salmon are present. The department has also closed most of the Chilkat River to subsistence fishing between June 15 and July 31. In 2017 the department implemented a three-

day-a-week closure of the short section of the Chilkat River that was left open to subsistence fishing between June 15 and July 31.

The regulations for subsistence gillnets do not address mesh size or delegate authority for the restriction of gillnet mesh size for the conservation of a species of salmon.

DEPARTMENT COMMENTS: The department **SUPPORTS** the use of mesh restrictions as a conservation measure. The department is **NEUTRAL** on the allocative aspects of this proposal.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Individuals fishing nets with mesh size larger than 5 3/8" would be required to purchase smaller mesh nets.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is this stock customarily and traditionally taken or used for subsistence? The board has determined under 5 AAC 01.716(a)(13)(A)(i) that in District 15 salmon in all waters of the Chilkat River and Chilkat Inlet north of the latitude of Glacier Point are customarily and traditionally taken or used for subsistence.
3. Can a portion of the stock be harvested consistent with sustained yield? Yes.
4. What amount is reasonably necessary for subsistence uses? The board has established a range of 7,174–10,414 salmon reasonably necessary for subsistence uses (5 AAC 01.716(c)(6)).
5. Do the regulations provide a reasonable opportunity for subsistence uses? This is a board determination.
6. Is it necessary to reduce or eliminate other uses to provide a reasonable opportunity for subsistence use? This is a board determination.

Taku River King Salmon (3 Proposals)

PROPOSAL 132 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area; and 5 AAC 33.384. Lynn Canal and Chilkat River King Salmon Fishery Management Plan.

PROPOSED BY: Michael R. Bethers.

WHAT WOULD THE PROPOSAL DO? This would enact king salmon sport fishing bag limits and closed waters in Districts 11, 12, 14, and 15 from April 15 to June 30 based on the preseason forecast of large Taku River king salmon. When the preseason forecast of large Taku River king salmon is in the lower 1/3 (< 24,667) of the escapement goal range, districts 11 and 15 would be closed to sport fishing for king salmon and in districts 12 and 14 the bag limit would be one king salmon (Figure 132-1). When the forecast is in the middle 1/3 (24,667–30,333) of the escapement goal range, a portion of District 11 south of Juneau would be closed to sport fishing for king salmon and the bag limit in District 15 would be one king salmon (Figure 132-2). When the forecast is in the upper 1/3 (> 30,333) of the range, upper Taku Inlet and District 15 waters of Lynn Canal north of Eldred Rock would be closed to sport fishing for king salmon, and there would be a bag limit of two king salmon in districts 11, 12, 14 and the open portions of 15 (Figure 132-3).

WHAT ARE THE CURRENT REGULATIONS? When the preseason forecast of large Taku River king salmon is above 38,900, the following regulations apply to the waters of District 11 from April 25 to June 30; a sport fish angler may use two rods; the resident bag and possession limit is three king salmon, 28 inches or greater in length; the nonresident bag and possession limit is two king salmon, 28 inches or greater in length; with a nonresident annual limit of five king salmon, 28 inches or greater in length. When the preseason forecast is less than 38,900, the waters of upper Taku Inlet are closed to sport fishing for king salmon from April 16 to June 14 and the remaining salt waters fall under the regional bag limits established by the *Southeast Alaska King Salmon Management Plan* or conservative regulations can be established by emergency order if conservation concerns exist.

Under the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan,* in the marine waters near Haines (District 15), when the preseason forecast of large Chilkat River king salmon is below the inriver goal range, all of Chilkat Inlet is closed to sport fishing for king salmon through June 30, and the bag and possession limit is one fish from July 1 to 15. When the forecast is within the inriver goal range, the northern portion of Chilkat Inlet is closed to sport fishing for king salmon April 15–July 15. When the forecast is above the inriver goal range, the northern portion of Chilkat Inlet is closed to sport fishing for king salmon April 15–July 15, and the king salmon bag and possession limit may be increased in the remainder of Chilkat Inlet.

In the remainders of districts 11 and 15, and in all of districts 12 and 14, king salmon sport fishing bag and possession limits are established under the *Southeast Alaska King Salmon Management Plan*.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Closing areas in districts 11 and 15 would reduce harvest of Taku, Chilkat, and King Salmon rivers king salmon stocks among other wild stocks of king salmon in SEAK. Sport fishing opportunity for king salmon would be reduced by some unknown level.

BACKGROUND: The Taku River is a TBR glacial system that supports an outside-rearing stock of king salmon. The Taku River originates in British Columbia and drains over 17,000 square kilometers before it's terminus at Taku Inlet approximately 40 km northeast of Juneau. Wild juvenile king salmon were coded-wire tagged from 1976 to 1981 and from 1993 to present to determine the proportion of Taku River king salmon stocks taken in mixed stock marine fisheries. Starting in 2005, during years of surplus production to the Taku River, directed king salmon fisheries were allowed in the marine waters in District 11 near Juneau and in Canada.

Since 2007, U.S. harvest has mostly occurred in the commercial troll fishery (67%), followed by the sport fishery (20%) and the commercial gillnet fishery (13%). Since 2007, the average harvest rate has been 26% of which the U.S. and Canada account for 16% and 10%, respectively.

In 2000, a BEG range of 30,000–55,000 large fish was established for the Taku River king salmon stock. The board adopted a new BEG range of 19,000–36,000 large spawners in 2009 after the analysis was updated using more recent data. Escapements were above the lower bound of the BEG range from 2009 to 2012 and 2014 to 2015 but were below the BEG range in 2013, 2016, and 2017. Available information since 1973 suggests the 2017 run was the lowest on record .

Special provisions specify that management actions be taken in the sport fishery within District 11 depending on the preseason forecast. In recent years, runs have been poor and conservative actions have been taken in the Juneau sport fishery to reduce harvest. A reduction in bag limit has been implemented in each of the last three years (2015–2017). In addition, a portion of District 11 was closed to sport fishing for king salmon in 2016 and all of District 11 was closed to sport fishing for king salmon from April 15 to June 15 in 2017.

Annual sport harvest of Taku River king salmon in District 11, based on Genetic Stock Identification (GSI), averaged around 650 large king salmon from 2007 to 2016. The most recent five year average (2012–2016) is around 550 large fish (Table 132-1). Outside of District 11, the sport harvest estimate, based on Coded Wire Tag (CWT) recoveries, averaged around 80 fish from 2007 to 2016 (Table 132-1). The preliminary 2017 sport harvest of Taku River king salmon in District 11, based on Genetic Stock Identification (GSI) is 34 large king salmon. Outside of District 11, the sport harvest of Taku River king salmon based on Coded Wire Tag (CWT) recoveries was zero (Table 132-1).

The *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* specifies management actions to be taken in sport and commercial fisheries within Chilkat Inlet depending on whether the preseason forecast of Chilkat River king salmon inriver run is above, within, or below the inriver goal range of 1,850–3,600 large king salmon. The preseason forecast is developed using a sibling model based on historical runs and brood year strength. In 2015 and 2016, the department extended bag limit reductions to District 15 outside of Chilkat Inlet. In 2017, Section 15-A was closed to the retention of king salmon from April 15 to December 31 and Chilkat Inlet was closed to king salmon fishing from April 15 to July 15. Despite these conservative measures, the inriver goal was not attained in 2016 and 2017 and the goal has been missed five out of the past six years.

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 132-1.–Annual estimates of escapement and sport harvest of large Taku River king salmon in District 11, based on GSI, and outside of District 11, based on CWT recoveries, 2007–2017.

Year	D11	Outside D11[a]	Escapement
2007	1,034	343	14,749
2008	632	840	26,645
2009	673	59	22,761
2010	984	0	28,769
2011	573	0	27,523
2012	671	0	19,538
2013	257	0	18,002
2014	714	0	23,532
2015	463	308	28,827
2016	635	0	12,381
Average 2007–2016	664	78[a]	22,273
2017[b]	34	0	7,500

[a] The Outside D11 sport harvest for each year includes two components, one for the NW quadrant and one for the SE quadrant; totals for the two quadrants for each year are reported in this table. The 10-year average therefore is calculated by the sum (1,550) divided by the total number of estimates which is 20.

[b] 2017 estimates of harvest and escapement are preliminary.

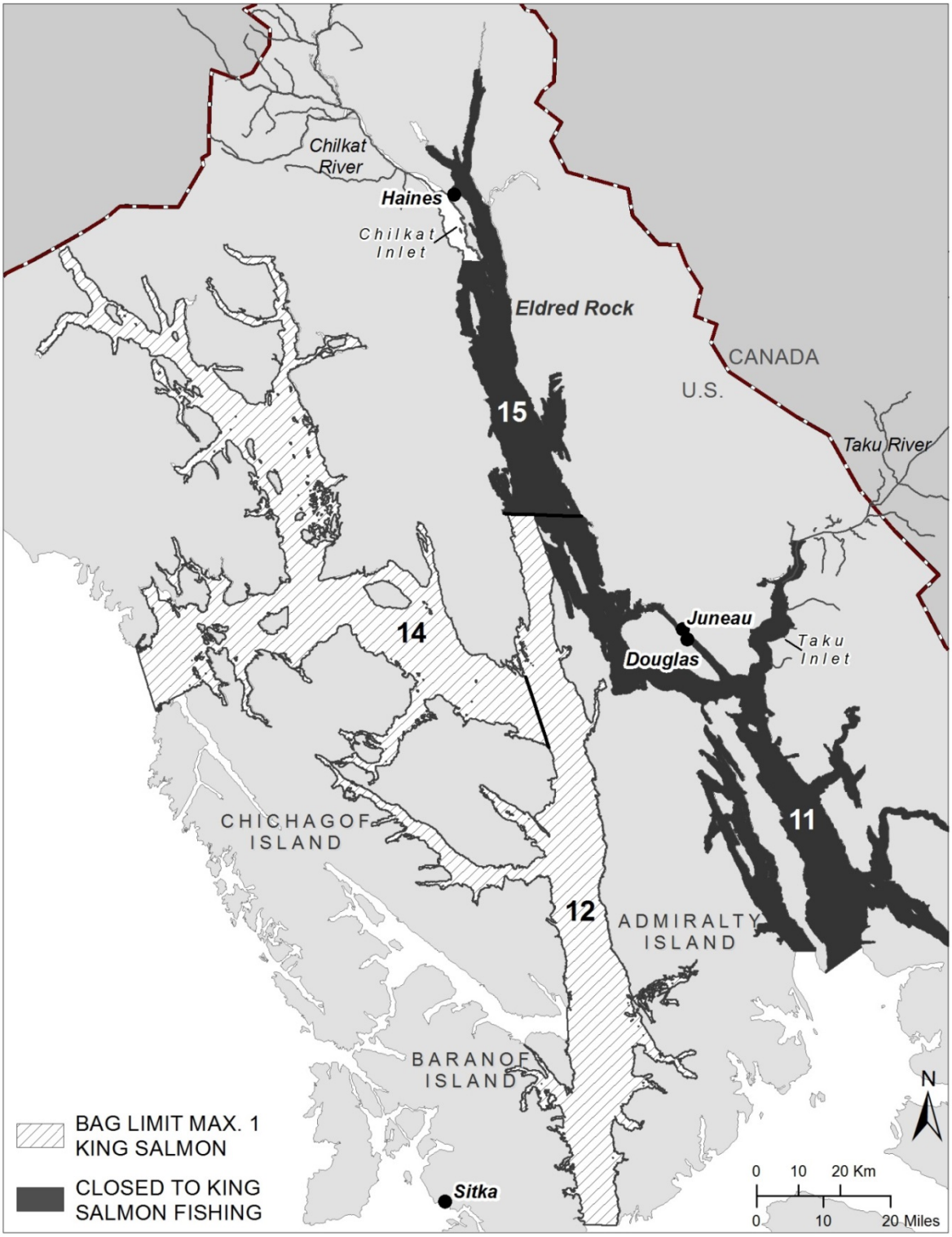


Figure 132-1.–Map of proposed sport fishing closures in districts 11, 12, 14, and 15 when the preseason forecast of large Taku River king salmon is in the lower 1/3 of the escapement goal range.

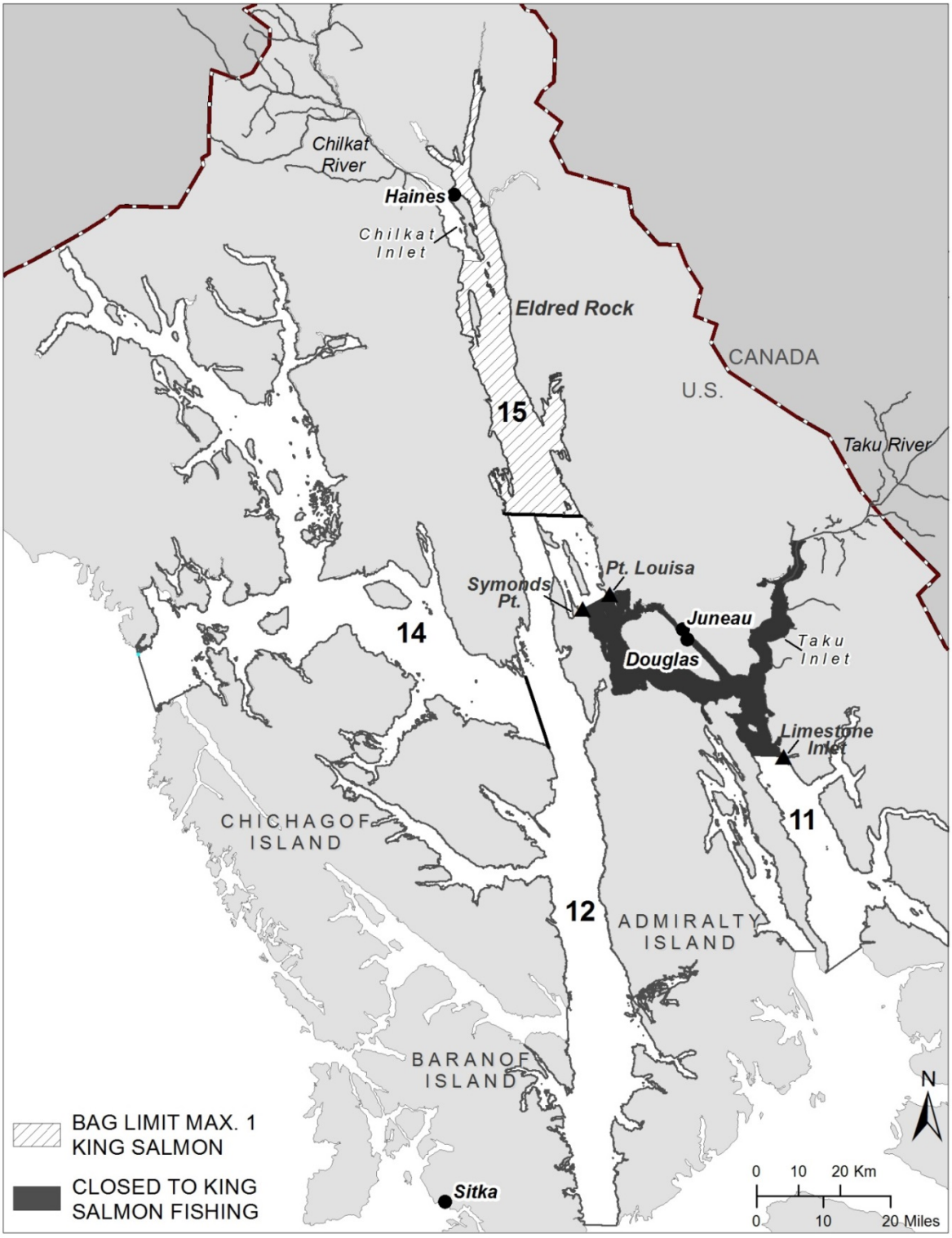


Figure 132-2.–Map of proposed sport fishing closures in districts 11, 12, 14, and 15 when the preseason forecast of large Taku River king salmon is in the middle 1/3 of the escapement goal range.

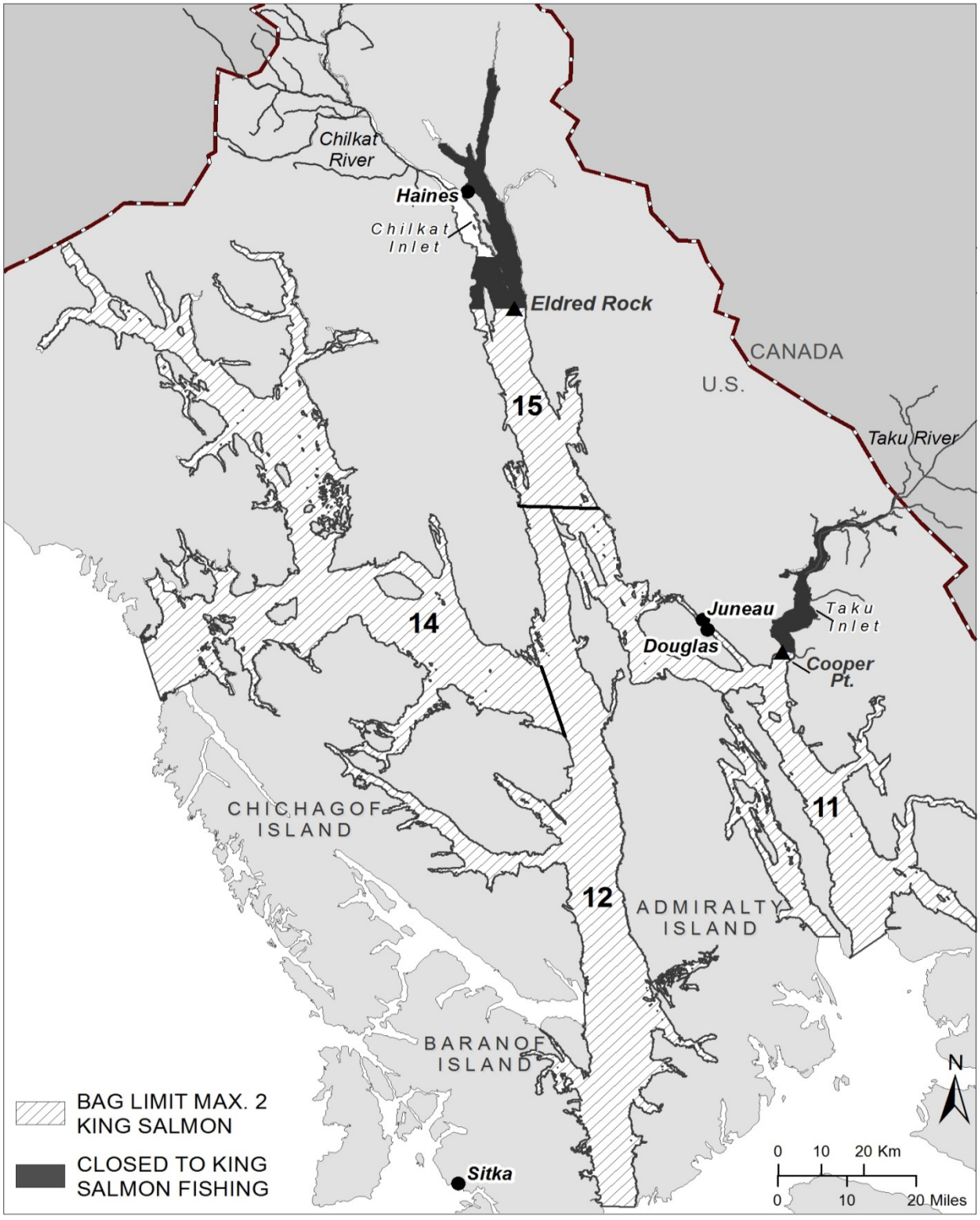


Figure 132-3.–Map of proposed sport fishing closures in districts 11, 12, 14, and 15 when the preseason forecast of large Taku River king salmon is in the upper 1/3 of the escapement goal range.

PROPOSAL 133 - 5 AAC 29.090. Management of the spring salmon troll fisheries; 5 AAC 29.095. District 8 King Salmon Management Plan; 5 AAC 29.097. District 11 King Salmon Management Plan; 5 AAC 33.368. District 8 King Salmon Management Plan; 5 AAC 33.384. Lynn Canal and Chilkat River King Salmon Fishery Management Plan; and 5 AAC 33.XXX. New Section (District 11 King Salmon Management Plan).

PROPOSED BY: Michael Bethers.

WHAT WOULD THE PROPOSAL DO? This would change the management of directed king salmon fisheries in Districts 8 and 11, predetermine gear and area restrictions for drift gillnet fisheries in Districts 8, 11, and 15, and limit or close spring and late winter commercial salmon troll fishery openings between April 15 and June 30 in Districts 9, 12, and 14, dependent upon preseason escapement projections for Chilkat, Taku, and Stikine rivers king salmon runs.

WHAT ARE THE CURRENT REGULATIONS? The *Management of the Spring Salmon Troll Fisheries* and the *District 12 and 14 Enhanced Chum Salmon Troll Fisheries Management Plan* (5 AAC 29.090 and 5 AAC 29.112) provide opportunity to harvest Alaska hatchery-produced king and chum salmon while minimizing the harvest of non-Alaska hatchery-produced (treaty) king salmon. Each spring troll fishing area is managed individually on a weekly basis, with fishing periods opened by emergency order based on inseason harvest estimates of both Alaska hatchery-produced and treaty king salmon. The Districts 8 (drift gillnet and troll) and 11 (troll only) regulatory management plans provide the framework for which directed king salmon commercial fisheries can occur. Directed fisheries are predicated on escapement, stock assessment, and meeting harvest obligations of the Pacific Salmon Treaty (PST). *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) provides specific management actions for all fisheries (drift gillnet, troll, sport, and subsistence) in the Chilkat Inlet portion of District 15 to meet the spawning escapement goal for Chilkat River king salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would limit or eliminate the opportunity for commercial salmon trollers to harvest both treaty and Alaska hatchery-produced king and chum salmon during late winter and spring commercial salmon troll fisheries in Districts 9, 12, and 14 based on preseason forecasts of wild king salmon systems located in central and northern inside waters of Southeast Alaska. The framework for the management of the Districts 8 and 11 directed king salmon fisheries would change and would no longer correspond with the PST. Directed commercial king salmon fisheries would only occur when the escapement is projected to be above the escapement goal range. Directed drift gillnet sockeye salmon fisheries in Districts 8, 11, and 15 would have set conservation measures in place.

BACKGROUND: In 1986, the board established experimental spring troll fisheries to provide opportunity for trollers to harvest Alaska hatchery-produced king salmon in areas along migration corridors or near hatchery release sites. Spring fisheries begin following the closure of the winter troll fishery, generally by May 1. Over the past 30 years, spring fisheries have developed and expanded in both time and area, and as of 2017, include 13 spring and terminal troll fisheries in Districts 9, 12, and 14.

Beginning in 2010, spring troll areas have included fisheries in Icy Strait, Cross Sound, and Northern Chatham Strait (Districts 12 and 14) that target enhanced chum salmon, with a management plan developed for these fisheries in 2012. Currently, five of the eight spring troll areas located in Northern Chatham Strait, Cross Sound, and Icy Strait are directed chum salmon

fisheries, with the two spring areas closest to the Taku and Chilkat rivers closed to king salmon retention by regulation. Since 2010, the redirection of target species in these chum salmon areas, along with additional king salmon management restrictions and poor runs of SEAK hatchery-produced and wild SEAK king salmon stocks, has significantly reduced the harvest of king salmon in the Icy Strait/Northern Chatham Strait corridor. King salmon harvests in these areas have declined from the 2000–2009 average of 3,058 fish, to an average of 1,784 fish between 2010 and 2016, to a harvest of 413 fish in 2017.

Several spring troll fisheries that target king salmon in corridors of Districts 9 and 14 are in proximity to the outer coast, with the two largest fisheries, Port Althorp in District 14 and Tebenkof Bay in lower District 9, conducted more than 100 miles from the mouth of any wild Southeast Alaska king salmon system. Although these fisheries by design target Alaska hatchery-produced king salmon, the stock composition of the harvests are highly mixed, vary to a greater degree than fisheries conducted in more terminal inside waters, and harvests predominantly originate from Washington, Canada, and Oregon.

Directed king salmon fisheries were reinstated in 2005 in Districts 8 and 11. By 2005, ongoing stock assessment projects on the Taku and Stikine rivers were able to produce reliable preseason forecasts and inseason estimates and projections of king salmon run size. The U.S. and Canada negotiated Treaty Annex provisions that include harvest sharing arrangements for king salmon returning to the Stikine and Taku rivers. Following the negotiations, the board approved emergency regulations in March 2005 for the commercial and sport fisheries. These regulations were only in effect for the 2005 season. During the 2006 board meeting, the board adopted the District 8 and District 11 king salmon management plans, although a specific plan for drift gillnet in District 11 is not in place. Directed commercial fisheries have occurred in six years in District 8 and four years in District 11 since 2005.

The department adopted a Chilkat River BEG of 1,750 to 3,500 large (3-ocean age and older) king salmon in January 2003. This BEG formed the basis of the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) that was adopted by the board in February 2003. The management plan specifies an inriver run goal range of 1,850 to 3,600 large king salmon. The difference between the management plan inriver run goal range and the BEG range allows for subsistence harvest of 100 large fish between the adult marking area and the spawning grounds. The management plan specifies time and area restrictions that will be implemented in the Chilkat Inlet portion of District 15 subsistence, sport, and commercial troll and gillnet fisheries.

In addition to the gear, time and area specific management plans, commercial fisheries are also managed pursuant to the *United States-Canada Salmon Management Plan* (5 AAC 33.361) and *Policy for the management of sustainable salmon fisheries* (SSFP) (5 AAC 39.222), whereas impacts of fishing on salmon escapement are assessed and considered in management decisions, and necessary conservation restrictions may be imposed in order to achieve escapement, rebuild, or in some other way conserve a specific salmon stock or group of stocks. Based on coded-wire tag and run-timing data, additional time and area restrictions have been implemented in specified spring troll area corridors in recent years to help reduce encounters of wild SEAK king salmon. Gear, area, and time restrictions have been implemented in the Districts 8, 11, and 15 drift gillnet fisheries to reduce the harvest of king salmon returning to the Stikine, Chilkat and Taku rivers. In 2017, the department took further conservation measures, beginning with area closures of Districts 1, 11, 12, and 15 during the winter troll fishery. In addition to these winter restrictions,

designated spring troll areas throughout the region were delayed in initial opening dates and had reduced opening lengths. The drift gillnet fisheries in Districts 8, 11, and 15 had larger area restrictions, were restricted more in time, and had a maximum mesh size implemented for the first two to three weeks of the season. Following inseason run projections that indicated a drop in predicted escapements for king salmon throughout Southeast Alaska, a 17-day regionwide closure for non-terminal spring troll fisheries was implemented under emergency order, and all spring troll fisheries were closed from May 29 through June 15.

King salmon productivity throughout Southeast Alaska has been trending downwards over the past decade. Despite management measures to ensure escapements are met, they have not been met on an annual basis. The Stikine River escapement has been below the escapement goal range in two of the most recent five years with the 2017 escapement and run being the lowest on record. The Taku River has been below the escapement goal range in three of the last five years with the 2017 escapement and run being the lowest on record. The Chilkat River escapement has been below the escapement goal range in four of the past five years with the 2016 and 2017 escapements and runs being the lowest on record. The Chilkat River king salmon stock has been recommended as a stock of management concern.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The department has the ability and means to address king salmon conservation through existing EO authority.

The department is **NEUTRAL** on the allocative aspects of this proposal, since it would place additional restrictions on the spring troll fishery and reallocate king salmon from spring to summer.

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.

PROPOSAL 134 – 5 AAC 29.090. Management of the spring salmon troll fisheries.

PROPOSED BY: Territorial Sportsmen, Inc./Ron Somerville.

WHAT WOULD THE PROPOSAL DO? This would close the spring commercial salmon troll fishery from April 15 to June 15 in Districts 9, 12, and 14 when the Juneau Area sport fishery is closed to protect Taku River king salmon.

WHAT ARE THE CURRENT REGULATIONS? The management plan provides opportunity to harvest Alaska hatchery-produced king salmon while minimizing the harvest of non-Alaska hatchery-produced (treaty) king salmon. All treaty king salmon harvest counts toward the annual PST troll harvest limit, but most Alaska hatchery-produced fish do not. While there is no ceiling on the number of king salmon harvested in the spring fisheries, the take of treaty king salmon is limited according to the percentage of the Alaska hatchery fish taken in the fishery. Each spring fishing area is managed individually on a weekly basis, with fishing periods opened by emergency order based on inseason harvest estimates of both Alaska hatchery-produced and treaty king salmon. Fishing time in an area may be extended, shortened, or closed based on inseason estimates and historic harvest timing information.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would eliminate the opportunity for commercial salmon trollers to harvest Alaska hatchery-produced king salmon in the spring commercial salmon troll fisheries in Districts 9, 12, and 14 in years when the Juneau Area sport fishery is closed. SEAK wild stock king salmon would be conserved. It would also eliminate opportunity to harvest other species such as chum and pink salmon in the Cross Sound, Icy Strait, and Northern Chatham areas. Though these areas would close to commercial fishing for conservation concerns, under the proposed guidelines these areas could remain open to recreational fisheries that could potentially harvest wild Southeast Alaska king salmon.

BACKGROUND: In 1986, the board established experimental spring troll fisheries to provide opportunity for trollers to harvest Alaska hatchery-produced king salmon in areas along migration corridors or near hatchery release sites. Spring fisheries begin following the closure of the winter troll fishery, generally by May 1. Over the past 30 years, spring fisheries have developed and expanded in both time and area, and as of 2017, include 13 spring and terminal troll fisheries in Districts 9, 12, and 14. These areas, along with the rest of the regional spring troll fisheries, are opened and closed by emergency order.

Beginning in 2010, spring troll areas have included fisheries in Icy Strait, Cross Sound, and Northern Chatham Strait (Districts 12 and 14) that target enhanced chum salmon. Currently, five of the eight spring troll areas located in Northern Chatham Strait, Cross Sound, and Icy Strait are directed chum fisheries, with the two spring areas closest to Juneau and the Taku River, closed to king salmon retention by regulation. Since 2010, the change of target species in these chum salmon areas, along with additional king salmon management restrictions and poor runs of SEAK hatchery-produced and wild SEAK king salmon stocks, has significantly reduced the harvest of king salmon in the Icy Strait/Northern Chatham Strait corridor. King salmon harvests in these areas have declined from the 2000–2009 average of 3,058, to an average of 1,784 between 2010 and 2016, to a harvest of 413 in 2017.

Annual sport harvest of Taku River king salmon in District 11, based on Genetic Stock Identification (GSI), averaged around 650 large king salmon from 2007 to 2016. The most recent

five year average (2012–2016) is around 550 large fish (Table 132-1). Outside of District 11, the sport harvest estimate, based on Coded Wire Tag (CWT) recoveries, averaged around 80 fish from 2007 to 2016 (Table 132-1). The preliminary 2017 sport harvest of Taku River king salmon in District 11, based on (GSI) is 34 large king salmon. Outside of District 11, the sport harvest of Taku River king salmon based on Coded Wire Tag (CWT) recoveries was zero (Table 132-1).

Several spring troll fisheries that target king salmon in corridors of District 9 and 14 are in proximity to the outer coast, with the two largest fisheries, Port Althorp in District 14 and Tebenkof Bay in lower District 9, conducted approximately 120 miles from the mouth of the Taku River. Although these fisheries target Alaska hatchery-produced king salmon, the stock compositions of the harvests are highly mixed, vary to a greater degree than fisheries conducted in more terminal inside waters, and predominantly originate from Washington, Canada, and Oregon.

Spring troll fisheries are also managed pursuant to the *Policy for the management of sustainable salmon fisheries* (SSFP) (5 AAC 39.222), wherein impacts of fishing on salmon escapement are assessed and considered in management decisions, and necessary conservation restrictions may be imposed in order to achieve escapement, rebuild, or in some other way conserve a specific salmon stock or group of stocks. Additional time and area restrictions have been implemented in specified corridors in recent years, based on coded-wire tag and run-timing data, to help reduce the harvest of wild Southeast Alaska king salmon. In 2017, the department took further conservation measures, beginning with area closures of Districts 1, 11, 12, and 15 during winter troll, and the Division of Commercial Fisheries coordinated actions with the Division of Sport Fish, mirroring time and area closures of king salmon retention for both user groups within the same waters. In addition to these Juneau/Haines area troll restrictions, designated spring troll areas throughout the region had opening dates delayed and opening lengths reduced. Following inseason run projections that indicated a drop in predicted escapements for king salmon throughout Southeast Alaska, a 17-day regionwide closure for non-terminal spring troll fisheries was implemented under emergency order and all spring troll fisheries were closed from May 29 through June 15.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal as a conservation measure. This would eliminate the department's ability to open and close spring fisheries in Districts 9, 12, and 14 by emergency order, and unnecessarily link opening these areas to management actions taken in the Juneau Area sport fishery.

The department is **NEUTRAL** on the allocative aspects of this proposal because it would place additional restrictions on the commercial fisheries in the spring and reallocate king salmon from spring to summer.

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.

Situk River King Salmon (2 Proposals)

PROPOSAL 135 - 5 AAC 01.670. Lawful gear and gear specifications.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would require a subsistence salmon permit holder to attend their gillnet at all times when it is being used to take salmon in Yakutat Bay from April through July. Alternatively, the permit holder could disable (tie up) their gillnet if left unattended.

WHAT ARE THE CURRENT REGULATIONS? Gillnets used for subsistence salmon fishing in the Yakutat Area may not exceed 50 fathoms. Permit holders are required to attend their gillnets at all times when subsistence fishing in the Situk River. No other subsistence fisheries in the Yakutat Area have net attendance requirements. There is no daily or annual subsistence salmon harvest limit for any waters in the Yakutat Management Area. A subsistence salmon fishing permit holder may harvest salmon at any time in Yakutat Bay prior to the first commercial set gillnet fishery opener. Once the commercial salmon net season opens, a subsistence user may only take salmon from 6:00 a.m., Friday to 6:00 p.m., Saturday. This applies to each river and bay fishery individually until the close of the commercial salmon net season. The Yakutat Bay commercial set gillnet fishery opens the second Sunday in June until closed by emergency order.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This may reduce depredation by marine mammals and the waste associated with that depredation on salmon caught in subsistence gillnets. Subsistence fishermen would expend more time and effort at their fishing sites to be in compliance.

BACKGROUND: Yakutat Bay includes waters east and north of a line from the southernmost point of Ocean Cape to Point Manby. Mixed stocks of salmon are harvested in the subsistence, commercial, and sport fisheries of Yakutat Bay. Subsistence nets in Yakutat Bay primarily target king salmon in April and May and will continue to harvest king salmon through July. The recent five-year average annual subsistence harvest recorded on permits is 311 king salmon from an average of 34 permits. Approximately 90% of the annual king salmon harvest in Yakutat Bay occurs from April through July.

The Yakutat Bay subsistence fishery can be slow-paced, so for efficiency, the nets are often unattended and may be checked only once a day. Predation on subsistence salmon nets by seals and sea lions in the Yakutat Bay fishery is a long-standing local concern.

King salmon samples collected from commercial troll and sport fisheries between 2004 and 2009 indicate that Situk River fish comprised less than 1% of the sample. Tag recovery data in Yakutat Bay commercial net fisheries in 1987 produced an estimated contribution of Situk River sockeye salmon of 50% of the total harvest. There is no sampling information for king salmon stock composition from the commercial and subsistence net fisheries.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on 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.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is this stock customarily and traditionally taken or used for subsistence? The board has determined under 5 AAC 01.666(3) that salmon in fresh water upstream from the terminus of streams and rivers of the Yakutat Area from the Doame River to the Tsiu River, in waters of Yakutat Bay and Russell Fjord inside a line from the westernmost point of Point Manby to the southernmost point of Ocean Cape, and in waters of Icy Bay inside a line from the westernmost tip of Point Riou to Ice Cape Light are customarily and traditionally taken or used for subsistence.
3. Can a portion of the stock be harvested consistent with sustained yield? Yes.
4. What amount is reasonably necessary for subsistence uses? The board has established a range of 5,800–7,832 salmon reasonably necessary for subsistence uses (5 AAC 01.666(b)).
5. Do the regulations provide a reasonable opportunity for subsistence uses? This is a board determination.
6. Is it necessary to reduce or eliminate other uses to provide a reasonable opportunity for subsistence use? This is a board determination.

PROPOSAL 136 – 5 AAC 47.023. Special provisions for season, bag, possession, annual, and size limits, and methods and means for the freshwaters of the Southeast Alaska Area.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? The area closed to sport fishing upstream and downstream of the Situk River weir would be increased from 100 yards to 300 yards during June and July, unless the king salmon escapement goal is achieved prior to the end of July at which time it would revert back to 100 yards.

WHAT ARE THE CURRENT REGULATIONS? Under statewide regulations, waters within 300 feet of a fish weir or fish ladder are closed to sport fishing, unless a lesser distance is indicated by department regulatory markers.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would reduce the area open to anglers fishing in fresh waters of the Situk River during June and July. Based on Statewide Harvest Survey data, anglers averaged approximately 7,500 days fished in the lower Situk River (downstream of the weir) annually from 2012 to 2016. This effort, occurring on a less than two mile portion of the river, accounts for half of sport fishing effort on the entire Situk River, which is over 20 miles long. A closure 300 yards below the weir would enclose one small hole downstream of the weir where king salmon may stage, providing an unknown benefit to king salmon.

BACKGROUND: The Situk River weir has been operating at its current location at river mile 1.2 since 1988. The weir is installed in early May to count outmigrating steelhead, and then is reconfigured in June to count all immigrating salmon and collect biological information from king and sockeye salmon.

Over the past ten years (2008–2017), the lower bound of the Situk River escapement goal range of 450 to 1,050 large king salmon has not been achieved six times. Management action taken to conserve Situk River king salmon includes closures of the subsistence, commercial, and sport fisheries, as well as additional time and area restrictions to the commercial sockeye salmon fishery. The sport fishery for king salmon on the Situk River has been restricted or closed each year since 2006.

In 2017, king salmon accumulated in several large holes downstream of the weir during a period of low water levels. In addition to closing the entire river to sport fishing for king salmon, sport fish staff issued an emergency order closing a portion of the river approximately 700 yards in length downstream of the weir to all sport fishing from July 7 to August 4. This action was taken to provide additional protection for the king salmon accumulating in the large holes below the weir.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposed restriction without a demonstrated biological or conservation need. Management actions taken by the department on the Situk River through emergency order authority have been responsive to variable king salmon abundance. The department does not support this proposed regulation to preemptively close a portion of the river, and prefers to utilize existing EO authority to close additional area below the weir when conditions warrant, as was done in 2017.

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.

Sport King Salmon Management Plan (2 Proposals)

PROPOSAL 137 – 5 AAC 47.055. Southeast Alaska King Salmon Management Plan.

PROPOSED BY: Mike Fox.

WHAT WOULD THE PROPOSAL DO? This would increase the regional resident king salmon possession limit from three fish to six fish when the Southeast Alaska Area preseason king salmon abundance index is greater than 2.0.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 47.020 instructs the department to set bag, possession and annual limits for king salmon by emergency order as specified in 5 AAC 47.055 the *Southeast Alaska King Salmon Management Plan.*

The *Southeast Alaska King Salmon Management Plan* does not provide specific direction for setting possession limits except that the department is directed to set them. The department has always set the possession limit equal to the bag limit for all anglers.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide additional harvest opportunity for resident anglers on multi-day trips who are not preserving their fish. Information to specifically estimate the increase in harvest due to an increase in the possession limit for residents during years of high abundance is not available. The increase in king salmon harvest is expected to be low.

BACKGROUND: Possession limit provisions are utilized, in addition to bag and annual limits, to constrain harvests to stay within harvest allocations (currently 20% of the annual total harvest for all fisheries) and for conservation purposes. When the king salmon abundance index is high, typically the sport fishery harvests below its allocation. Since 1999, the abundance index has been greater than 2.0 in 2005, 2014, and 2016. During these three years the sport fishery harvest was 16.4% (2005), 18.2% (2014), and 17.6% (2016) of the all-gear harvest limit, excluding the net harvest.

DEPARTMENT COMMENTS: 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.

PROPOSAL 138 – 5 AAC 47.055. Southeast Alaska King Salmon Management Plan.

PROPOSED BY: Eric Tyson.

WHAT WOULD THE PROPOSAL DO? This would allow anglers to retain other salmon species while using two rods to fish for king salmon.

WHAT ARE THE CURRENT REGULATIONS? The *Southeast Alaska King Salmon Management Plan* directs the department to implement the use of two rods for all anglers, specifically while sport fishing for king salmon, from October to March at indices of 1.51 or greater. At an abundance index less than or equal to 1.50, the plan directs the department to implement regulations that allow residents to use two rods, specifically while sport fishing for king salmon, from October to March. Retention of species other than king salmon is prohibited when an angler fishes two rods.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase harvest of coho, chum, and pink salmon from October to March, by some unknown amount, but the increase is expected to be very low. During October, fall run coho salmon are still present in marine waters of Southeast Alaska, particularly in the Ketchikan Management Area. Fall run chum salmon and late run pink salmon may also be encountered. Resident anglers would be the primary beneficiaries because very few nonresidents fish during this time.

BACKGROUND: In 2012, the department submitted a proposal requesting that the board clarify existing regulatory language pertaining to whether or not an angler may retain species other than king salmon when the use of two rods is allowed under the *Southeast Alaska King Salmon Management Plan*. The board clarified that the intent of the two rod provision was to increase harvest opportunity for king salmon, not for other species and added regulatory language to specify that anglers may not retain species other than king salmon during periods when fishing with two rods is implemented under the *Southeast Alaska King Salmon Management Plan*.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The department does not have biological concerns for the increase in harvest of other salmon species that would occur from October to March.

COST ANALYSIS: Approval of this proposal is not expecte

COMMITTEE OF THE WHOLE GROUP 4: Salmon: Enhancement, Special Harvest Areas, Management Plans, and Miscellaneous (23 proposals: Chair - Huntington)

Enhanced Salmon Allocation (8 Proposals)

PROPOSAL 139 – 5 AAC 33.387. Southeast Cove Terminal Harvest Area Management Plan.

PROPOSED BY: Northern Southeast Regional Aquaculture Association (NSRAA).

WHAT WOULD THE PROPOSAL DO? This would remove management guidelines and add drift gillnet as legal harvest gear in the Southeast Cove Terminal Harvest Area (THA). The gear and rotations of commercial fisheries within the THA would be managed by the department, in consultation with NSRAA by emergency order.

WHAT ARE THE CURRENT REGULATIONS? The *Southeast Cove Terminal Harvest Area Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced salmon, in excess of broodstock and cost recovery needs, among the purse seine and troll fisheries.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This allows NSRAA the ability to influence gear rotations in Southeast Cove THA among all three gear groups.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

In 1997, a special harvest area was established to harvest hatchery-produced chum salmon returning to Southeast Cove. In 2011, Northern Southeast Regional Planning Team gear group representatives, appointed by NSRAA, agreed to support a production increase at Gunnuk Creek Hatchery if Kake Non-Profit Fisheries submitted a board proposal to establish a THA and create a management plan for Southeast Cove. At the time of the proposal, the seine and troll fleets were below their allocation ranges. The board discussed including drift gillnet in the management plan, but determined the drift gillnet fleet was over their allocation range and could be added at a later date if that changed. In 2012, the board adopted the current management plan which limits seine to two days per week and limits troll to five days per week. The gear group furthest out of their allocative range gets the first rotation. Since the plan was adopted, there have been no commercial openings.

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.

PROPOSAL 140 – 5 AAC 33.383. District 7: Anita Bay Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Southeast Alaska Seiners Association.

WHAT WOULD THE PROPOSAL DO? This would remove gillnet opportunity in the Anita Bay Terminal Harvest Area (THA) and limit net harvest to purse seine only for the 2018–2020 fishing seasons.

WHAT ARE THE CURRENT REGULATIONS? The *Anita Bay Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced king, coho, and chum salmon, in excess of cost recovery needs, among the purse seine, troll, and drift gillnet fisheries.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This redistributes the harvest of salmon in the Anita Bay THA from the drift gillnet to the purse seine and troll fleets.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The Anita Bay THA management plan, adopted in 1997, directed the department to manage the fishery from May 1 through November 10, allow salmon to be taken by the troll fleet at any time, and provide a time ratio for gillnet openings to seine openings of 2:1. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1. From 2015 through 2017, May 1 until noon, June 12 and from September 1 through November 10, gillnet and seine were open concurrently; from noon, June 12 through statistical week 30, the time ratio was 1:1; and from statistical week 31 through August 31, the time ratio for gillnet openings to seine openings was 2:1.

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.

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PROPOSAL 141 – 5 AAC 33.376. District 13: Deep Inlet Terminal Harvest Area Salmon Management Plan and 5 AAC 33.383. District 7: Anita Bay Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: United Southeast Alaska Gillnetters.

WHAT WOULD THE PROPOSAL DO? This would direct the department to manage, for the 2018 through 2020 seasons, Deep Inlet Terminal Harvest Area (THA) and Anita Bay THA with a time ratio for gillnet openings and seine openings of 1:1.

WHAT ARE THE CURRENT REGULATIONS? The *Anita Bay Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced king, coho, and chum salmon, in excess of cost recovery needs, among the purse seine, troll, and drift gillnet fisheries.

The *Deep Inlet Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced salmon in the THA between the purse seine, drift gillnet, and troll fleets. Salmon may be taken by the troll fleet when the THA is closed to net fisheries, including cost recovery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase harvest opportunity in the Deep Inlet and Anita Bay THAs to the seine fleet and reduce harvest opportunity to the gillnet fleet.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The Anita Bay THA management plan, adopted in 1997, directed the department to manage the fishery from May 1 through November 10, allow salmon to be taken by the troll fleet at any time, and provide a time ratio for gillnet openings to seine openings of 2:1. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1. From 2015 through 2017, May 1 until noon, June 12 and from September 1 through November 10, gillnet and seine were open concurrently; from noon, June 12 through statistical week 30, the time ratio was 1:1; and from statistical week 31 through August 31, the time ratio for gillnet openings to seine openings was 2:1.

The Deep Inlet THA management plan, adopted in 1991, directed the department to manage the fishery, in consultation with Northern Southeast Regional Aquaculture Association, to provide a time ratio for gillnet openings to seine openings of 2:1 and allow troll gear when the THA is closed to net fisheries, including cost recovery. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1 after the third Sunday in June. For 2015 through 2017, from the third Sunday in June through statistical week 30, the time ratio for gillnet openings and seine openings was 1:1; the time ratio for gillnet openings and seine openings was 2:1 the rest of the season.

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.

PROPOSAL 142 – 5 AAC 33.376. District 13: Deep Inlet Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Northern Southeast Regional Aquaculture (NSRAA).

WHAT WOULD THE PROPOSAL DO? This would provide, for the 2018 through 2020 seasons, from the third Sunday in June through statistical week 30, a time ratio for gillnet openings and seine openings at Deep Inlet Terminal Harvest Area (THA) will be 1:1, and from statistical week 31 through the end of the season, the time ratio for gillnet to seine openings will be 1:2, unless preliminary allocation data shows the seine fleet is in their allocation range (5 AAC 33.364). If the seine fleet is in their range, the time ratio for gillnet to seine openings will be 1:1, and if the seine fleet is above their range, the time ratio for gillnet to seine openings will be 2:1.

WHAT ARE THE CURRENT REGULATIONS? The *Deep Inlet Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced salmon in the THA between the purse seine, drift gillnet, and troll fleets. Salmon may be taken by the troll fleet when the THA is closed to net fisheries, including cost recovery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase harvest opportunity in the Deep Inlet THA to the seine fleet and reduce harvest opportunity to the gillnet fleet in years the seine fleet is in or below their allocation range.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation range for over three consecutive years and the gillnet fleet has been above its range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The Deep Inlet THA management plan, adopted in 1991, directed the department to manage the fishery, in consultation with NSRAA, to provide a time ratio for gillnet openings to seine openings of 2:1 and allow troll gear when the THA is closed to net fisheries, including cost recovery. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1 after the third Sunday in June. For 2015 through 2017, from the third Sunday in June through statistical week 30, the time ratio for gillnet openings and seine openings is 1:1, and the time ratio for gillnet openings and seine openings is 2:1 the rest of the season.

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.

PROPOSAL 143 – 5 AAC 33.376. District 13: Deep Inlet Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Southeast Alaska Seiners Association.

WHAT WOULD THE PROPOSAL DO? This would modify the management of Deep Inlet Terminal Harvest Area (THA) to a time ratio for gillnet to seine openings of 1:2.

WHAT ARE THE CURRENT REGULATIONS? The *Deep Inlet Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced salmon in the THA between the purse seine, drift gillnet, and troll fleets. Salmon may be taken by the troll fleet when the THA is closed to net fisheries, including cost recovery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase harvest opportunity in Deep Inlet THA to the seine fleet and reduce harvest opportunity to the gillnet fleet.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The Deep Inlet THA management plan, adopted in 1991, directed the department to manage the fishery, in consultation with Northern Southeast Regional Aquaculture Association, to provide a time ratio for gillnet openings to seine openings of 2:1 and allow troll gear when the THA is closed to net fisheries, including cost recovery. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1 after the third Sunday in June. For 2015 through 2017, from the third Sunday in June through statistical week 30, the time ratio for gillnet openings and seine openings is 1:1, and the time ratio for gillnet openings and seine openings is 2:1 the rest of the season.

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.

PROPOSAL 144 – 5 AAC 33.376. District 13: Deep Inlet Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Chum Trollers Association.

WHAT WOULD THE PROPOSAL DO? This would modify the management of Deep Inlet Terminal Harvest Area (THA) to allow troll gear during net gear openings from August through the end of the fishing season.

WHAT ARE THE CURRENT REGULATIONS? The *Deep Inlet Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced salmon in the THA between the purse seine, drift gillnet, and troll fleets. Salmon may be taken by the troll fleet when the THA is closed to net fisheries, including cost recovery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase harvest opportunity by allowing troll access to the Deep Inlet THA during net gear openings, including cost recovery efforts.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The Deep Inlet THA management plan, adopted in 1991, directed the department to manage the fishery, in consultation with Northern Southeast Regional Aquaculture Association, to provide a time ratio for gillnet openings to seine openings of 2:1 and allow troll gear when the THA is closed to net fisheries, including cost recovery. Since 2009, net rotations have been manipulated due to the seine fleet being below their allocation range and gillnet fleet being above their allocation range. From 2009 through 2014, net rotations were managed at a time ratio of 1:1 after the third Sunday in June. For 2015 through 2017, from the third Sunday in June through statistical week 30, the time ratio for gillnet openings and seine openings was 1:1; the time ratio for gillnet openings and seine openings was 2:1 the rest of the season. Troll opportunity was limited to "buildup days" between net rotations.

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.

PROPOSAL 145 – 5 AAC 33.372. District 1: Nakat Inlet Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Southeast Alaska Seiners Association.

WHAT WOULD THE PROPOSAL DO? This would modify the management of Nakat Inlet Terminal Harvest Area (THA) to allow seine gear when the gillnet fleet is above their allocation range as defined in *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* (5 AAC 33.364). This proposal allows a purse seine opening, one day per week for 12 consecutive hours starting at 6 am, when the gillnet fleet is above their allocation range.

WHAT ARE THE CURRENT REGULATIONS? The *Nakat Inlet Terminal Harvest Area Salmon Management Plan* provides management guidelines to the department to distribute the harvest of hatchery-produced coho and chum salmon between the troll and drift gillnet fleets. The department, in consultation with Southern Southeast Regional Aquaculture Association, shall manage the Nakat Inlet THA with fishing open continuously to troll and drift gillnet gear from June 1 through November 10.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide harvest opportunity in the Nakat Inlet THA to the purse seine fleet, which is currently distributed between the troll and drift gillnet fleets.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

The original Nakat Inlet THA management plan, adopted in 1989, distributed harvest between the purse seine, troll, and drift gillnet fleets. In 2006, the board adopted regulations that removed purse seine from the Nakat Inlet THA.

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.

PROPOSAL 146 – 5 AAC 33.364. Southeastern Alaska Area Enhanced Salmon Allocation Management Plan.

PROPOSED BY: Donald Churchill Jr.

WHAT WOULD THE PROPOSAL DO? Only regional hatchery association production would be evaluated to determine if there is a fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and drift gillnet fisheries, consistent with the percentages defined in the current plan.

WHAT ARE THE CURRENT REGULATIONS? The *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and drift gillnet fleets. The department determines the value of hatchery-produced salmon based on data from the Commercial Fisheries Entry Commission.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Removing independent production from the enhanced salmon harvest value calculation decreases the drift gillnet percentage while increasing the seine and troll percentages.

BACKGROUND: According to *Findings of the Alaska Board of Fisheries 94-148-FB,* in 1991, the board chairman asked Northern Southeast Regional Aquaculture Association (NSRAA) and Southern Southeast Regional Aquaculture Association (SSRAA) to coordinate the development of a Southeast Alaska wide allocation plan for all enhanced salmon including the department's Fisheries Rehabilitation and Enhancement Division (FRED), independent non-profit aquaculture corporations, and regional aquaculture associations. The Southeast Alaska Allocation Task Force was composed of six voting members, three each from NSRAA and SSRAA with each association providing one seine, one troll, and one gillnet representative. Two non-voting members represented FRED Division and independent non-profit aquaculture associations. Douglas Island Pink and Chum, Inc. (DIPAC) represented the independent seat. All decisions were by consensus. All meetings were publically held. In 1994, the board adopted the current allocation management plan. Since 1994, independent production has contributed an average of 31% of the estimated hatchery-produced salmon value in Southeast Alaska with a distribution of 12% troll, 22% seine, and 66% drift gillnet. The three largest producers of hatchery salmon in Southeast are NSRAA, SSRAA, and DIPAC.

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.

Special Harvest Areas/Terminal Harvest Areas (6 Proposals)

PROPOSAL 147 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Kevin Mulligan.

WHAT WOULD THE PROPOSAL DO? This would open the area currently closed to fishing in Mist Cove to allow for fly-fishing-only. It would also establish a no snagging area 300 yards seaward of the current closed area.

WHAT ARE THE CURRENT REGULATIONS? Mist Cove is closed to sport fishing for salmon south of a line identified by department markers (Figure 147-1)

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase sport fishing opportunity and harvest of salmon in Mist Cove by an unknown amount.

BACKGROUND: In 2015 at the request of NSRAA a portion of Mist Cove was closed to fishing to provide safety to staff, and protect floats, barrier nets, net pens, and other infrastructure and for protection of coho salmon for cost recovery. Mist Cove, on the east side of Baranof Island, is relatively remote and typically only attracts anglers from one of the smaller communities near this site. From 2013 to 2016, an average of 3,000 coho salmon were caught on the entire east side of Baranof Island based on data from the SWHS. Charter logbook information indicates that an average of 1,300 fish annually were harvested in Mist Cove by guided anglers between 2013 and 2015. The average return of Mist Cove (Deer Lake) coho salmon for this same time period was 210,000 fish.

While there are "no snagging" saltwater areas in Southeast Alaska there are no waters currently designated as "fly fishing only". Gear for fly-fishing-only waters are defined under 5 AAC 75.024 and include specifications for hook size, weight of fly, and distance that weight may be used ahead of the fly.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. If adopted, the board should consider referencing 5 AAC 75.024 *Gear for fly-fishing-only waters* in regulatory language for consistency with the statewide 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.

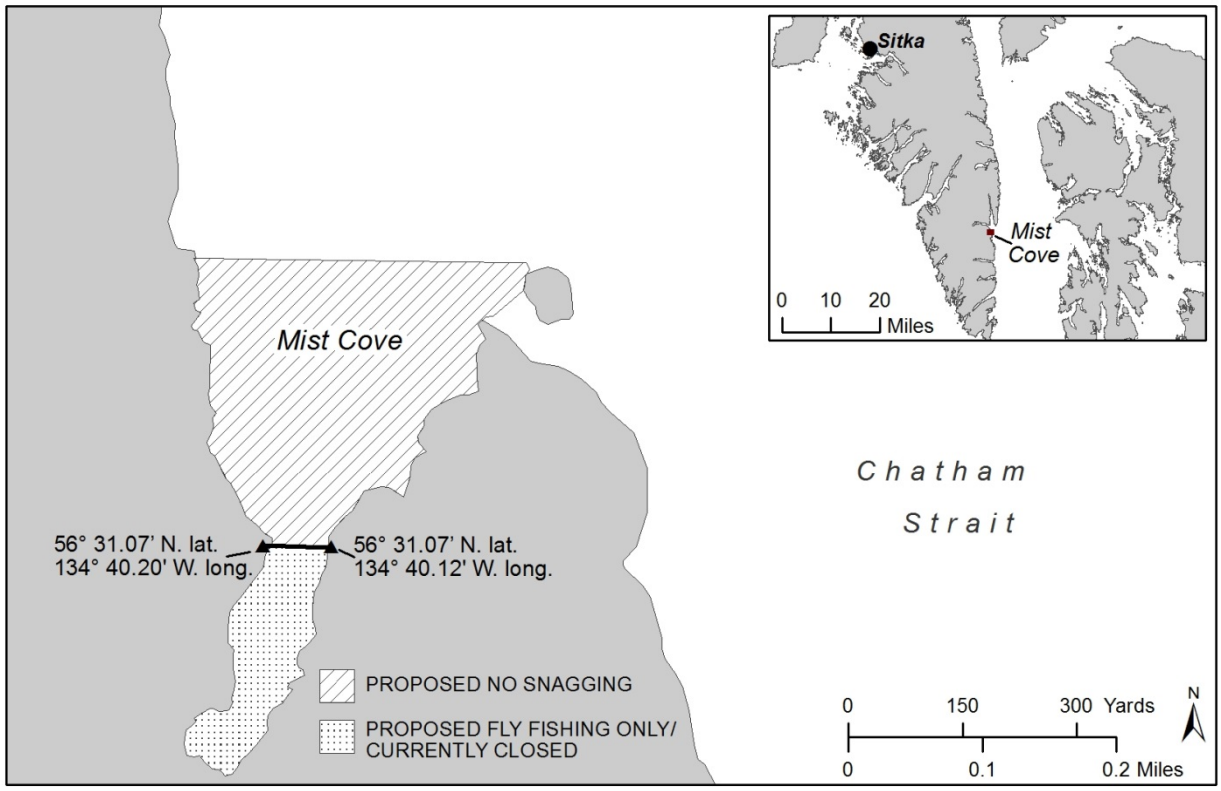

Figure 147-1.–Map of proposed and current Mist Cove sport fishing regulations.

PROPOSAL 148 – 5 AAC 33.369. District 1: Herring Bay Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Don Westlund and Larry McQuarrie.

WHAT WOULD THE PROPOSAL DO? This would expand the Herring Bay Sportfish Terminal Harvest Area to include portions of statistical areas 101-25 and 101-29 and the remaining portion of 101-27 (Figure 148-1). In addition, it would implement a bag limit of two king salmon for residents and nonresidents in the expanded area; and king salmon harvested in this area would not count toward the nonresident annual limit.

WHAT ARE THE CURRENT REGULATIONS? The Herring Bay Sportfish Terminal Harvest Area is open for sport fishing from June 1–July 31 in the waters of Nichols Pass north of the latitude of Driest Point, Revillagigedo Channel north of the latitude of Harbor Point, and Tongass Narrows south of the latitude of the Lewis Reef light (Figure 148-1). The bag and possession limit for all anglers is six king salmon, with no size limit and king salmon caught in the terminal area do not count towards the nonresident annual limit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase the harvest of king salmon by resident and nonresident anglers. However, during years of high king salmon abundance (AI of 1.51 or higher) the bag limit for resident anglers would decrease by one fish. The additional harvest of king salmon would include both treaty (wild and non-Alaska hatchery stocks) and non-treaty fish (Alaska hatchery stocks). The treaty portion of the increased harvest would count towards the sport fishery king salmon allocation.

BACKGROUND: The Herring Bay Terminal Harvest Area Salmon Management Plan was established by the board in 2011. Prior to the management plan, the department used emergency order authority to liberalize the sport fishery regulations in the Ketchikan designated harvest area to target Alaska hatchery king salmon. Since 2009, this opening occurred the first week of June and closed on July 31. The fishing area has remained consistent from 1999 to 2013. Due to conservations concerns for the Unuk River king salmon stock, in 2014, 2015 and 2017, the THA opening was postponed until July 1 and the area with increased limits was significantly reduced to Herring Bay proper (Figure 148-1) in order to reduce harvest of Unuk River king salmon. Similar restrictions are anticipated for 2018.

From 2013 to 2017 an average of 48% of the king salmon harvested annually in the Ketchikan Area have originated from Alaska hatcheries (Table 148-1). From 2013 to 2017 an average of 41% of the king salmon harvested in subdistricts 101-25 and 101-29 were Alaska hatchery fish (Table 148-2).

Based on 2013–2017 data, if the bag limit was increased in districts 101-25 and 101-29, the total sport harvest is estimated to increase by an average of 11% or 967 fish and the treaty portion of the harvest would increase by 6% or 573 fish.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal due to conservation concerns for wild king salmon stocks migrating through the Ketchikan Area. The Unuk River stock of king salmon has not achieved the Biological Escapement Goal (BEG) in five of the last six years and king salmon stocks returning to Chickamin and Blossom rivers failed to achieve their BEGs in 2016 and 2017. Special restrictions, including restrictions in time and area within the THA, have been implemented annually since 2014 to reduce harvest of Unuk River king salmon and other Behm Canal king salmon stocks. In 2018, the department is

anticipating additional time and area restrictions in the Herring Bay Sportfish Terminal Harvest Area.

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 148-1.–Average Alaska hatchery contributions of king salmon to the Ketchikan Area sport fisheries, 2013–2017.

Biweek[1]	AK Hatchery Contribution: Ketchikan Area	Total Sport Harvest: Ketchikan Area	% AK Hatchery Harvest: Ketchikan Area
9	0	26	0%
10	135	230	59%
11	460	763	60%
12	727	1,082	67%
13	688	1,413	49%
14	242	671	36%
15	46	217	21%
16	17	178	10%
17	8	88	9%
18	4	61	6%
Total	2,328	4,729	48%

[1] Biweeks as used here include 26 fourteen day time-periods except for the first and last Biweeks which can be anywhere from one day to 20 days, depending on what days of the month encompass the first full 14 days. Biweeks 9–18 encompass the dates of approximately April 24 through September 10, each of which is 14 days in length.

Table 148-2.–Average sport fishery king salmon harvest and Alaska hatchery contribution in 101-25 and 101-29, 2013–2017.

Biweek[1]	AK Hatchery Contribution[2]: 101-25 and 101-29[2]	Total Sport Harvest: 101-25 and 101-29	% AK Hatchery Harvest[2]: 101-25 and 101-29
9	0	6	0%
10	15	30	50%
11	63	121	53%
12	45	62	73%
13	51	105	49%
14	12	48	25%
15	1	53	2%
16	7	40	19%
17	0	10	0%
18	0	1	0%
Total	194	476	41%

[1] Biweeks as used here include 26 fourteen day time-periods except for the first and last Biweeks which can be anywhere from one day to 20 days, depending on what days of the month encompass the first full 14 days. Biweeks 9–18 encompass the dates of approximately April 24 through September 10, each of which is 14 days in length.

[2] AK Hatchery contributions and percent harvests have a large amount of error due to expansions on very small sample sizes.

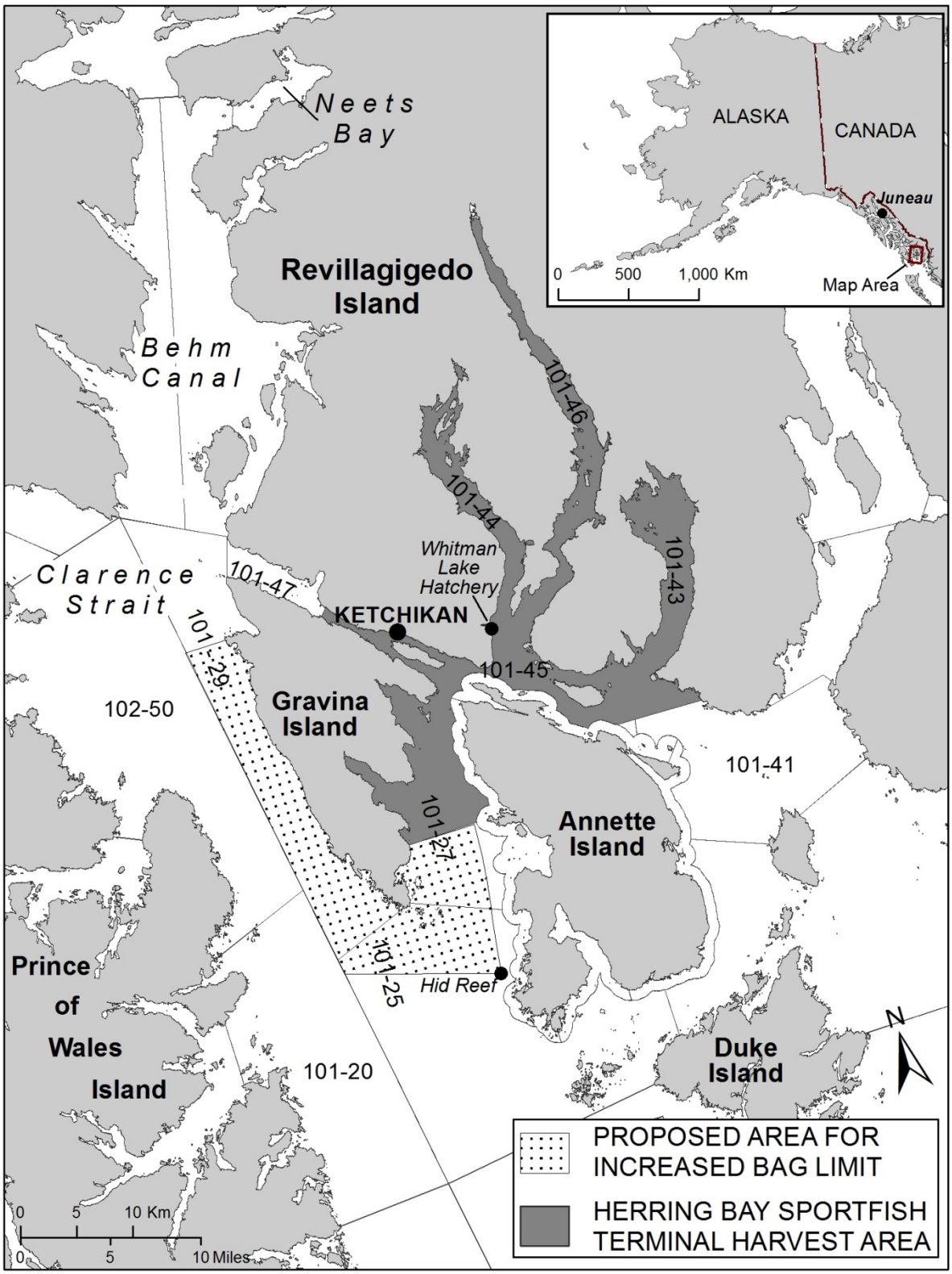

Figure 148-1.–Location of the Ketchikan designated harvest area and proposed areas for an increased bag limit.

PROPOSAL 149 – 5 AAC 40.042. Northern Southeast Regional Aquaculture Association Special Harvest Areas.

PROPOSED BY: Northern Southeast Regional Aquaculture Association (NSRAA).

WHAT WOULD THE PROPOSAL DO? This would extend the time that NSRAA could harvest salmon in the Deep Inlet Special Harvest Area (SHA) from September 15 to October 31.

WHAT ARE THE CURRENT REGULATIONS? NSRAA can harvest king, chum, and coho salmon in the waters of the Deep Inlet Special Harvest Area (SHA). The Deep Inlet SHA will be open for harvest by the hatchery permit holder from 12:01 a.m., June 15 until 11:59 p.m. September 15, except Sandy Cove is closed (5 AAC 40.042).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? NSRAA would be able to harvest coho salmon in the Deep Inlet SHA until October 31, without having to annually request the department extend the harvest period by emergency order to harvest all surplus salmon returning to the SHA.

BACKGROUND: NSRAA began development of a coho salmon program at Sawmill Cove Hatchery using Salmon Lake stock fish in 2009 and should be at full production by 2020, with a permitted capacity of 2,000,000 smolt. The majority of NSRAA's Sawmill Cove coho salmon production is released from and returns to the Deep Inlet SHA. The coho salmon return in Deep Inlet typically runs through mid/late October. NSRAA is required, as a stipulation of the Annual Management Plan, to harvest all surplus salmon returning to the SHA either as broodstock or cost recovery. Currently, cost recovery or broodstock harvest beyond September 15 requires that the department write an emergency order.

DEPARTMENT COMMENTS: The department **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.

PROPOSAL 150 – 5 AAC 40.042. Northern Southeast Regional Aquaculture Association Special Harvest Areas.

PROPOSED BY: Northern Southeast Regional Aquaculture Association (NSRAA).

WHAT WOULD THE PROPOSAL DO? This would establish a Special Harvest Area (SHA) for NSRAA to harvest enhanced chum and king salmon at the Crawfish Inlet remote release site; and establish legal gear the hatchery operator may use to harvest salmon in excess of broodstock needs. This proposal also seeks to modify the Terminal Harvest Area (THA) for the benefit of the troll fleet, in order to provide greater access to returning chum and king salmon (Figure 150-1).

WHAT ARE THE CURRENT REGULATIONS? Regulations establish areas, dates, and legal gear for the NSRAA's release sites.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would create additional opportunity for the commercial troll fleet primarily during June and July for king salmon and late July to early September for chum salmon. Any additional opportunity for the troll fleet to harvest hatchery produced salmon will likely result in that gear group harvesting closer to their enhanced allocation percentage range.

BACKGROUND: NSRAA began releasing salmon at the Crawfish Inlet remote site during 2015. Chum salmon began returning in 2017 and king salmon in 2018. This remote release site was established to provide additional opportunity to the troll fleet in an attempt to bring the troll fleet closer to their enhanced allocation percentage. The troll fleet has been below their enhanced allocation value range since the 5-year rolling average period 2002–2006 (Figure 150-2).

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.

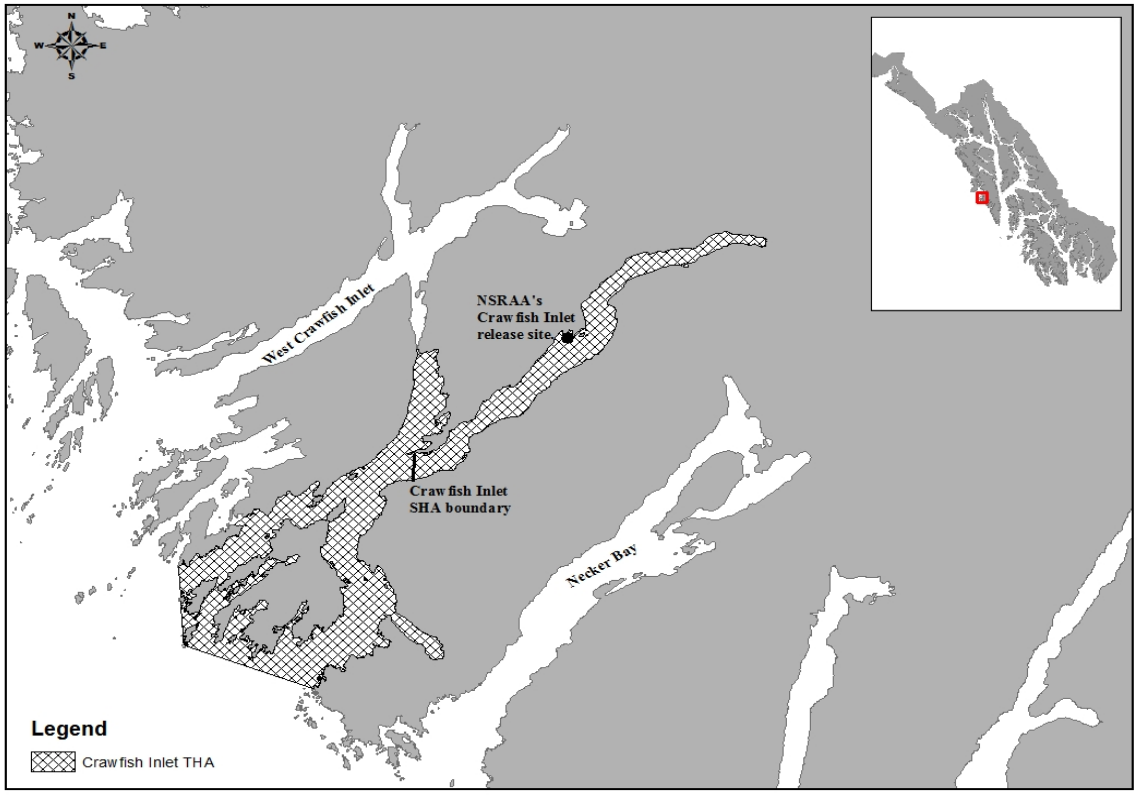

Figure 150-1.–Proposed Crawfish Inlet SHA/THA.

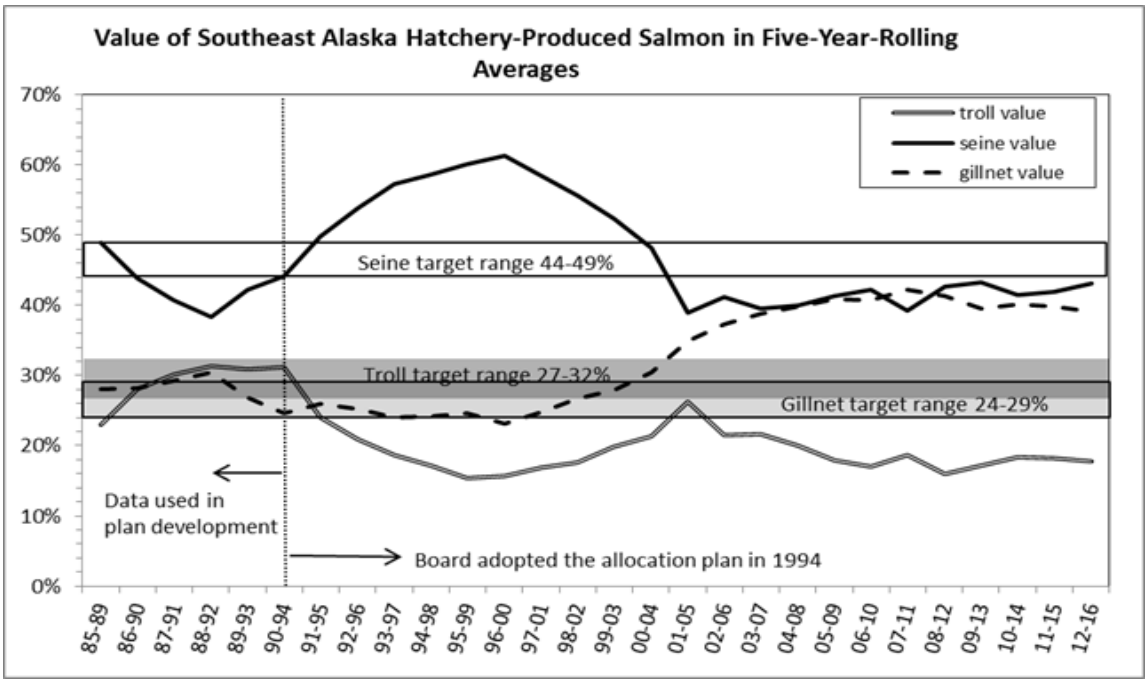

Figure 150-2.–Southeast Alaska enhanced allocation value chart.

PROPOSAL 151 – 5 AAC 33.XXX. New Section.

PROPOSED BY: Southern Southeast Regional Aquaculture Association (SSRAA).

WHAT WOULD THE PROPOSAL DO? Establish a management plan that defines a terminal harvest area (THA) in Carrol Inlet and provides the department guidelines to distribute harvest of hatchery-produced king salmon between the purse seine, troll, and drift gillnet fleets.

WHAT ARE THE CURRENT REGULATIONS? In 2009, *District 1: Carrol Inlet Terminal Harvest Area Salmon Management Plan* (5 AAC 33.371) was repealed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The intent is to provide additional harvest opportunity to the troll fleet with the net fleets providing "clean up" near the release site. The gear group that benefits most will depend on troll effort and efficiency and rotation of the net fleets. The amount of wild stock harvest in the new THA is unknown at this time.

BACKGROUND: *Southeastern Alaska Area Enhanced Salmon Allocation Plan* (5 AAC 33.364) defines fair and reasonable distribution of hatchery-produced salmon harvest among the seine, troll, and gillnet fleets. Through 2016 preliminary data, the seine and troll fleets have been below their allocation ranges for over three consecutive years and the gillnet fleet has been above their range for over three consecutive years. According to *Findings of the Alaska Board of Fisheries* 94-148-FB, #13, when harvest adjustments are deemed necessary to meet allocation percentage goals, the following tools should be used: special harvest area management adjustments; new production; and modification of existing production. New production and modifications of existing production are considered long term and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify imbalances until long-term adjustments can take effect.

From 1986 through 1995, SSRAA released king salmon at Carrol Inlet to provide harvest opportunity to the troll fleet. SSRAA discontinued the release primarily due to broodstock concerns at Whitman Lake Hatchery. In 2014, SSRAA approached the department with the idea of increasing the Whitman Lake Hatchery king salmon release at Neets Bay THA in order to increase harvest opportunity to the troll fleet, which is under their allocation range. The department was reluctant to support an increase at Neets Bay THA due to concerns with harvesting wild Unuk River king salmon. Carrol Inlet is a compromise that increases harvest opportunity to the troll fleet while potentially reducing concerns of wild stock interception.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The department **OPPOSES** the effective dates of June 15 to July 10 for purse seine and drift gillnet in the proposal due to wild pink and chum salmon management concerns, but would support effective dates of June 15 to July 1. The department also **OPPOSES** expanding the Carroll Inlet THA to include all waters of Carroll Inlet north of California Head from May 1 to July 10 for troll gear due to an unknown harvest rate of wild king salmon stocks and recommends the proposed expansion be managed by emergency order until migration patterns and encounter rates are better understood.

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.

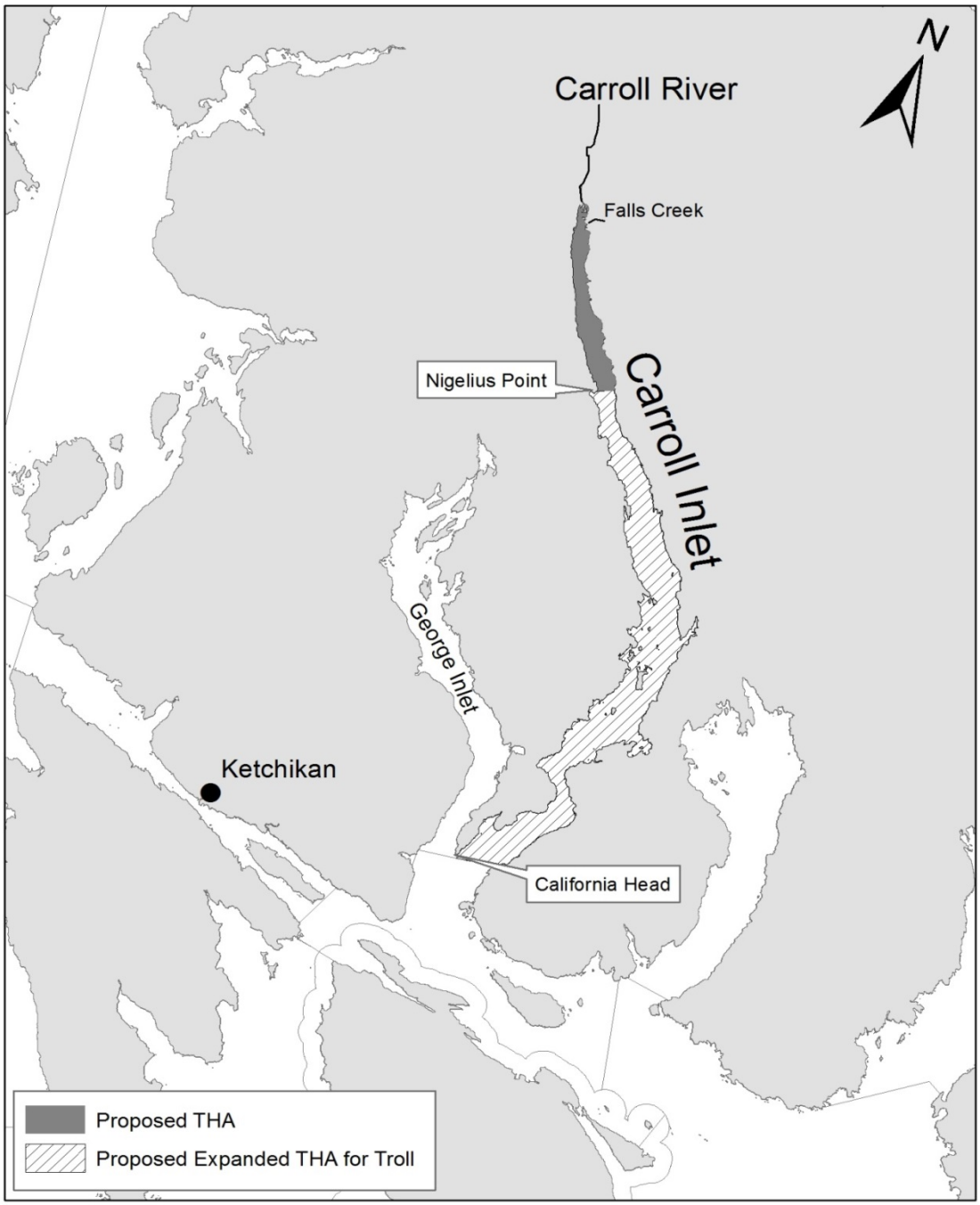

Figure 151-1.–Proposed Carroll Inlet THA.

PROPOSAL 152 – 5 AAC 33.383. District 7: Anita Bay Terminal Harvest Area Salmon Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This will more accurately describe the actual location of commercial salmon markers.

WHAT ARE THE CURRENT REGULATIONS? The Anita Bay THA consists of waters inside Anita Bay that are south and west of a line from Anita Point at the mouth of Anita Bay to a point on the northern shoreline on Etolin Island.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? A more precise description of the Anita Bay THA that matches current placement of commercial salmon markers would be in regulation. Any confusion between what is stated in regulation and marker placement would be reduced. The proposed description will clarify marker positions without significantly increasing or decreasing fishing area.

BACKGROUND: Anita Bay THA is a remote release site near Wrangell for hatchery produced king, coho, and chum salmon. The THA opens May 1 and closes November 10. All three commercial gear groups are included in the management plan for the THA.

The locations of regulatory markers do not always correspond to the points listed in regulation. Often regulatory markers are placed where there is a good place to fix the markers and where they are highly visible. This may be close to the points listed in regulation but not precisely on that point. In addition, some latitudes and longitudes have been in regulation for decades and were not taken with the precision that modern electronics provide. The department has been and continues to update descriptions in regulation with more precise locations of regulatory markers.

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.

PROPOSAL 153 – 5 AAC 33.360. District 1 Pink Salmon Management Plan.

PROPOSED BY: Southeast Alaska Seiners Association (SEAS).

WHAT WOULD THE PROPOSAL DO? This would repeal the *District 1 Pink Salmon Management Plan*.

WHAT ARE THE CURRENT REGULATIONS? Current regulations directly link harvest time given for the District 1 drift gillnet fishery to the harvest time given to the District 1 purse seine fishery. This management plan goes into effect on the third Sunday in July when both fleets are concurrently harvesting the same pink salmon stocks.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The gillnet fishery would continue to be managed based on the strength of pink salmon returns as well as other species. Managing the gillnet fishery in District 1 without the *District 1 Pink Salmon Management Plan* would put the department in a position of making allocative decisions among purse seine and drift gillnet gear. It would also allow the department to use time as a management tool to conserve sockeye salmon under the Pacific Salmon Treaty stipulations. However, after the third Sunday in July, the harvest of sockeye makes up less than 5% of the total harvest per week.

BACKGROUND: The *District 1 Pink Salmon Management Plan* was adopted in 1981 and revised in 1988. It links the harvest time given for the drift gillnet fishery to that of the purse seine fleet in District 1. This ties the drift gillnet harvest time to the abundance of pink salmon in District 1. Pink salmon compose an average of 71% of the total gillnet harvest during the time period the management plan is in effect.

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.

PROPOSAL 154 – 5 AAC 33.362. Lower Clarence Strait Pink Salmon Management Plan.

PROPOSED BY: United Southeast Alaska Gillnetters (USAG).

WHAT WOULD THE PROPOSAL DO? This would create a new drift gillnet fishery in District 2 in lower Clarence Strait with fishing time linked to the fishing time allowed for the purse seine fishery in District 2.

WHAT ARE THE CURRENT REGULATIONS? Current regulations do not allow drift gillnet fishing in District 2.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would change the way District 2 is managed for pink salmon. If pink salmon streams in District 2 are experiencing normal returns, this plan might have very little effect and simply replace purse seine harvest with drift gillnet harvest. In years with low returns, the department opens portions of District 2 where returns are strong, keeping weaker areas closed. Requiring the drift gillnet fishery to be open if any portion of District 2 is open to purse seine gear could force the department to keep the entire district closed to prevent fishing in weaker areas.

BACKGROUND This proposal would create a drift gillnet fishery in Clarence Strait similar to the Lower Clarence Strait drift gillnet fishery that was adopted by the board in 1984 as a means of increasing drift gillnet pink salmon opportunity. The lower Clarence Strait drift gillnet fishery was open from 1984 through 1988 in a portion of Districts 1 and 2 that encompassed approximately 144 square miles. The open area was located in off shore waters and had very low salmon harvests and effort levels. The average harvest was approximately 1,500 fish with over 90% being pink salmon. Effort ranged from zero boats in 1987 to 40 boats in 1988. This fishery was viewed as experimental in nature and the board removed the regulations due to lack of effort and harvest in 1989. The area description and proposed language is different than the 1984 management plan in several ways. This plan would open an eight nautical mile portion of District 2 exclusively to gillnet gear. The open area would be approximately one-quarter the size of the 1984 fishery and would include the shoreline. The proposal asks that if any portion of District 2 is open to purse seine gear then the portion of District 2 from Ingraham Point to Adams Point must be opened exclusively to drift gillnet gear. Although effort levels and harvest are unknown, overall harvest of pink salmon in this area by gillnet gear would most likely be less than is currently harvested by purse seine gear.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of the proposal and **OPPOSES** the loss of management flexibility that may lead to foregone harvest opportunity.

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.

PROPOSAL 155 – 5 AAC 33.366. Northern Southeast seine salmon fishery management plans.

PROPOSED BY: Southeast Alaska Seiners Association (SEAS).

WHAT WOULD THE PROPOSAL DO? This would eliminate the July wild sockeye salmon harvest limit for commercial purse seine fisheries on the Admiralty Island shoreline north of Point Marsden (Figure 155-1).

WHAT ARE THE CURRENT REGULATIONS? During the month of July, there is a wild sockeye salmon harvest limit of 15,000 for purse seine fisheries on the Admiralty Island shoreline north of Point Marsden (the Hawk Inlet shoreline), including the Amalga Harbor Special Harvest Area (SHA). Once this limit is reached, no further openings on this shoreline are allowed in July.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This could increase purse seine opportunity on north-bound pink salmon along the Hawk Inlet shoreline during July. Without a wild sockeye salmon harvest limit in regulation, it is likely in years of high pink salmon abundance that more aggressive purse seine openings would increase the exploitation of north-bound pink, sockeye, and other salmon species in this mixed stock area. Higher harvests of sockeye salmon in these directed pink salmon fisheries could limit harvest opportunities in directed sockeye salmon commercial drift gillnet, subsistence, sport, and personal use fisheries in Districts 11 and 15, while managing for escapements to the Taku, Chilkoot, and Chilkat rivers. Without a sockeye salmon harvest limit in place for July, or some other guideline, fishery managers will be required to make fishery decisions with allocative implications.

BACKGROUND: The northwestern shoreline of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline. A portion of all stocks of salmon returning to their natal streams in Lynn Canal, Stephens Passage, Seymour Canal, Frederick Sound, Chatham Strait, and Peril Strait pass through this area after they have entered the inside waters from the Gulf of Alaska through Icy Strait. The Hawk Inlet shoreline was not fished between 1973 and 1978 due to poor pink salmon returns. The return of seine gear to the shoreline in 1979 raised allocation concerns from drift gillnet fishermen in Lynn Canal and Stephens Passage and the area was closed during July by regulation in 1984. In 1989, the board adopted *Northern Southeast seine salmon fishery management plans* (5 AAC 33.366) into regulation, reopening the Hawk Inlet shoreline to purse seining in July to improve utilization of Lynn Canal and Taku River origin pink salmon. Under this regulation, openings are dependent on the abundance of early run pink salmon and the conservation of all stocks, in conjunction with a maximum harvest of 15,000 sockeye salmon during the month of July. These management plans were amended in 2003 to clarify the procedure used to account for the sockeye salmon harvest limit, and in 2006, to include only wild sockeye salmon in the 15,000 fish July harvest limit in response to the increasing enhanced sockeye salmon returns to the Douglas Island Pink and Chum (DIPAC) Snettisham Hatchery. In 2015, these plans were further amended by adding new language concerning south-bound sockeye salmon important to subsistence fisheries, and sockeye salmon harvested in the common property purse seine fisheries occurring in the Amalga Harbor Special Harvest Area (SHA) established in 2012 targeting enhanced chum salmon surplus to DIPAC cost recovery needs.

The main point of contention over purse seine fisheries on the Hawk Inlet shoreline concerns the incidental harvest of sockeye salmon in these directed pink salmon fisheries. The main north-bound sockeye salmon stocks are Chilkat and Chilkoot lakes in District 15, and Taku River and Port Snettisham in District 11. South-bound sockeye salmon stocks encountered in this area include Kook, Sitkoh, and Kanalku lakes, and the Hasselborg River, all important to subsistence needs for nearby communities. When there is an identified surplus of pink salmon available for harvest in this area, other sockeye salmon user groups express concern over the extent and duration of directed pink salmon purse seine openings along the Hawk Inlet shoreline and the impact these fisheries will have on directed sockeye salmon fisheries. Similar concerns are expressed regarding the enhanced chum salmon openings at the Amalga Harbor SHA. The existing harvest limit on wild sockeye salmon provides allocation guidance to commercial fishery managers when considering openings in this contentious mixed stock area.

Since 1989, purse seine fisheries on the Hawk Inlet shoreline have been opened in 15 of 29 seasons with annual harvests averaging 10,600 wild sockeye salmon, 780,000 pink salmon, and 68,000 chum salmon.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, but requests the board provide direction in allocating the burden of conservation and harvest opportunity for sockeye salmon in this contentious mixed stock fishery area.

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.

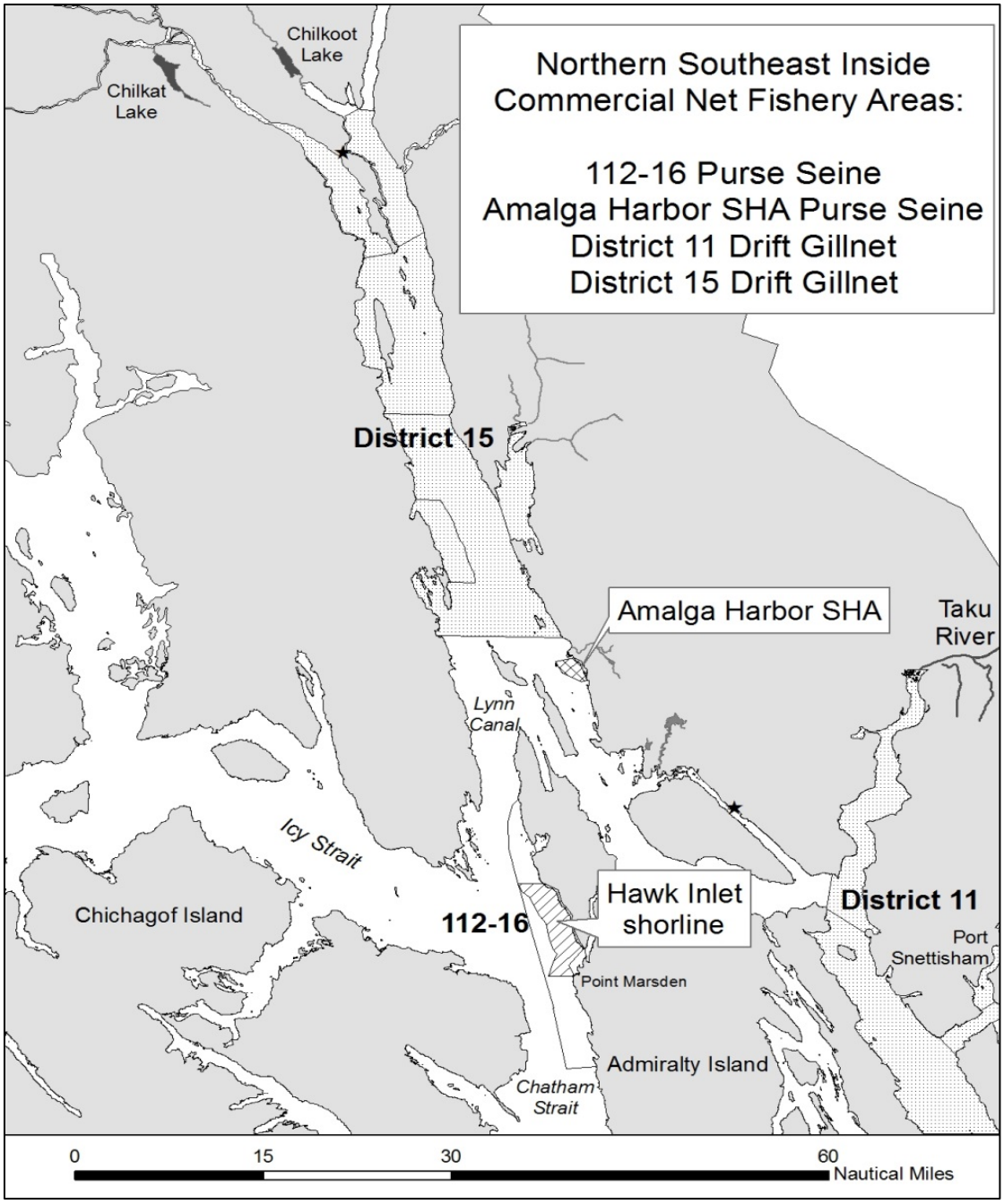

Figure 155-1.–Location of the Hawk Inlet shoreline and Amalga Harbor SHA purse seine and district 11 and 15 drift gillnet fishery areas.

PROPOSAL 156 – 5 AAC 33.366. Northern Southeast seine salmon fishery management plans.

PROPOSED BY: United Southeast Alaska Gillnetters (USAG).

WHAT WOULD THE PROPOSAL DO? This would change and extend the time period by two weeks when the wild sockeye salmon harvest limit for commercial purse seine fisheries on the Admiralty Island shoreline north of Point Marsden is in effect, from only the month of July to statistical weeks 28–33, approximately early-July to mid-August.

WHAT ARE THE CURRENT REGULATIONS? During the month of July, there is a 15,000 wild sockeye salmon harvest limit for purse seine fisheries on the Admiralty Island shore north of Point Marsden (the Hawk Inlet shoreline), including the Amalga Harbor Special Harvest Area (SHA). Once this limit is reached, no further purse seine openings are allowed on this shoreline in July.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would add additional limitations to purse seine fisheries targeting north-bound pink salmon along the Hawk Inlet shoreline for the first two weeks of August, decreasing purse seine opportunity to harvest north-bound pink salmon in years of high abundance.

BACKGROUND: The northwestern shore of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline (Figure 155-1). A portion of all stocks of salmon returning to their natal streams in Lynn Canal, Stephens Passage, Seymour Canal, Frederick Sound, Chatham Strait, and Peril Strait pass through this area after they have entered the inside waters from the Gulf of Alaska through Icy Strait. The Hawk Inlet shoreline was not fished between 1973 and 1978 due to poor pink salmon returns. The return of seine gear to the shoreline in 1979 raised allocation concerns from drift gillnet fishermen in Lynn Canal and Stephens Passage and the area was closed during July by regulation in 1984. In 1989, the board adopted *Northern Southeast seine salmon fishery management plans* (5 AAC 33.366) into regulation, reopening the Hawk Inlet shoreline to purse seining in July to improve utilization of Lynn Canal and Taku River origin pink salmon. Under this regulation, in the month of July, openings are dependent on the abundance of early run pink salmon and the conservation of all stocks, in conjunction with a maximum harvest of 15,000 sockeye salmon. These management plans were amended in 2003 to clarify the procedure used to account for the sockeye salmon harvest limit, and in 2006 to include only wild sockeye salmon in the 15,000 fish July harvest limit in response to the increasing enhanced sockeye salmon returns to the Douglas Island Pink and Chum (DIPAC) Snettisham Hatchery. In 2015, these plans were further amended by adding new language concerning south-bound sockeye salmon important to subsistence fisheries, and sockeye salmon harvested in the common property purse seine fisheries occurring in the Amalga Harbor Special Harvest Area (SHA) established in 2012 targeting enhanced chum salmon surplus to DIPAC cost recovery needs.

While temperature data shows general warming over the last 30 years, biological and catch data do not support a later shift in sockeye salmon run timing. In District 11, while it appears the harvest has been shifted later in the season since the mid-1990s, this can be attributed to the addition of the DIPAC Snettisham Hatchery enhanced sockeye salmon to the northern southeast waters during this time; with a run size similar in magnitude to the Taku River. The donor Speel Lake stock of sockeye salmon has later run timing than most of the Taku River stocks. The majority of the enhanced sockeye salmon from this source are harvested in the District 11 drift

gillnet fishery. The District 15 drift gillnet harvest does not show a similar shift and has a much lower proportion of enhanced Snettisham Hatchery sockeye salmon in the harvest. Sockeye salmon from several systems monitored with weirs in northern Southeast Alaska waters migrate northwards along the Hawk Inlet shoreline to their natal streams and are incidentally harvested in purse seine fisheries there. These include sockeye salmon returning to Auke, Chilkat, Chilkoot, Speel, Kuthai and Tatsamenie lakes. Using the midpoint of their annual total weir counts as an index of run timing for the stock, there is a slight shift towards an earlier run timing over the course of the last three decades. In addition to the weirs which monitor individual stocks of salmon, the department operates fish wheels on the Chilkat and Taku rivers to provide inseason and postseason run strength and timing information. These indicators are less precise being subject to environmental conditions such as water flow levels and fish wheel placement in the river channel, as well as monitoring multiple stocks of salmon sequentially passing by as in the case of the Taku River, whose production levels can vary independently. The fish wheel data also show little variation in the midpoint of their seasonal catches of sockeye salmon between decades.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Available data do not demonstrate a shift to later run timing for northern southeast Alaska sockeye salmon stocks that would necessitate extending the period of time the wild sockeye salmon cap along the Hawk Inlet shoreline applies.

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.

PROPOSALS 157 and 158 – 5 AAC 33.366. Northern Southeast seine salmon fishery management plans.

PROPOSED BY: United Southeast Alaska Gillnetters (USAG) (Proposal 157); Ryan Cook (Proposal 158).

WHAT WOULD THE PROPOSALS DO? Proposals 157 and 158 are requesting identical actions and would include all wild sockeye salmon harvested in the Amalga Harbor Special Harvest Area (SHA) common property purse seine fisheries in the wild sockeye salmon harvest limit for purse seine fisheries occurring north of Point Marsden in District 12 during July (Figure 157-1).

WHAT ARE THE CURRENT REGULATIONS? During July, there is a 15,000 wild sockeye salmon harvest limit for purse seine fisheries on the Admiralty Island shoreline north of Point Marsden in District 12 (the Hawk Inlet shoreline), including the Amalga Harbor SHA located in District 11. Once this limit is reached, no further openings are allowed on this shoreline in the month of July. Up to 2,000 wild sockeye salmon harvested in the Amalga Harbor SHA common property openings apply to the harvest limit, only from openings when the entire common property area is opened. The Amalga Harbor SHA provision expired in 2017.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? These may reduce purse seine opportunity on wild north-bound pink salmon targeted by purse seine fisheries on the Hawk Inlet shoreline in July by reaching the 15,000 wild sockeye salmon harvest limit sooner. In years of high sockeye and pink salmon abundance, this could reduce purse seine opportunities targeting enhanced chum salmon in the Amalga Harbor SHA if the July sockeye salmon harvest limit has been reached before the final Amalga Harbor SHA opportunity. Overall there would be little effect on sockeye salmon escapements and drift gillnet fisheries as the number of wild sockeye salmon harvested in the Amalga Harbor SHA is small compared to total drift gillnet harvests and escapements.

BACKGROUND: From the onset of cost recovery fisheries in the Amalga Harbor SHA in 1993, cost recovery operations occur 25 days a year on average by one or two seine vessels with an average harvest of 850 sockeye and 850,000 enhanced chum salmon annually. Since the onset of common property purse seine fisheries in 2012, there has been an average of four openings a year, an average of 84 seine vessels have participated and have harvested an average of 2,700 sockeye and 450,000 chum salmon annually. In the four initial common property fishery opportunities in 2012 and 2013, the majority of the SHA was opened to the purse seine fleet and the sockeye salmon harvest averaged 1,900 sockeye salmon in each opening. In an effort to reduce the incidental harvest of sockeye salmon in this directed enhanced chum salmon fishery, area managers reduced the open area to focus the fleet closer to shore. This was based on field observations of catches that suggested more sockeye salmon were harvested by boats fishing farther offshore.

All the sockeye salmon that are incidentally harvested in the Amalga Harbor SHA fisheries migrate into the inside waters through Icy Strait and northwards into Lynn Canal, the same migration pathway in which the Hawk Inlet shoreline fisheries target north-bound pink salmon.

Genetic Stock Identification (GSI) results from the 2013 and 2014 Amalga Harbor SHA fisheries indicate on average 90% of the sockeye salmon encountered in these July fisheries are bound for District 11 systems, primarily the Taku River and Port Snettisham. Of the remaining 10%, 4%

were bound for the Chilkoot and Chilkat rivers in District 15 and 6% were bound for other systems, mostly low producing streams that flow into Stephens Passage and Lynn Canal.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these allocative proposals.

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.

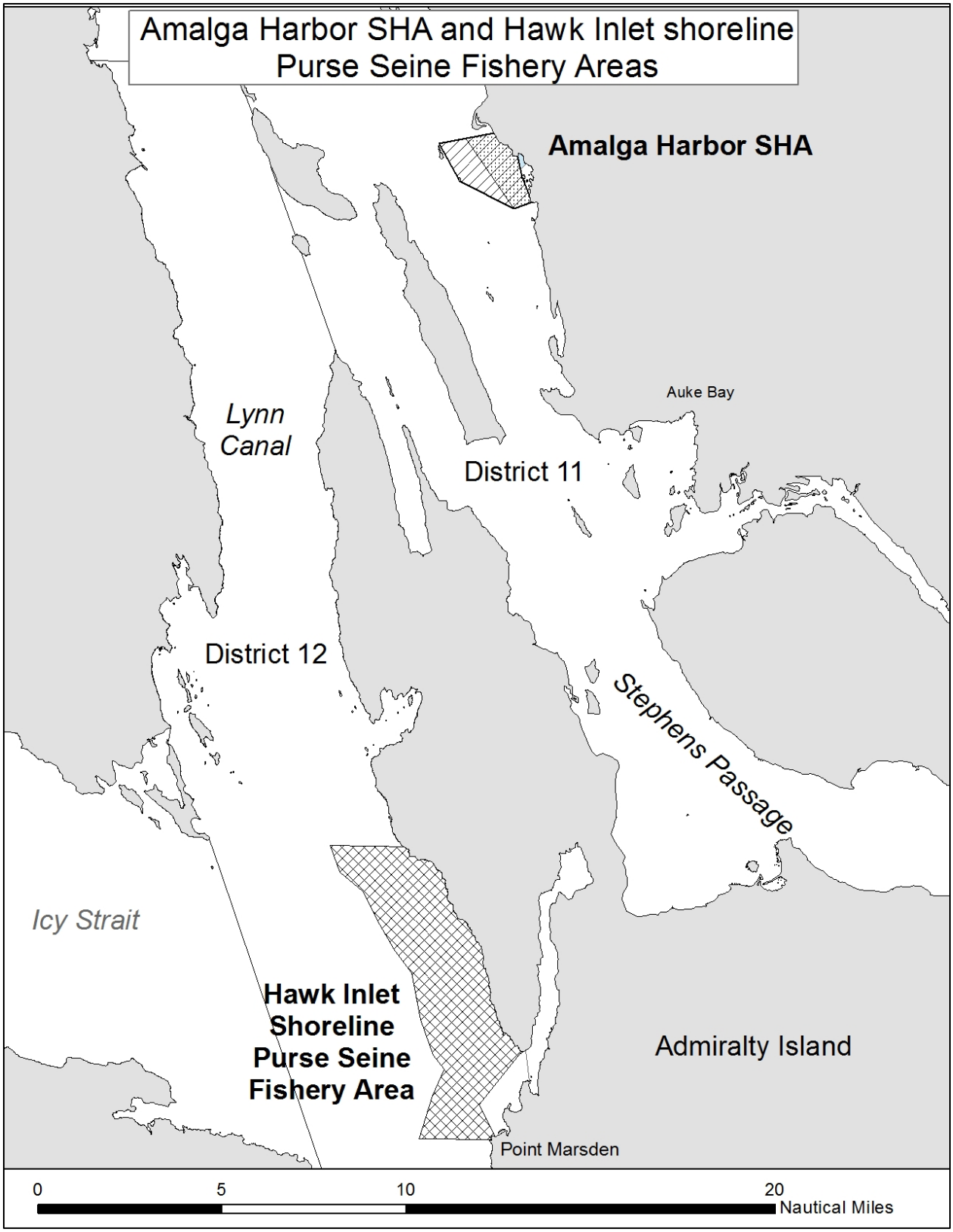

Figure 157-1.–Amalga Harbor SHA common property and Hawk Inlet Shoreline fishery areas.

Miscellaneous (3 Proposals)

PROPOSAL 159 – 5 AAC 33.XXX. New Section.

PROPOSED BY: John M. Johanson.

WHAT WOULD THE PROPOSAL DO? This would prohibit the use of all aircraft (manned and unmanned) during commercial salmon openings in Southeast Alaska to locate salmon or direct fishing operations.

WHAT ARE THE CURRENT REGULATIONS? There are no regulations pertaining to the use of manned aircraft in Southeast Alaska, therefore, the use of manned aircraft is unrestricted.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The use of aircraft to assist in commercial fishing operations would be allowed only during closed periods. The effectiveness of boats that currently use aircraft to locate fish and/or other boats during open commercial fishing periods may be reduced.

BACKGROUND: Aircraft have been used for decades in the Southeast Alaska purse seine fishery. Typically, one aircraft will spot for a group of boats. The department does not have information on how many purse seine vessels utilize aircraft, but that number is believed to be a minority. The department is not aware of the use of aircraft to locate fish or direct fishing operations in the commercial troll or drift gillnet fisheries. Five areas in the state currently prohibit aircraft use: Bristol Bay (5 AAC 06.379), Alaska Peninsula (5 AAC 09.378), the Mainland District of Kodiak (5 AAC 18.332), the Central and Northern Districts of Cook Inlet (5 AAC 21.379), and Prince William Sound (5 AAC 24.378). The board has failed to adopt proposals banning the use of aircraft in Southeast Alaska during past board meetings, most recently in 2015; however in 2015 the board did adopt a regulation banning the use of unmanned aircraft during commercial fishing periods (5 AAC 33.398).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Prohibiting aircraft use during commercial salmon fisheries would not impact the department's ability to manage for sustained yield and meet escapement goals.

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.

PROPOSAL 160 – 5 AAC 33.350. Closed waters.

PROPOSED BY: Southeast Alaska Fishermen's Alliance & United Southeast Alaska Gillnetters.

WHAT WOULD THE PROPOSAL DO? This will make changes to the closed waters descriptions in regulation to allow commercial fishing in stream mouths that are ordinarily closed.

WHAT ARE THE CURRENT REGULATIONS? Unless otherwise specified, commercial fishing is prohibited in fresh waters of streams and rivers, within 500 yards of the fresh waters of a salmon stream, and over the beds or channels of fresh waters of streams and rivers during all stages of the tide (5 AAC 39.290). A salmon stream is defined as any stream used by salmon, at any stage of life, for spawning, rearing, presence, or migration (5 AAC 39.975). The Nakat Inlet THA management plan includes specific closed waters within 500 yards of the terminus of Nakat Lake Creek. Waters closed by regulation may be open by emergency order based on wild stock escapement levels. The *Policy for the management of sustainable salmon fisheries* (5 AAC 39.222) provides an outline for managing salmon fisheries to provide protection to wild salmon stocks from adverse impacts from enhancement efforts.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Commercial fishing would be allowed within 500 yards and over the stream beds and channels of certain streams within the hatchery THAs. As such, commercial fishermen would be able to better utilize the THA. The overall harvest of salmon, wild and enhanced, may increase. The escapement of wild salmon that utilize these streams may decrease.

BACKGROUND: The board adopted new definitions for closed waters and salmon stream during the 2013 Statewide Finfish and Supplemental Issues meeting. The board changed these definitions because there was confusion on how closed waters were defined and enforced by Department of Public Safety. The new definition for closed waters prohibits commercial fishing within 500 yards of the fresh water of a salmon stream during all stages of the tide. The definition for salmon stream was also clarified to include the use by salmon at any stage of life, not just for spawning.

Salmon and trout will utilize streams in different ways. Trout, including Dolly Varden, cutthroat, and steelhead may spawn and juveniles rear in a stream or there may just be juvenile rearing in the stream. Coho salmon are similar in that juveniles can be found rearing in a stream where coho salmon are not known to utilize the stream for spawning. Pink and chum salmon only utilize a stream for spawning. Sockeye salmon in Southeast Alaska are typically associated with a lake system where they spawn in the inlet to the lake and rear in the lake for 1 to 2 years before migrating to sea. Returning salmon typically school in or near the mouth of the stream before entering. The time during which they school in the mouth depends on the flow conditions and water temperature of the stream. During this period, they are highly susceptible to harvest if no closed waters are in effect. Trout and juvenile salmon are not very susceptible to harvest by commercial net gear as the mesh size allows most trout and juvenile salmon to pass through. Table 160-1 identifies the streams and those species found in those streams for each of the THAs and streams included in this proposal.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Removing restrictions to protect spawning wild salmon could allow harvest of returning salmon beyond what is sustainable.

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 160-1.–Anadromous fish presence in streams within THAs.

Stream #	Sockeye salmon	Coho salmon	Pink salmon	Chum salmon	Cutthroat trout	Dolly Varden	Steelhead trout
			Nakat Inlet THA				
101-11-10220			✓	✓			
101-11-10230			✓				
101-11-10250		✓	✓	✓			
101-11-10270			✓				
101-11-10290		✓	✓	✓			
101-11-10330	✓	✓	✓	✓			✓
101-11-10370		✓	✓	✓	✓	✓	✓
101-11-10390	✓	✓	✓	✓		✓	✓
101-11-10410		✓	✓				
			Anita Bay THA				
107-30-10760		✓	✓	✓			
107-30-10780		✓	✓	✓			
107-30-10800		✓	✓	✓			✓
107-30-10810		✓	✓	✓			✓
107-30-10836			✓	✓			
107-30-10840			✓	✓			
107-30-10900		✓	✓	✓			
			Deep Inlet				
113-41-10360				✓			
113-41-10370		✓	✓	✓		✓	
113-41-10380		✓	✓	✓		✓	
113-41-10390		✓	✓	✓			
			Boat Harbor THA				
115-10-10500		✓					

PROPOSAL 161 – 5 AAC 33.350. Closed waters.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THIS PROPOSAL DO? This would update commercial salmon fishery closed waters coordinates in Whitewater Bay.

WHAT ARE THE CURRENT REGULATIONS? The regulation describes a point to point line across the mouth of Whitewater Bay on the southwest shore of Admiralty Island defining closed waters.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? This will accurately describe regulatory closed waters of Whitewater Bay.

BACKGROUND: The latitude and longitude of the point on the north shore of the mouth of Whitewater Bay described in regulation are in error, indicating a point some 420 nautical miles south of the actual position. Correcting this in regulation will assist commercial fishermen in understanding the closed waters boundary line described for Whitewater Bay.

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

COST ANALYSIS: If this proposal is adopted, there will be no cost to individuals participating in commercial salmon fisheries.

COMMITTEE OF THE WHOLE GROUP 5: Commercial Salmon: Set Gillnet, Purse Seine, Drift Gillnet, Troll (24 proposals: Chair - TBD)

Set Gillnet (4 Proposals)

PROPOSAL 162 - 5 AAC 30.310. Fishing seasons.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would increase the allowable set gillnet gear of 15 fathoms in length to 75 fathoms, and expand the area where set gillnet gear is allowed in the remainder of the Yakutat District if the department closes the fishing area from the confluence of the Lost River to the mouth of the Situk-Ahrnklin Inlet for king salmon conservation. The proposed fishing area would be limited to waters along the shoreline southeast of Ocean Cape to a point one mile from the mouth of the Situk-Ahrnklin Inlet up to one mile offshore.

WHAT ARE THE CURRENT REGULATIONS? Salmon may be taken in the remainder of the district from the fourth Sunday in June until the fishery is closed by emergency order. *Gillnet specifications and operations* (5 AAC 30.331) defines set gillnet use in "other waters" of the Yakutat District not listed in regulation. These waters include the surf line beyond the outermost bars at mean low tide. An individual may only operate one set gillnet no longer than 15 fathoms in length. *Gillnet operation in surfline areas* (5 AAC 30.340) allows a permit holder to operate a set gillnet in the area within a radius of one-half mile from the terminus of a river fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Individual fisheries, particularly the Situk River, would need to be carefully monitored to determine whether an increase in gear warranted a change in management strategies. A decrease in allowable fishing time may be necessary to offset the effects of increased harvest to insure adequate escapement.

BACKGROUND: With few exceptions, the set gillnet fishery in the Yakutat Management Area is confined to the intertidal area inside the mouths of the various rivers and streams and the ocean waters immediately adjacent to each. Approximately 167 commercial set gillnet entry permits are renewed annually and up to 118 permits have been actively fished in the recent decade. The Situk-Ahrnklin Inlet is the most productive fishery in the Yakutat Area and normally supports the largest concentration of fishing effort (up to 100 permits). Set gillnet permit holders in the Yakutat Area do not have registered sites and may fish in any open fishing area. They may also move between fishing areas during the season as long as not more than one area is fished concurrently. Yakutat Bay is the only fishery in the Yakutat Area where a 75 fathom net can be operated. With the exception of Yakutat Bay, the surfline areas are seldom fished due to the hazards of operating open skiffs in heavy surf.

The king salmon commercial, subsistence, and sport fisheries in the Situk River drainage are managed according to the *Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan* (5 AAC 30.365). The plan directs the department to manage fisheries to achieve a biological escapement goal (BEG) of 450–1,050 large (three ocean age and older) king salmon. The Situk River king salmon BEG has only been achieved three of the last eight years. Due to record low escapements of Situk River king salmon, conservation measures have been implemented since 2011 to protect this stock. Commercial fishery actions were focused on area restrictions

while trying to maintain a weekly fishing schedule beginning the third Sunday in June. Management options for maximizing harvest of Situk River sockeye salmon are limited due to the overlap in run timing with king salmon. In addition, an area around the Lost River mouth is closed by regulation to conserve Lost River sockeye and coho salmon that are harvested incidentally in the Situk-Ahrnklin Inlet fishery (5 AAC 30.350 (a)(7)). Area closures have displaced some traditional fishing sites (up to 10 permits) and fishermen have moved to other fishing sites in the Situk-Ahrnklin Inlet or Yakutat Bay.

Tag recovery data in Yakutat Bay from 1987 indicated that approximately 50% of the sockeye salmon harvested were of Situk River origin. While there is limited harvest information from the proposed fishing area, illegal fishing took place in this area in 2007–2009. Approximately ten permit holders fished in this area using 75 fathom gillnets where legal gear length is 15 fathoms. The Yakutat Management Area sockeye salmon fishery was declared a disaster in 2008 with a total harvest of 35,000 fish. At that time, it was estimated from fish tickets that nearly half of the sockeye salmon harvest came from illegal fishing that occurred in the proposed fishing area. Alaska Wildlife Troopers no longer have a representative stationed in Yakutat making enforcement difficult. The department does not have the personnel to closely monitor the fishery.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Opening this mixed stock area to 75 fathom set gillnets will likely result in increased harvests of Situk River and other local salmon stocks. This may create a biological or conservation concern for already depressed Situk River king salmon stocks. The department would need to closely monitor those fisheries to evaluate inseason management actions needed to manage the stocks in the Situk River, among other systems in the Yakutat area.

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.

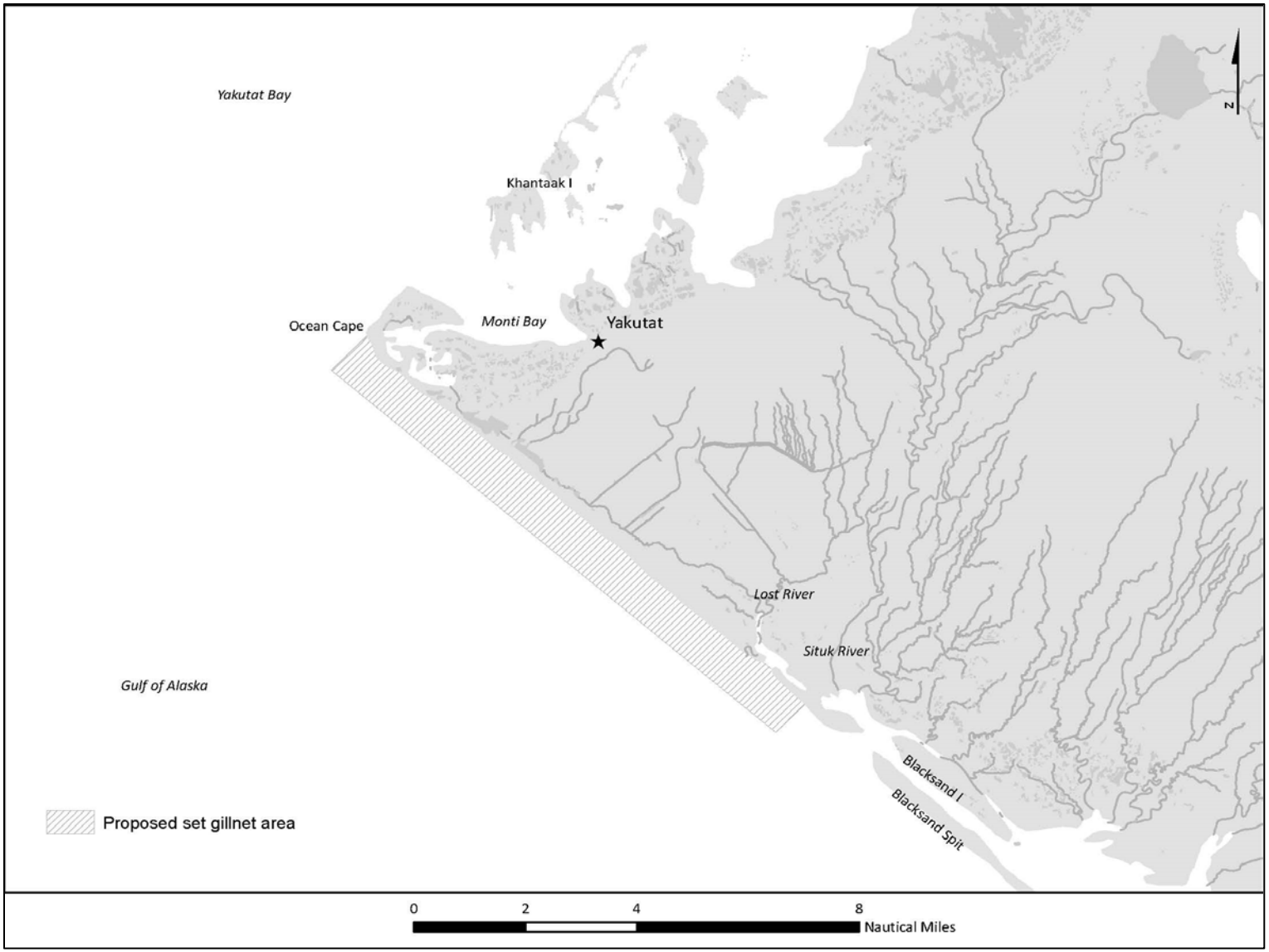

Figure 162-1.–Proposed set gillnet fishing area with a 75 fathom net.

PROPOSAL 163 – 5 AAC 30.345. Requirements and specifications for operation of two units of set gillnet gear in Yakutat Area.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would remove the sunset provision from the regulation allowing individuals who hold two Yakutat set gillnet permits to fish two units of gear in the Situk-Ahrnklin Inlet, the waters of Yakutat Bay, and the Kaliakh River if the projected escapement of king salmon in the Situk River exceeds 750 large fish.

WHAT ARE THE CURRENT REGULATIONS? An individual who holds two Yakutat Area set gillnet permits may operate two units of set gillnet gear in Situk-Ahrnklin Inlet, the marine waters of Yakutat Bay north of line from Point Manby to Ocean Cape, and the Kaliakh River if the projected escapement of king salmon in the Situk River exceeds 750 large fish. The regulation will sunset on December 31, 2017. These provisions do not apply during the coho salmon season and permit stacking operations can be utilized in the three fisheries during the fall.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? There are no biological concerns with the regulation because there are only a few individuals who own two limited entry set gillnet permits. If the number of stacked permits increases, this could increase the gear in those systems well over historical levels. This could potentially create a biological or conservation concern and the department would be required to closely monitor those fisheries to evaluate inseason management actions needed to manage the stocks in those systems.

BACKGROUND: This regulation was adopted from a board generated proposal in 2012 with a sunset period of five years. In 2015, the Yakutat Fish and Game Advisory Committee submitted a similar proposal to allow a CFEC permit holder who owns two set gillnet permits to operate two units of gear in all waters of the Yakutat Area. The department expressed concern given the potential to increase gear in some of the smaller Yakutat Area fisheries and the proposal was not adopted.

Up to 167 Yakutat set gillnet permits are renewed annually, and of those, an average of 118 permits are actively fished each year. The total number of active CFEC permit holders has remained steady over the last 10-year period and it is unlikely that number will change significantly. Permit stacking operations have been prohibited in the Situk River and Yakutat Bay sockeye salmon fisheries since the implementation of this proposal due to record low returns of Situk River king salmon. Currently, only a few individuals own two limited entry set gillnet permits and have utilized the opportunity to fish additional gear in the Situk-Ahrnklin Inlet and Yakutat Bay coho salmon fisheries. The Kaliakh River has not been commercially fished since 2010.

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

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery due to the cost of obtaining a second CFEC permit.

PROPOSAL 164 – 5AAC 30.350. Closed waters.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? It would update commercial salmon fishery closed waters in the Situk-Ahrnklin Inlet.

WHAT ARE THE CURRENT REGULATIONS? In the Situk-Ahrnklin Inlet salmon may not be taken upstream of a line from a department regulatory marker located on Hoggish Point, southeast to a department regulatory marker on the opposite bank of the Situk River channel, to a department regulatory marker on the cut bank on the eastern side of the mouth of Johnson Slough.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would correct inaccurate regulatory marker locations defining the closed waters near the mouth of the Situk River. Correcting this regulation will help commercial fishermen better understand the area closed to commercial fishing.

BACKGROUND: The current regulation describes three regulatory marker locations for the closed waters boundary line and one of the landmarks no longer exist.

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

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

PROPOSAL 165 – 5AAC 30.350. Closed waters.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? It would move the regulatory markers in the Tsiu River and provide a more accurate description of closed waters that reflect the current changes of the Tsiu and Tsivat rivers.

WHAT ARE THE CURRENT REGULATIONS? In the Tsiu River, salmon may not be taken upstream of department regulatory markers located approximately one-half mile downstream from Duck Camp Island.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The proposed regulatory marker locations will close waters necessary to protect fish for escapement needs. The department has moved the regulatory markers to the proposed location for the last four years and there has been no conflict between the user groups.

BACKGROUND: The area description for closed waters on the Tsiu River is no longer applicable due to geophysical changes in the river channel. The Tsivat River is adjacent to the Tsiu River and has a few overflow channels that drain into the Tsiu River. In 2012, one of the overflow channels from the Tsivat River cut across the sand flats inland of the Tsiu River and has become a major tributary and new migration route for coho salmon. This new confluence of the Tsiu and Tsivat rivers is approximately one mile downstream of Duck Camp Island. Salmon are no longer migrating up the Tsiu River, instead entering the Tsivat River well before they reach the current upper marker location. By emergency order, the department has moved the regulatory markers to the proposed location for the last four years to compensate for the new migration route and to protect salmon for escapement needs.

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

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

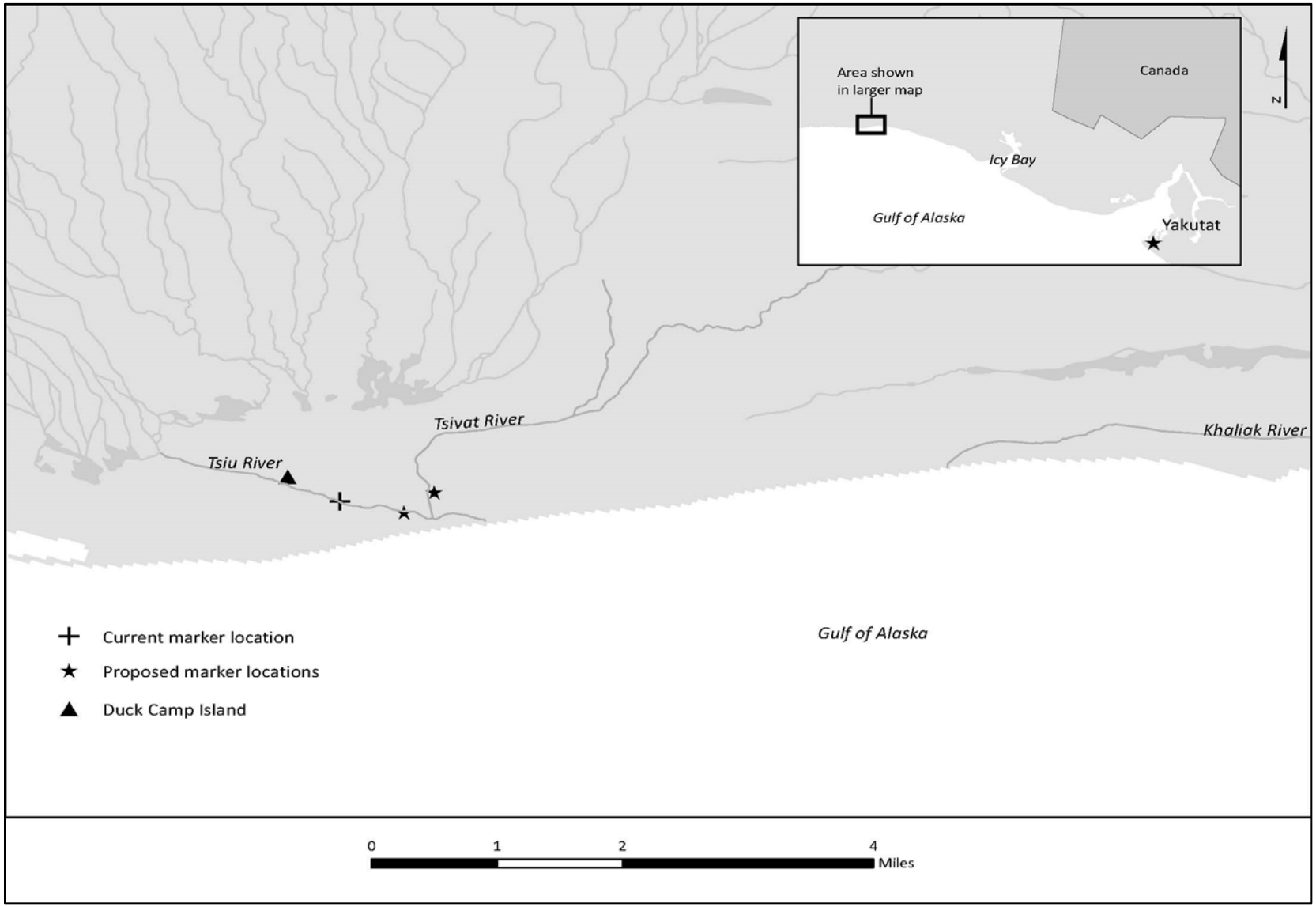

Figure 165-1.–Proposed regulatory marker locations on Tsiu and Tsivat rivers.

Purse Seine (3 Proposals)

PROPOSAL 166 – 5 AAC 33.366. Northern Southeast seine salmon fishery management plans.

PROPOSED BY: Stan Savland.

WHAT WOULD THE PROPOSAL DO? This would provide a weekly commercial index fishery in a limited area on the Admiralty Island shoreline north of Point Marsden targeting north-bound pink salmon with purse seine gear to provide data for managing the purse seine fishery in this area.

WHAT ARE THE CURRENT REGULATIONS? During July, there is a 15,000 wild sockeye salmon harvest limit for purse seine fisheries on the Admiralty Island shoreline north of Point Marsden (the Hawk Inlet shoreline), including the Amalga Harbor Special Harvest Area (SHA). Once this limit is reached, no further openings on this shoreline are allowed in the month of July.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? It is likely the harvest of sockeye salmon from an index fishery would be higher than in the existing test fishery along this shoreline due to the increased number of vessels participating and number of sets likely to occur. It is also likely to reduce the number of sockeye salmon available to be taken in more extensive openings in which the wild sockeye salmon harvest limit applies. Currently, northern Southeast Alaska inside waters pink salmon returns have been shifting towards an odd-year dominant cycle, with very poor returns in even years. There may be no effort in an index fishery during years with low pink salmon returns and if the existing test fishery is replaced by an index fishery, there may be no information on returning salmon run strength in this area. Any sockeye salmon harvested in this proposed common property index fishery would add to the cumulative July wild sockeye salmon harvest limit.

BACKGROUND: The northwestern shore of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline (Figure 166-1). A portion of all stocks of salmon returning to their natal streams in Lynn Canal, Stephens Passage, Seymour Canal, Frederick Sound, Chatham Strait, and Peril Strait pass through this area after they have entered the inside waters from the Gulf of Alaska through Icy Strait. The Hawk Inlet shoreline was not fished between 1973 and 1978 due to poor pink salmon returns. The return of seine gear to the shoreline in 1979 raised allocation concerns from drift gillnet fishermen in Lynn Canal and Stephens Passage and the area was closed during July by regulation in 1984. In 1989, the board adopted *Northern Southeast seine salmon fishery management plans* (5 AAC 33.366) into regulation, reopening the Hawk Inlet shoreline to purse seining in July to improve utilization of Lynn Canal and Taku River origin pink salmon. Under this regulation, during the month of July, openings are dependent on the abundance of early run pink salmon and the conservation of all stocks, in conjunction with a maximum harvest of 15,000 sockeye salmon. These management plans were amended in 2003 to clarify the procedure used to account for the sockeye salmon harvest limit, and in 2006 to include only wild sockeye salmon in the 15,000 fish July harvest limit in response to the increasing enhanced sockeye salmon returns to the Douglas Island Pink and Chum (DIPAC) Snettisham Hatchery. In 2015, these plans were further amended by adding new language concerning south-bound sockeye salmon important to subsistence fisheries, and sockeye salmon harvested in the common property purse seine fisheries occurring in the Amalga

Harbor Special Harvest Area (SHA) established in 2012 targeting enhanced chum salmon surplus to DIPAC cost recovery needs.

An index fishery similar to the one being proposed has been opened regularly the third Sunday in June at Point Augusta at the intersection of Icy and Chatham straits in order to collect northern Southeast Alaska incoming pink salmon run strength information to guide purse seine fishery management decisions (Figure 166-1). These fisheries are allowed without any supporting returning pink salmon abundance information and provide insight into early season run strength. At Point Augusta, a one-mile portion of shoreline is opened out to one-half mile offshore. In recent even years with very low abundance of pink salmon, the Point Augusta index fisheries have been the only purse seine opportunities provided to the purse seine fleet in the Juneau Management Area and closed after several weeks once poor run strength was confirmed. Index fishery catch information is included in department news releases comparing harvests to historical index fishery averages. Once the returning pink salmon run strength is determined adequate to support further fisheries, the Point Augusta area is expanded and adjacent areas are opened, and the harvests from the area are no longer utilized as an index. Various sized fleets work this area when opened, but the limited area only allows room for up to four boats at a time to make sets. With a one-half mile length of shoreline open to one-half mile offshore in the proposed Hawk Inlet shoreline index area, a maximum of four sets could be made simultaneously, two for north-bound fish and two for south-bound fish.

Since 1989, a test fishery has been utilized to assess pink and other salmon species abundance along the Hawk Inlet shoreline. A purse seine vessel is chartered to conduct four weekly test fisheries beginning in late June. One set is made at each of four specified locations for a set duration of time with the fisherman choosing the order of the locations fished and whether to set for north or south-bound salmon, depending on local conditions (Figure 166-1). The results of the day's sets are compared to historical results and an assessment is made of relative abundance of pink and other salmon species along the shoreline to aid in fishery management decision making. Test fishery results indicate that the farther north along the Admiralty Island shoreline from Point Marsden sets are made, the higher the incidence of sockeye and chum salmon. The harvest of sockeye salmon in the test fisheries are not included in the 15,000 wild sockeye salmon harvest limit described in *Northern Southeast seine salmon fishery management plans*. The current test fishery occurs every season regardless of pink salmon abundance and provides a long-term data series to compare relative abundance of all returning salmon species.

Under the current management regimen of early season openings on Thursday and Sunday, common property index fisheries would have to occur on Thursdays so the information would be available for decisions for the following Sunday opening. Should the regional fishery schedule shift to two days on and two days off, a one-day index fishery could be opened during one cycle to provide information for openings in the following cycle. Participating vessels would have to be identified and their sockeye salmon harvests would be part of the 15,000 wild sockeye salmon harvest limit in regulation.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, but has concerns regarding the potential for harvests from the proposed index fishery to be mixed with harvests from other areas opened concurrently and misrepresented on fish tickets. Furthermore, obtaining otolith samples of incidentally harvested sockeye salmon from the index area to analyze for enhanced sockeye salmon contributions may be increasingly difficult for department port sampling staff to obtain.

Under current regulations, the department could open an index fishery as described in this proposal, but has not done so because the existing test fishery provides consistent reliable results in a controlled manner. If approved, the board should provide guidance regarding the extent of area and time the proposed index fishery may be opened weekly, the dates between which these fisheries may be prosecuted, and whether or not such a fishery may be opened in years of known poor pink salmon abundance.

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.

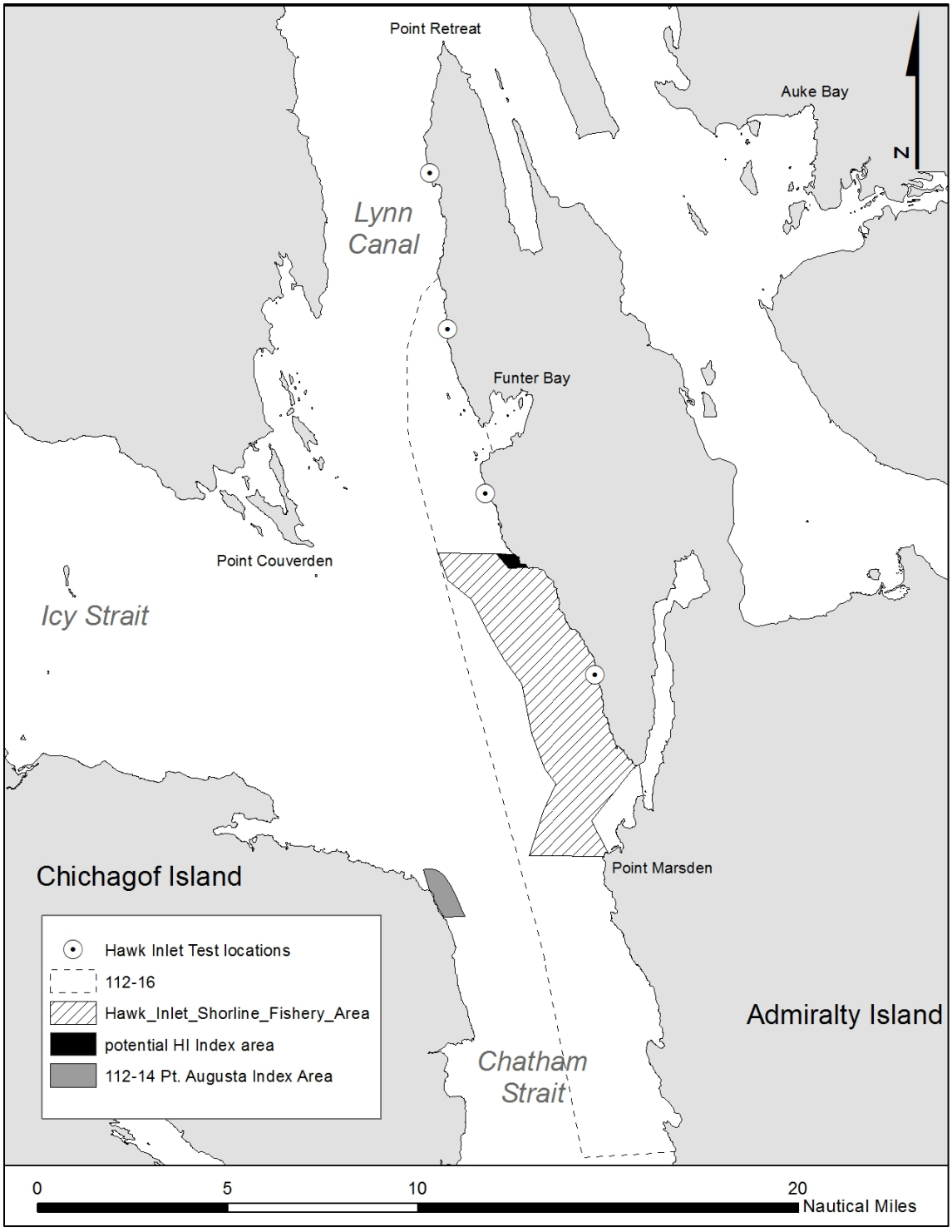

Figure 166-1.–Hawk Inlet shoreline open fishing area, Test Fishery set locations, Point Augusta Index fishery location and potential Hawk Inlet Index Fishery location.

PROPOSAL 167 – 5 AAC 33.350. Closed waters.

PROPOSED BY: William Prisciandaro.

WHAT WOULD THE PROPOSAL DO? This would close waters beyond one-half mile from shore in Subdistricts 112-14, 112-16, 114-25, and 114-27 to commercial fishing for salmon with purse seine gear.

WHAT ARE THE CURRENT REGULATIONS? In districts 12 and 14, salmon may be taken with purse seines only during periods established by emergency order, except that in District 12 north of Point Marsden, salmon may only be taken in accordance with *Northern Southeast seine salmon fishery management plans* (5 AAC 33.366).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would result in reduced opportunity for the purse seine fleet to harvest migrating pink salmon in the Districts 12 and 14 corridor area during seasons of high pink salmon abundance (Figure 167-1). Fewer salmon would be harvested by the purse seine fleet, and there would be increased competition and congestion on the fishing grounds with more boats competing for fewer set opportunities in the limited area. In years of high pink salmon abundance, drift gillnet fisheries in Districts 11 and 15 would see higher salmon harvests and some pink salmon systems could have over-escapement issues.

BACKGROUND: Under normal conditions with no conservation concerns, Subdistricts 112-14 and 112-16 in Chatham Strait, and Subdistrict 114-27 in Icy Strait are typically opened to two miles off shore to provide the purse seine fleet ample opportunity to harvest pink salmon. Due to the higher proportions of northbound sockeye and chum salmon present on the northern shoreline of Icy Strait, Subdistrict 114-25 is opened infrequently when high numbers of pink salmon bound for local streams are observed, and held to one-half mile from shore in order to minimize the incidental harvest of other salmon species migrating through the area. The majority of salmon returning to Districts 11 and 15 migrate through these subdistricts. The 2008–2017 average purse seine harvests from these subdistricts are 175 king, 38,000 sockeye, 22,000 coho, 4,324,000 pink, and 145,000 chum salmon. The 2008–2017 average drift gillnet harvests from Districts 11 and 15 combined are 3,100 king, 258,000 sockeye, 76,000 coho, 389,000 pink, and 1,773,000 chum salmon.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, but **OPPOSES** losing the ability to provide appropriate purse seine fishing area to harvest pink salmon surplus to escapement needs. The department's emergency order authority currently provides the latitude to reduce open fishery areas to conserve specific stocks of salmon migrating through this corridor area if deemed necessary, and restrictions on the distance from shore the department may open these areas are not needed to manage these mixed stock corridor areas.

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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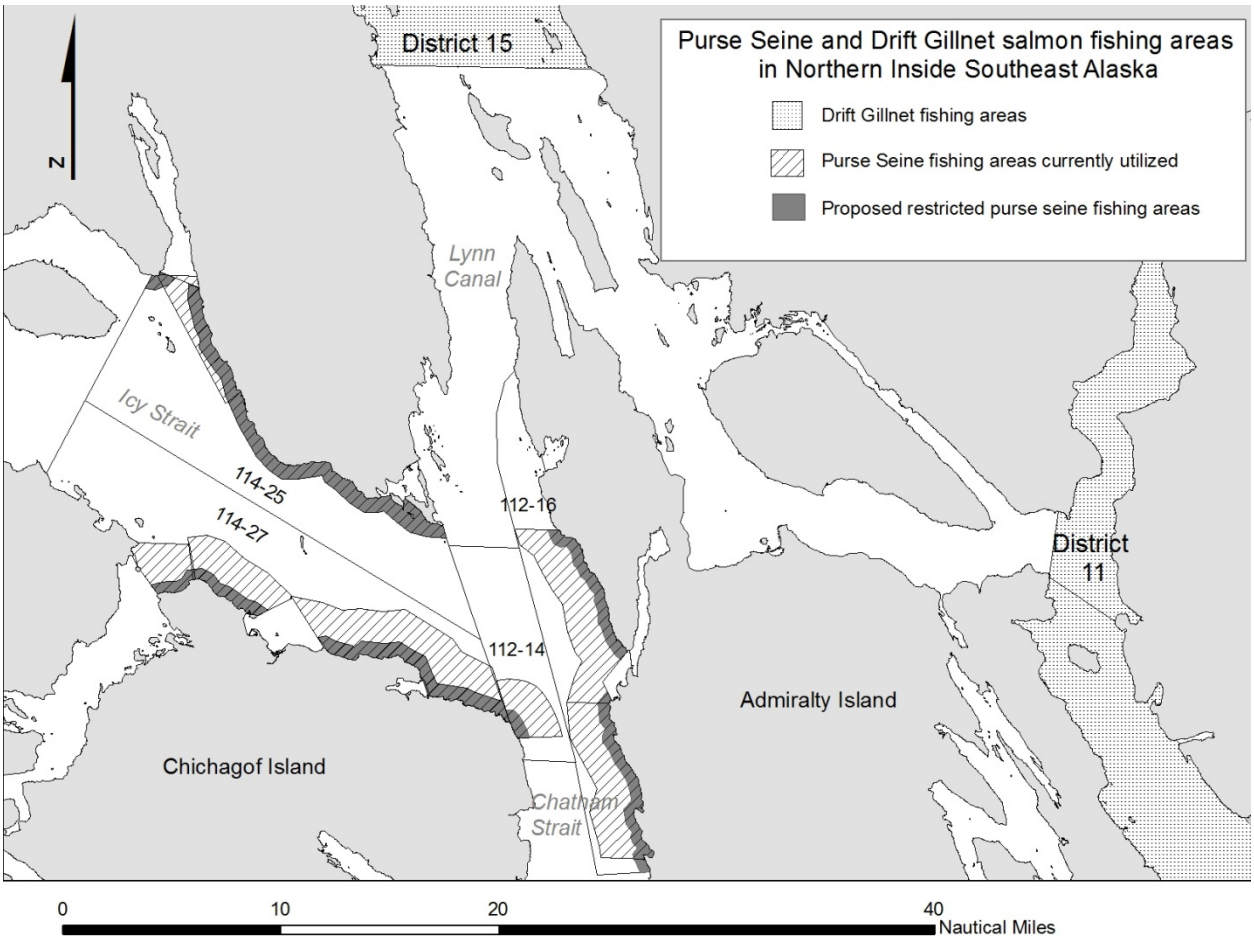

Figure 167-1.–Currently utilized and proposed restricted purse seine fishery areas in subdistricts 112-14, 112-16, 114-25 and 114-27**.**

PROPOSAL 168 – 5 AAC 33.350. Closed waters.

PROPOSED BY: Ryan Cook.

WHAT WOULD THIS PROPOSAL DO? This would close waters in subdistricts 112-14, 112-16, 114-25, and 114-27 to commercial fishing with purse seine gear in order to conserve king salmon (Figure 168-1).

WHAT ARE THE CURRENT REGULATIONS? In Districts 12 and 14, salmon may be taken with purse seines only during periods established by emergency order, except that in District 12 north of Point Marsden, salmon may only be taken in accordance with *Northern Southeast seine salmon fishery management plans* (5 AAC 33.366).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Closing these waters to commercial fishing with purse seine gear will lead to foregone pink salmon harvest opportunities to the purse seine fleet and could result in escapement in excess of goals in years of strong pink salmon returns.

BACKGROUND: Subdistricts 112-14, 112-16, 114-25, and 114-27 are a portion of the core migration corridor area for salmon returning from the Pacific Ocean through Cross Sound and Icy Strait bound for their natal spawning streams in northern inside Southeast Alaska. These subdistricts, where Icy Strait intersects with Lynn Canal and Chatham Strait, represent the area with the broadest mix of salmon stocks in northern Southeast Alaska. Although conservation of king salmon in general is the goal of the proposed closures, this proposal has identified the Chilkat and Taku rivers king salmon stocks as the main target stocks for conservation through these closures, and these frequently opened purse seine areas bracket the migration pathway these stocks travel through to their respective spawning grounds. Other commercial and sport gear groups harvest these stocks of king salmon in the same and/or different areas along this migration corridor. Trollers encounter king salmon throughout District 14, although a larger portion of the District 14 troll harvest occurs in Cross Sound in western District 14 where a larger variety of coastwide king salmon stocks are encountered. Drift gillnet fisheries occur in Districts 11 and 15 in the terminal areas of the Taku and Chilkat rivers, respectively.

In 2017, in response to very poor forecasts for returning Taku and Chilkat rivers king salmon, retention of king salmon in recreational fisheries was prohibited from April 15 through June 14 in the waters of Lynn Canal and Stephens Passage to protect king salmon returning to these rivers. Implementation of spring troll fisheries in the approaches to these systems were delayed and the early openings of the drift gillnet fisheries had extensive time and area restrictions to protect these king salmon stocks migrating through the terminal drift gillnet areas. Purse seine fisheries in the subdistricts proposed for closure commence the third Sunday of June in Subdistrict 112-14 when the limited area of the Point Augusta index fishery was opened. The fishing area did not expand to portions of Subdistricts 112-16 and 114-27 until July 9, by which time 98% of the king salmon encountered in the Taku River fish wheels and 66% of the king salmon encountered in the Chilkat River fish wheels had passed upstream. The mouths of both rivers are approximately 60 nautical miles of salt water distant from the nearest area open to purse seine fisheries and the fish wheels are located approximately 8 and 20 river miles upstream for the Chilkat and Taku rivers respectively.

Stock specific information on the king salmon harvest from the various gear groups and areas are generated using coded-wire tag (CWT) and genetic stock identification (GSI) methodologies.

Based on these methods, 10-year average (2007–2016) harvest rates for Chilkat and Taku rivers stock of king salmon have been around 25% each. The Chilkat River run of king salmon is harvested in net (12%), sport (7%), and troll (6%) fisheries. The Taku River king salmon are harvested in troll (10%), sport (3%), net (3%), and in Canadian inriver fishery (10%). Since 2007, most Chilkat River king salmon have been harvested in the District 15 drift gillnet fishery and most Taku River king salmon have been harvested in the late winter and spring troll fisheries.

Since 2008, pink salmon returns to northern Southeast Alaska inside waters have been very poor in even years. Limited purse seine opportunity has been offered with little to no harvest in subdistricts other than 112-14 where the Point Augusta index fishery is opened to determine incoming pink salmon run strength.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal but **OPPOSES** losing management flexibility when determining purse seine openings in the area. These areas can be closed to commercial fishing with purse seine gear through existing emergency order authority to achieve the desired conservation measures if warranted.

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.

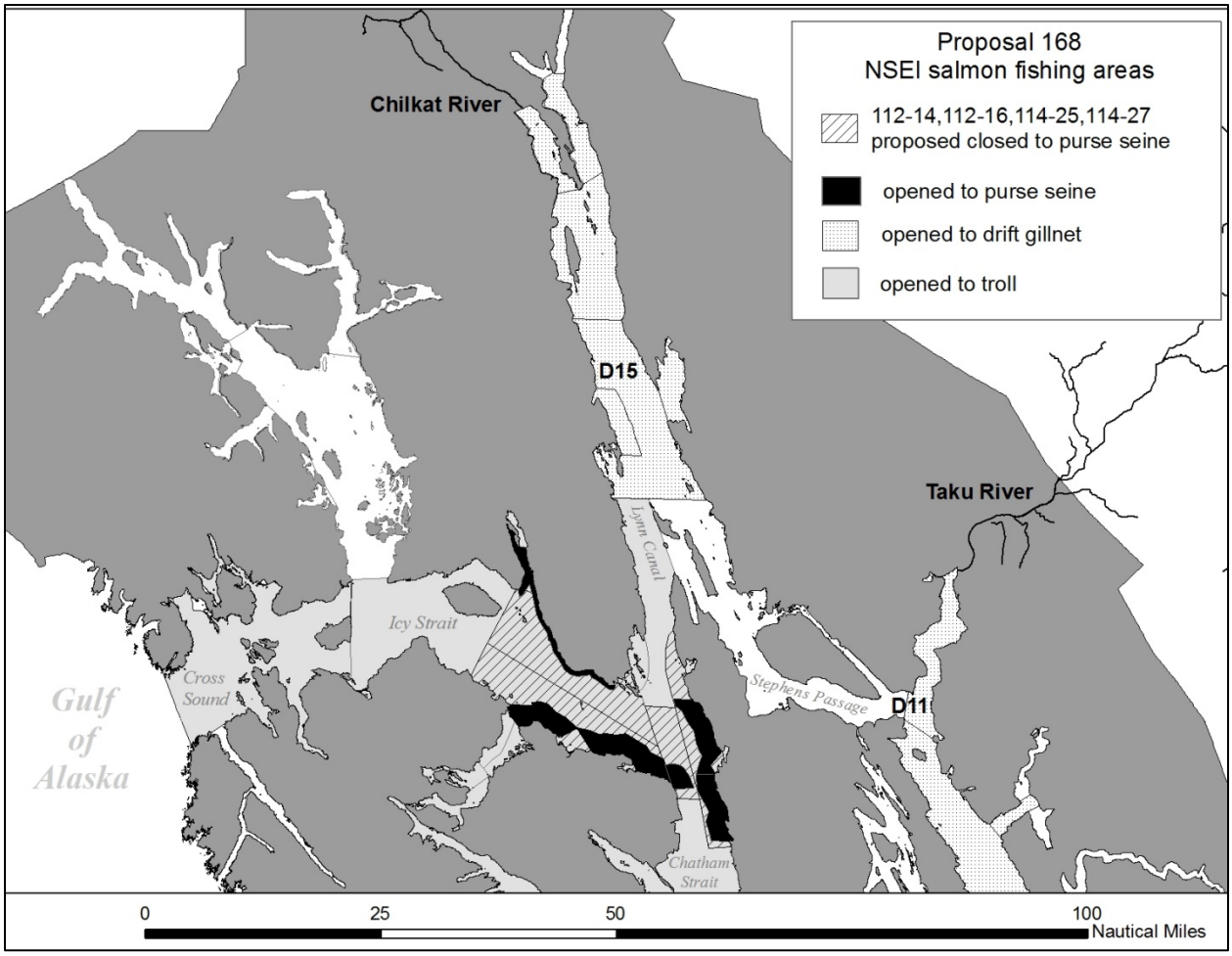

Figure 168-1.–Proposed subdistricts for purse seine closure and currently utilized purse seine, drift gillnet, and selected troll fishery areas.

Drift Gillnet (3 Proposals)

PROPOSAL 169 – 5 AAC 33.310. Fishing seasons and periods for net gear.

PROPOSED BY: United Southeast Alaska Gillnetters (USAG).

WHAT WOULD THE PROPOSAL DO? This would allow fishing with drift gillnet gear in a portion of Section 6-D from the first Sunday in August through the first Saturday in September regardless of purse seining open periods. The area would be open to fishing with purse seine and drift gillnet gear concurrently during this time period.

WHAT ARE THE CURRENT REGULATIONS? Salmon may be taken by drift gillnets in a portion of Section 6-D from the second Sunday in June through the first Saturday in August and from the first Sunday in September until the season is closed. Regulations adopted during the 2015 board meeting, allow drift gillnetting the Screen Island portion of Section 6-D when it opens to purse seining. This regulation sunset December 31, 2017.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase the area where drift gillnet fishing is allowed in District 6 during the month of August. Gear conflicts are possible due to the possibility of both gear groups fishing in this area at the same time. The drift gillnet harvest of pink salmon, as well as other salmon species, may increase.

BACKGROUND: Districts in Southeast Alaska were first implemented for the 1963 season and are similar to districts currently in use. Sections were also established in 1963, but in many cases, are different from sections currently in use. Since 1963, District 6 has been split into drift gillnet and purse seine areas. Waters of sections 6-A and 6-B are drift gillnet only. Waters of Section 6-C were drift gillnet only from 1963 through 1968. In 1969, Section 6-C was open to purse seining and has remained open to both purse seining and drift gillnetting. The waters of Section 6-D were purse seine only from 1963 through 1983. During the 1983/1984 board meeting, the current regulation was adopted allowing a portion of Section 6-D, commonly referred to as "Screen Island", to open for drift gillnetting prior to the first Saturday in August and from the first Sunday in September to the end of the season (Figure 169-1).

Purse seining can open at any time in the waters of Sections 6-C and 6-D based on pink salmon abundance. Occasionally, during large runs, purse seining can be open before the first Saturday in August and/or after the first Sunday in September in Section 6-D. During this time period drift gillnetters and purse seiners can, and have, fished the same waters at the same time.

In general, the drift gillnet fleet does not target pink salmon. During years when pink salmon prices are high and thus cost effective, a larger portion of the fleet will target pink salmon. Regardless, the purse seine fleet harvests the vast majority of the pink salmon in Southeast Alaska.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Adoption of this proposal does not raise any significant fishery management concerns. However in years of low pink salmon abundance, allowing gillnetters greater access to the shoreline area of Section 6-D where pink salmon can be found in higher concentrations may increase pink salmon harvest by drift gillnet fishermen. This may result in less open time and/or area, or a district wide closure. There are many years in District 6 when the drift gillnet fleet continued to

fish, due to their relatively low harvest of pink salmon, while the purse seine fishery in Section 6-C and the Screen Island/Steamer Bay portion of 6-D did not open.

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.

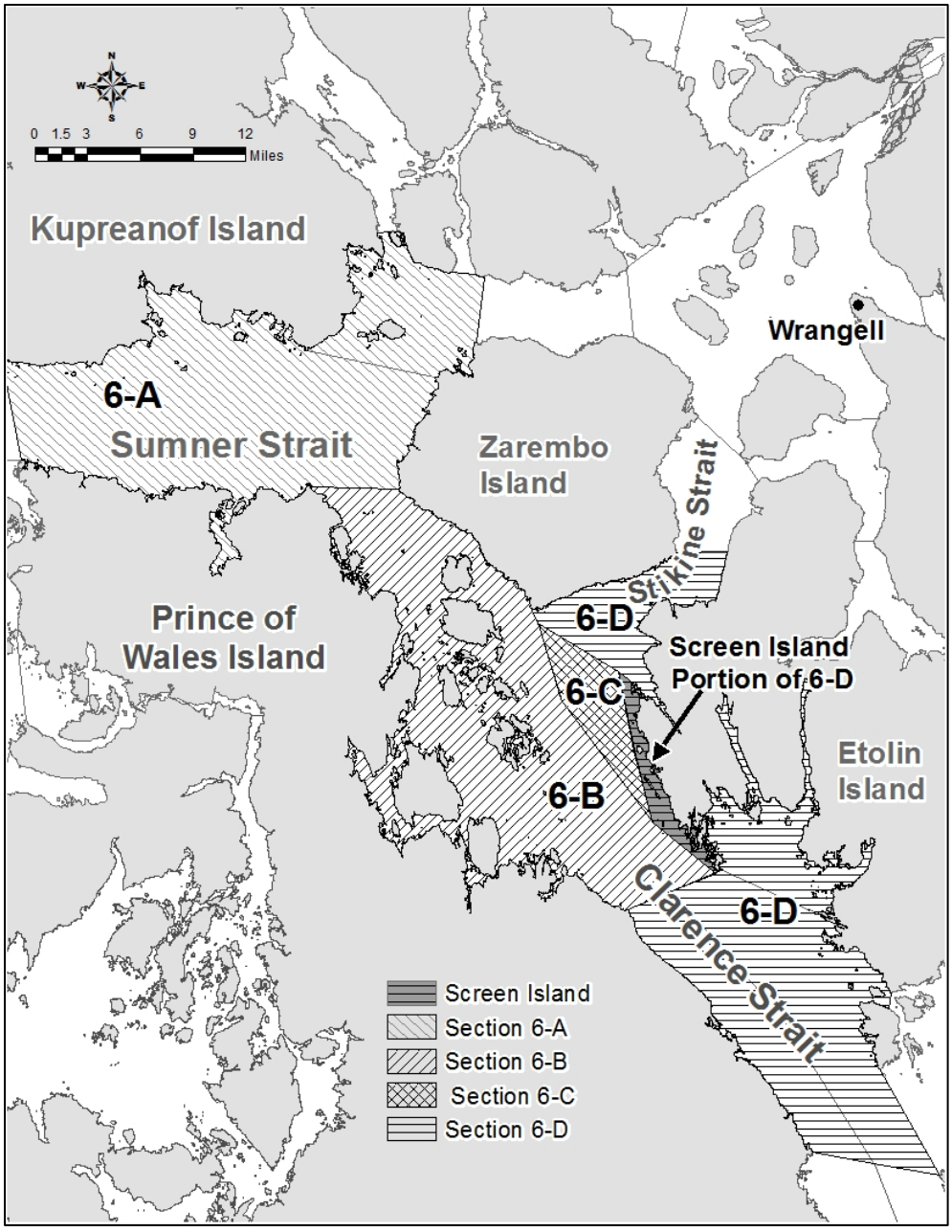

Figure 169-1.–District 6 fishing areas.

PROPOSAL 170 – 5 AAC 33.310. Fishing seasons and periods for net gear.

PROPOSED BY: United Southeast Alaska Gillnetters Association.

WHAT WOULD THE PROPOSAL DO? This would assign a traditional purse seine fishing area to the drift gillnet fishery.

WHAT ARE THE CURRENT REGULATIONS? Salmon may be taken by purse seine gear in District 10 during fishing periods established by emergency order.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The purse seine fleet would lose opportunity to harvest pink salmon in this area of District 10. The drift gillnet fishery would gain a new area to harvest pink salmon. The management of the pink salmon fishery in District 10 would change to reflect the gear change. It is very likely that the overall pink salmon harvest in District 10 would decrease and the potential for over-escapement would increase. The quality of the pink salmon harvested may decrease as more pink salmon would be harvested in the terminal areas closer to the spawning streams.

BACKGROUND: District 10 has been a purse seine only fishing area since 1963 and current boundaries have been in place since 1973. Subdistrict 110-31 encompasses the eastern portion of Stephens Passage in District 10 from Cape Fanshaw to Point League, excluding Port Houghton, Hobart Bay, Windham Bay (Figure 170-1). The purse seine fishery in District 10 is managed based on pink salmon abundance. Harvests in Subdistrict 110-31 have ranged from zero harvest to 3.3 million pink salmon. The average harvest in Subdistrict 110-31 since 1973 is 528,000 pink salmon, with an average contribution to the overall District 10 harvest of 38%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The department is concerned that the lower harvesting power of the gillnet fleet would result in excess fish in terminal areas, resulting in lower quality harvest and the potential for forgone harvest and escapement in excess of goals.

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.

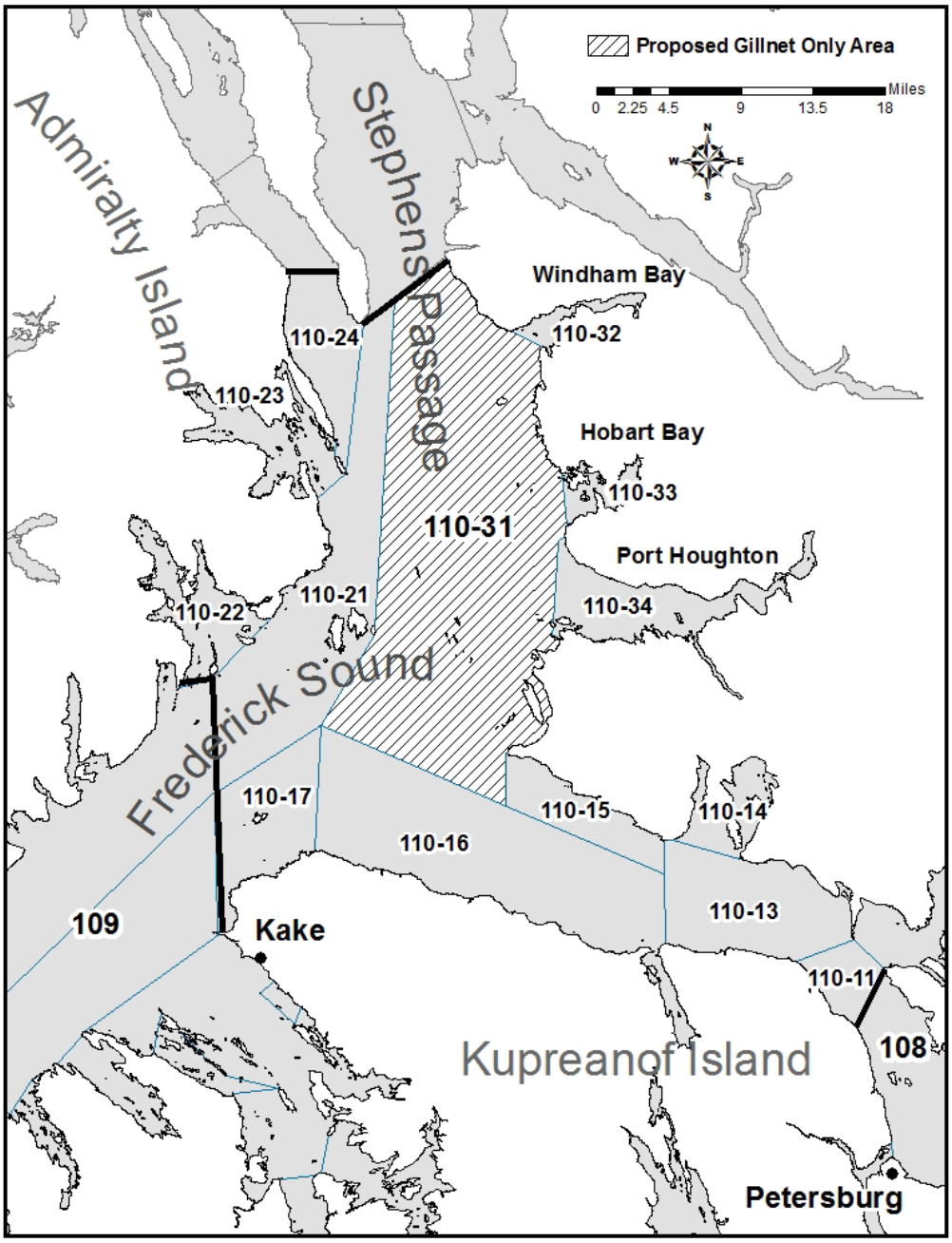

Figure 170-1.–District 10 historical boundaries and proposed gillnet only area.

PROPOSAL 171 – 5 AAC 33.331. Gillnet specifications and operation.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would allow the department to restrict maximum gillnet mesh size to six inches in districts 6, 8, 11, and 15 through the fourth Saturday in July.

WHAT ARE THE CURRENT REGULATIONS? Gillnet mesh size can be restricted to a maximum of six inches in Districts 8, 11, and 15 through the fourth Saturday in June.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? In the terminal gillnet areas of Districts 8, 11, and 15, the longer duration of a maximum mesh restriction would likely reduce the harvest of king salmon and allow for more liberal fishing time and area to target sockeye salmon during periods of king salmon conservation. The effects of a maximum mesh size restriction in District 6 may be minimal since very few boats utilize the larger mesh size of king salmon nets in those areas.

BACKGROUND: Due to poor marine survival, king salmon stocks originating from Southeast Alaska (SEAK) and the transboundary rivers in Northern British Columbia (NBC) are currently experiencing very low abundance. Over the past five years (2012–2016), the 11 king salmon index systems in SEAK did not meet escapement goals 45% of the time. SEAK king salmon run forecasts are produced annually for the Situk, Chilkat, Taku, Stikine and Unuk rivers stocks of king salmon. In 2017, only the Stikine River forecast was within the escapement goal range. All others were below the escapement goal range in spite of conservation measures taken by the department nine of the 11 king salmon index systems did not make the lower bound of the escapement goal range.

In response to the ongoing cycle of low productivity of SEAK king salmon stocks, the department held a series of meetings in winter 2016/2017 to develop a management strategy to maximize king salmon escapements across the region. In 2017, closures and reductions of time and area were implemented in subsistence, sport, and commercial salmon fisheries throughout SEAK. A critical part of this strategy was gillnet mesh restrictions in Districts 6, 8, 11, and 15 over the duration of king salmon runs to Chilkat, Taku, and Stikine rivers. SEAK king salmon runs typically peak in late June to early July and are largely complete by late July. A temporary emergency regulation was passed in March 2017 to implement a mesh restriction through July and include District 6.

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

COST ANALYSIS: Approval of this proposal may result in additional cost for fishermen to participate in this fishery who may not have nets less than 6 inch mesh size.

Troll (13 Proposals)

PROPOSAL 172 – 5 AAC 29.090. Management of the spring salmon troll fisheries.

PROPOSED BY: Southern Southeast Regional Aquaculture Association.

WHAT WOULD THE PROPOSAL DO? This would remove restrictions on harvesting non-Alaska hatchery-produced king salmon in the Ketchikan Area spring commercial salmon troll fishery during statistical weeks 23–27.

WHAT ARE THE CURRENT REGULATIONS? Spring troll fisheries are managed inseason, according to board regulations and U.S./Canada Pacific Salmon Treaty (PST) provisions. The *Management of the Spring Salmon Troll Fisheries* provides opportunity to harvest Alaska hatchery-produced king salmon while minimizing the harvest of non-Alaska hatchery king salmon. Non-Alaska hatchery fish are counted toward the annual PST harvest limit of king salmon but most of the Alaska hatchery-produced fish are not. While there is no ceiling on the number of king salmon harvested in the spring fisheries, the take of non-Alaska hatchery-produced king salmon is limited according to the percentage of the Alaska hatchery fish taken in the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would exempt the Ketchikan Area spring troll fishery from the current provisions of the *Management of the spring salmon troll fisheries,* which limits the harvest of non-Alaska hatchery-produced king salmon based on the composition of the Alaska hatchery-produced fish. Without a harvest cap for non-Alaska hatchery fish, which includes king salmon of wild stock origin, the number of fish harvested in the Ketchikan Area spring fishery that count against the annual PST harvest limit would be unrestricted.

BACKGROUND: From 2007 to 2016, the Alaska hatchery contribution to the Ketchikan Area spring troll fishery harvest averaged 45% for the season and 50% for statistical weeks 23–27. Between 2002 and 2014, the Ketchikan Area spring troll area was opened an average of seven days each week, including statistical weeks 23–27. The area remained open seven days each week because Alaska hatchery contributions were high and the non-Alaska hatchery harvest caps were not reached.

In 2014, management actions were taken during the spring troll fisheries, based on coded-wire tag and run-timing data, to help reduce the harvest of Unuk River king salmon, which failed to meet the escapement goal in 2012 and 2013. The initial management actions taken in 2014 included closing a large portion of the Ketchikan Area spring fishery, dividing the remainder of the Ketchikan Area open waters into three subareas to increase the level of detail in stock composition data, and reducing opening lengths during statistical weeks 23–27. Despite restrictive management actions taken since 2014, including a 17-day regional and 33-day Ketchikan Area closure in 2017, the Unuk River has failed to meet the king salmon escapement goal in five of the last six years. An estimated 10-year average of 30% of Unuk River king salmon caught during spring troll fisheries are harvested in the Ketchikan Area, with 83% of those caught during statistical weeks 23–27.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal to liberalize king salmon harvests in the spring troll fishery. The current spring management plan harvest tiers already allow for the liberalized or unlimited harvest of non-Alaska hatchery-produced king

salmon in areas with high Alaska hatchery proportions. With wild Southeast Alaska king salmon stocks in a period of low productivity, the department has concerns with an unrestricted spring fishery directly in a migration corridor of several wild Southeast Alaska king salmon stocks. 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.

PROPOSAL 173 – 5 AAC 29.114. District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan.

PROPOSED BY: Northern Southeast Regional Aquaculture Association Troll Representatives: George Eliason, James Moore, Zack Olson, Bert Bergman.

WHAT WOULD THE PROPOSAL DO? This would allow commercial fisheries using troll gear targeting enhanced chum salmon in Districts 12 and 14 to continue by removing the sunset provision.

WHAT ARE THE CURRENT REGULATIONS? *The District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan* (5 AAC 29.112) allows salmon troll fishermen to fish for enhanced chum salmon in specified areas of Districts 12 and 14 following any closure of these fisheries to the retention of king salmon as described in 5 AAC 29.114. The management plan includes provisions for managing chum troll fisheries that target enhanced chum salmon in Cross Sound, Icy Strait, and Northern Chatham Strait, as well as a sunset clause stating that provisions of the management plan do not apply after December 31, 2017.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would eliminate the sunset clause that will rescind the opportunity to harvest enhanced chum salmon when spring troll areas close to king salmon retention, reducing the harvest of enhanced chum salmon by the troll fleet in these areas.

BACKGROUND: Trollers have targeted enhanced king salmon in portions of Cross Sound and Icy Strait since 1989 under provisions of *General fishing seasons and periods* (5 AAC 29.070), and the *Management of the spring salmon troll fisheries* (5 AAC 29.090). Trollers have been targeting enhanced chum salmon in Icy Strait spring troll areas since 2010 using methods and gear developed specifically for chum salmon. In 2012, the board adopted the *District 12 and District 14 Enhanced Chum Salmon Troll fisheries Management Plan* to give the department direction as chum salmon troll fisheries developed. At that time, the chum salmon troll fishery had occurred in District 14 during the previous two years and was considered to be a high impact emerging fishery. Little was known about the long-term effects the new chum salmon troll fisheries would have on Northern Southeast Inside (NSEI) wild stocks at that time. A sunset clause was included to allow the option of modifying the plan once the fisheries had been open for three additional years. After seven years, the annual chum salmon harvest has varied widely, with large harvests occurring during two of the last seven years (2011 and 2013). The chum salmon stock composition has included approximately 80-85% enhanced fish annually. NSEI wild summer-run chum salmon escapement indices were below the escapement goal from 2008 to 2010, above the escapement goal from 2011 to 2013 and 2015, and below the escapement goal again in 2014 and 2016.

Beginning in 2010, spring troll areas have included fisheries in Icy Strait, Cross Sound, and Northern Chatham Strait (Districts 12 and 14) that target enhanced chum salmon. Currently, five of the eight spring troll areas located in Northern Chatham Strait, Cross Sound, and Icy Strait are directed chum fisheries, with the two spring areas closest to Juneau and the Taku River, closed to king salmon retention by regulation. Since 2010, the change of target species in these chum salmon areas, along with additional king salmon management restrictions and poor runs of SEAK hatchery-produced and wild SEAK king salmon stocks, has significantly reduced the harvest of king salmon in the Icy Strait/Northern Chatham Strait corridor. King salmon harvests

in these areas have declined from the 2000–2009 average of 3,058, to an average of 1,784 between 2010 and 2016, to a harvest of 413 in 2017.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The department **SUPPORTS** continuation of the management plan to provide direction for managing this 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.

PROPOSAL 174 – 5 AAC 29.114. District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan.

PROPOSED BY: Northern Southeast Regional Aquaculture Association Troll Representatives: George Eliason, Eric Jordan, James Moore, Zack Olson, Bert Bergman.

WHAT WOULD THE PROPOSAL DO? This would establish a commercial troll fishery to target hatchery-produced chum salmon in the Southeast Cove and Gunnuck Creek Hatchery area in Kadake Bay and Southwest Frederick Sound, in addition to the existing Districts 12 and 14 enhanced chum salmon troll fisheries (Figure 174-1).

WHAT ARE THE CURRENT REGULATIONS? Regulations allow salmon troll fishermen to fish for enhanced chum salmon in specified areas of Districts 12 and 14 following any closure of these fisheries to the retention of king salmon. The management plan includes provisions for managing chum troll fisheries that target enhanced chum salmon in Cross Sound, Icy Strait, and Northern Chatham Strait. Openings in the Northern Chatham Strait Fishery Area may be open no more than four weekdays per week and only chum and pink salmon may be retained.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide additional enhanced chum salmon fishing area for trollers and could increase the harvest of hatchery-produced chum.

BACKGROUND: Trollers have targeted enhanced king salmon in some portions of Cross Sound and Icy Strait since 1986 under provisions of *Management of the spring salmon troll fisheries* (5 AAC 29.090). Trollers have been targeting enhanced chum salmon in Icy Strait during June since 2010 using methods and gear developed specifically for chum salmon. In 2012, the board adopted the *District 12 and District 14 Enhanced Chum Salmon Troll fisheries Management Plan* to give the department direction as chum salmon troll fisheries developed.

Northern Southeast Alaska Regional Aquaculture Association (NSRAA) has taken over the Southeast Cove chum salmon release site and Gunnuck Creek Hatchery facility, with expectations of chum salmon returns in June and early July. The current *District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan* does not include the proposed area. In order to provide additional benefit to the troll fleet, NSRAA troll representatives submitted proposal 174 to establish a boundary for commercial troll fishing, primarily during June and July for chum salmon, to provide additional opportunity in an attempt to help bring the troll fleet closer to their enhanced salmon allocation percentage.

The troll fleet has consistently failed to achieve their allocation of enhanced salmon under provisions of the *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* (5 AAC 33.364). The opportunities to increase the troll harvest are limited since most salmon entering special harvest areas need to be harvested by more efficient gears (purse seine and drift gillnet) in order to effectively harvest surplus fish. Except for a closure in mid-August, trolling is generally open regionwide from July 1 through September 20. Therefore, additional opportunities for trollers to harvest hatchery-produced fish are available only in May and June, during any mid-August closure, and after September 20. The troll five-year average percent of harvest values between 1994 and 2016 is 19%, which is below the target range of 27–32% (5 AAC 33.364), and through 2016, marks 22 consecutive years the troll fleet has been below their target allocation range.

The proposed area is a large expansion of the existing terminal harvest areas. It encompasses waters that are a major migration path for wild salmon to Frederick Sound, Stephens Passage, and to a lesser degree, lower Chatham Strait. The area encompasses three of the departments summer chum salmon index systems, is within 15 miles of four other Section 9-B and three District 10 index streams, and within 30 miles of nine other District 10 index streams, all of which likely will pass through the proposed area to varying degrees.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. The proposed area encompasses waters that are a major migration path for wild salmon to Frederick Sound, Stephens Passage, and to a lesser degree, lower Chatham Strait. This proposed additional opportunity would likely increase the troll harvest of both enhanced and wild chum salmon transiting the area. Furthermore, with wild Southeast Alaska king salmon stocks in a period of low productivity, the department has some concerns for potential incidental king salmon encounters in opening a new chum fishery in the migration corridor of several wild Southeast Alaska king salmon stocks during the time of these migrations.

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.

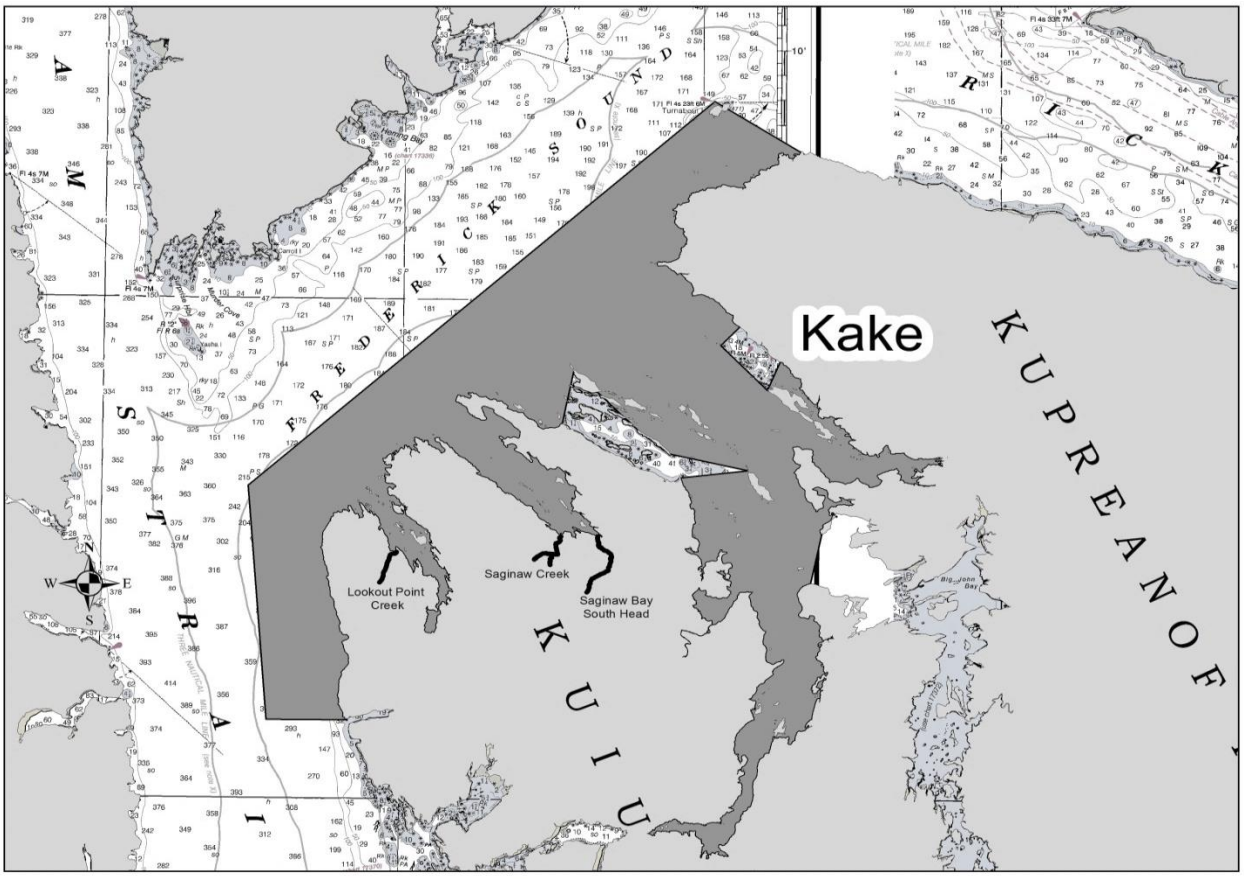

Figure 174-1.–Proposed commercial troll fishery in Kadake Bay and Frederick Sound.

PROPOSAL 175 – 5 AAC 29.114. District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would implement a king salmon possession restriction for vessels participating in the enhanced chum salmon fishery of District 12 and District 14.

WHAT ARE THE CURRENT REGULATIONS? *The District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan* allows salmon troll fishermen to continue to fish for enhanced chum salmon in specified areas of Districts 12 and 14 following any closure of these fisheries to the retention of king salmon as described in 5 AAC 29.090(d)(1)(D).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This will prohibit salmon troll vessels participating in enhanced chum salmon fisheries from possessing king salmon in areas that have been closed to directed spring troll king salmon fishing. Incidental king salmon harvests would be eliminated.

BACKGROUND: The *District 12 and District 14 Enhanced Chum Salmon Troll Fisheries Management Plan* was adopted in 2012. This plan was developed to provide additional opportunity for salmon troll fishermen to target enhanced chum salmon during the spring troll fisheries. When the plan was adopted, provisions restricting possession of king salmon while participating in enhanced chum salmon fisheries were inadvertently omitted.

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.

PROPOSAL 176 – 5 AAC 29.112. Management of chum salmon troll fishery.

PROPOSED BY: Alaska Trollers Association.

WHAT WOULD THE PROPOSAL DO? This would establish a commercial fishery using troll gear to target hatchery-produced chum salmon in Crawfish Inlet during closures of the summer coho salmon troll fishery (Figure 176-1).

WHAT ARE THE CURRENT REGULATIONS? Current regulations provide for opportunity in defined areas of Sitka Sound and Neets Bay to troll gear to harvest hatchery-produced chum salmon during any closure of the summer troll coho salmon fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would provide additional fishing time for trollers and could potentially increase the harvest of hatchery-produced chum salmon by allowing trolling in a defined area of Crawfish Inlet during any August troll coho salmon closure.

BACKGROUND: Northern Southeast Regional Aquaculture Association (NSRAA) initiated a chum and king salmon enhancement program at Crawfish Inlet in 2015 when the current Special Harvest Area was established. Chum salmon began returning to Crawfish Inlet in 2017. In order to provide additional benefit to the troll fleet, NSRAA submitted Proposal 150 to extend the SHA boundary for commercial troll fishing, primarily during June and July for king salmon and late July to early September for chum salmon, to provide additional opportunity in an attempt to help bring the troll fleet closer to their enhanced salmon allocation percentage.

The troll fleet has consistently failed to achieve their allocation of enhanced salmon under 5 AAC 33.364. The opportunities to increase the troll harvest are limited since most salmon entering special harvest areas need to be harvested by more efficient gears (purse seine and drift gillnet) in order to effectively harvest surplus fish. Except for a closure in mid-August, trolling is generally open regionwide from July 1 through September 20. Therefore, additional opportunities for trollers to harvest hatchery-produced fish are available only in May and June, during any mid-August closure, and after September 20. The troll five-year average percent of harvest values between 1994 and 2016 is 19%, which is below the target range of 27–32% (5 AAC 33.364), and through 2016, marks 22 consecutive years the troll fleet has been below their target allocation range.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. This proposed additional opportunity is likely to increase the troll harvest of hatchery-produced chum salmon.

A troll fishery for chum salmon is feasible within the defined area of Crawfish Inlet. However, any fishery targeting hatchery-produced chum salmon during a coho salmon closure would need to have restrictions on coho salmon harvest to prevent targeting of coho salmon. Other troll fisheries open to target hatchery-produced chum salmon during a coho salmon closure are closed to the retention of coho salmon.

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.

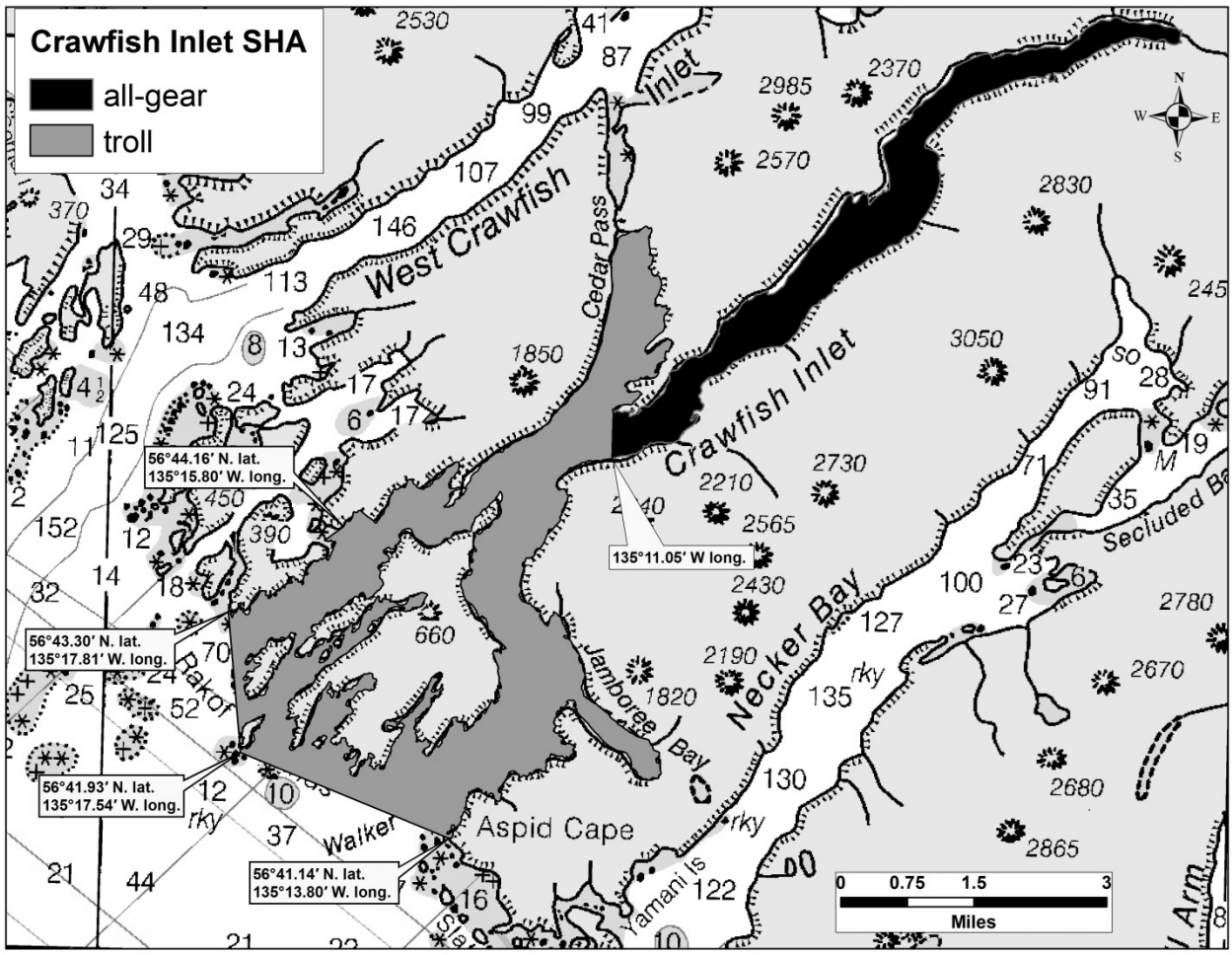

Figure 176-1.–Proposed commercial troll fishery area in Crawfish Inlet.

PROPOSAL 177 – 5 AAC 29.110. Management of coho salmon troll fishery.

PROPOSED BY: Alaska Trollers Association.

WHAT WOULD THE PROPOSAL DO? This would allow commercial troll fishing for hatchery-produced coho salmon in certain areas during commercial troll coho salmon conservation closures.

WHAT ARE THE CURRENT REGULATIONS? The department assesses wild coho salmon run strength in late July and again in early August. The department may close the coho salmon troll fishery in the Southeastern Alaska-Yakutat Area for conservation of coho salmon stocks lasting up to seven days in late July or up to ten days in August for coho salmon conservation or allocation reasons. A minimum 2-day closure is required to provide a fair start prior to a second summer king salmon opening.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would allow for zero to 10 days of additional coho salmon fishing time in areas where hatchery coho salmon could be accessed during the August troll closure. It may offer an opportunity to boost the allocated share of enhanced salmon for the commercial troll fleet.

BACKGROUND: Each August, the department is required to assess the Southeast Alaska coho salmon fishery and determine if a closure of the troll coho salmon fishery is required to meet allocation and conservation requirements. Current year harvests and catch rates in the troll, purse seine, drift gillnet, and set gillnet fisheries are summarized and compared to historical averages. The coho salmon troll fishery may close for up to 10 days if the department determines that the number of coho salmon reaching inside waters might be inadequate to provide for spawning requirements or if the proportional share of coho salmon harvested by the salmon troll fishery is larger than that of inside gillnet and recreational fisheries compared to average 1971–1980 levels.

The length of coho salmon conservation closures has varied the past 25 years, ranging from zero to 10 days. Over the past 10 years, the coho salmon closures have ranged from zero to five days. Because a minimum 2-day closure is required to provide a fair start prior to a second king salmon opening, the number of days gained in any given year during the past 10 years would have been 0–3 days.

The troll fleet has consistently failed to achieve their allocation of enhanced salmon. The troll five-year average percent of harvest values between 1994 and 2016 is 19%, which is below the target range of 27–32% (5 AAC 33.364), and through 2016, marks 22 consecutive years the troll fleet has been below their target allocation range. The opportunities to increase the troll harvest are limited since most salmon entering special harvest areas are harvested by more efficient gears (purse seine and drift gillnet). The 2017 coho salmon harvest for terminal harvest areas is 7,340 coho salmon by 72 permit holders, or approximately 0.3% of the 2017 summer coho salmon harvest taken by 883 permit holders.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. This proposed additional opportunity is likely to increase the troll harvest of hatchery-produced coho salmon. However, a fishery targeting hatchery-produced coho salmon during a coho salmon closure would still incidentally harvest wild coho salmon stocks. The purpose of a coho salmon closure is to discontinue all coho salmon catch by troll fisheries due to conservation concerns or to balance the proportional share of coho salmon harvested among the user groups.

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.

PROPOSAL 178 – 5 AAC 29.080. Management of the winter salmon troll fishery.

PROPOSED BY: Randy Ferdinand.

WHAT WOULD THE PROPOSAL DO? This would restrict the fishing area in Sitka Sound when harvest of non-Alaska hatchery-produced king salmon reaches 30,000 fish by March 1 by moving the winter fishing line eastward until April 1.

WHAT ARE THE CURRENT REGULATIONS? The "winter boundary line" in Sitka Sound is defined as a line from Cape Edgecumbe Light to the southernmost tip of Point Woodhouse.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The winter troll boundary line in Sitka Sound would be moved eastward by approximately 7.25 nautical miles (nm) from the existing northern boundary point. This modification would decrease the area of open water in Sitka Sound from March 1 until April 1 by approximately 185 square miles. With reduced area open in Sitka Sound, it is likely that king salmon harvest would decrease and a smaller percentage of the regional winter troll harvest would be taken in Sitka Sound during the month of March. If king salmon harvest is decreased in March, the winter guideline harvest level may not be reached as quickly in years of high abundance, resulting in the fishery potentially being open through April.

BACKGROUND: The winter troll fishery has been confined to waters inside the winter boundary line since it was defined in 1969. In 1991, the board changed the winter boundary line in Sitka Sound to follow Loran lines between Cape Edgecumbe and Point Woodhouse, allowing for the inclusion of a productive troll drag for king salmon. The board delayed the start of the winter troll fishery to October 11 in 1992 to provide additional fish for the summer salmon troll season. In 1994, due to increasing winter troll harvest rates, the board modified the winter troll line in Sitka Sound to what it was prior to 1992 to reduce the area open to trolling in Sitka Sound, and the winter fishery also began management so catch would not exceed the guideline harvest level of 45,000 king salmon. The board adopted another regulation in 2003 that modified the closure date for the winter fishery to April 30, or until the guideline harvest level (GHL) of 45,000 king salmon were harvested. In 2012, the board adopted a regulation that the GHL was not to exceed 45,000 non-Alaska hatchery-produced king salmon, plus the number of Alaska hatchery-produced king salmon.

The winter troll fishery begins October 11 and closes April 30, or when 45,000 non-Alaska hatchery-produced king salmon are harvested. Over the 23 years since the GHL went into effect in 1995, the winter troll fishery has closed early eight times (2003–2006, 2011, 2012, 2015, 2016). Since 1985, the winter troll king salmon harvests have ranged from a low of 9,401 in 1996, to a high of 71,831 in 1992, with the recent ten-year average of 41,799 king salmon harvested by 445 permit holders.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. With a greater contribution of Southeast Alaska wild king salmon in the late winter fishery and recent concerns for these wild king salmon stocks, shifting effort and harvest to inside waters and prolonging the fishery has the potential to increase harvest of these wild stocks in March and April.

The department is **NEUTRAL** on the allocative aspects of this proposal. Restricting a portion of the winter troll surfline allocates additional fish to other parts of the region.

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.

PROPOSAL 179 – 5 AAC 29.080. Management of the winter salmon troll fishery.

PROPOSED BY: Craig Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would reduce the harvest rate in the winter commercial salmon troll fishery during times of high king salmon abundance by implementing area restrictions for Yakutat, Sitka, Chatham Strait, Sumner Strait, and Noyes Island areas based on a series of harvest percentages occurring between January 1 and April 15.

WHAT ARE THE CURRENT REGULATIONS? The "winter boundary line" for Southeast Alaska/Yakutat is defined by coordinates and nearest headlands from Point Manby south to the International Boundary.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The new winter boundary line for Yakutat would be moved northeastward approximately 2.8 nautcial miles (nm) on the northern end and 1.4 nm on the southern end, resulting in a reduction of approximately 174 square miles. The new winter boundary line for Sitka Sound would be moved eastward 7.25 nm on the northern end, resulting in a reduction of 185 square miles. A new point would be added to the winter boundary line in lower Chatham Strait, which would move the line eastward and reduce the fishing area by 352 square miles. The winter line in Sumner Strait would move eastward by approximately 7.8 nm and reduce the fishing area by 448 square miles. Two new points would be added to the winter boundary line in the Noyes Island area, moving the line eastward and reducing fishing area by approximately 49 square miles. With reduced waters open in these areas, it is likely that king salmon harvest would slow and a smaller percentage of the regional winter troll harvest would be taken in these areas during the late winter fishery. If king salmon harvest is slowed, the winter guideline harvest limit may not be reached as quickly in years of high abundance, resulting in the fishery potentially being open through April.

This would also require substantially more inseason management effort by monitoring the percentage of harvest in Districts 183, 113, 109, 105, and 104 as a portion of the regional harvest during the late winter season.

BACKGROUND: The winter troll fishery has been confined to waters inside the winter boundary line since it was defined in 1969. The winter line was modified over the years to reduce the winter troll king salmon harvest by closing some of the most productive areas and establishing a harvest limit, helping to ensure a longer summer troll king salmon season. The winter boundary line has not been modified since 2003 when the board modified the Yakutat Bay winter troll boundary line to expand the area open to troll gear during the winter. The winter troll fishery begins October 11 and closes April 30, or when 45,000 non-Alaska hatchery-produced king salmon are harvested. Since 1985, the winter troll king salmon harvests have ranged from a low of 9,401 in 1996, to a high of 71,831 in 1992, with the recent ten-year average of 41,799 king salmon harvested by 445 permit holders. Over the 23 years since the GHL went into effect in 1995, the winter troll fishery has closed early eight times (2003-2006, 2011, 2012, 2015, 2016), with only four of those years closing prior to April 20.

Since 2003, the harvest of king salmon reached the GHL prior to April 14 during four winter seasons. For those four years, the proposed line restrictions would have been implemented as follows: the harvest in District 113 surpassed the proposed 65% for three years, while the harvest in Districts 183, 109, 105, and 104 never surpassed their district-specific percentages.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. With a greater contribution of Southeast Alaska wild king salmon in the late winter fishery and recent concerns for these wild king salmon stocks, shifting effort and harvest to inside waters and prolonging the fishery has the potential to increase harvest of these wild stocks in March and April.

The department is **NEUTRAL** on the allocative aspects of this proposal. Restricting portions of the winter troll surfline allocates additional fish to other parts of the region.

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.

PROPOSAL 180 – 5 AAC 29.090. Management of the spring salmon troll fisheries.

PROPOSED BY: Alaska Trollers Association.

WHAT WOULD THE PROPOSAL DO? This would reduce triggers in the Southeast Alaska commercial spring salmon troll fisheries by five percent in effort to prolong access to hatchery king salmon in spring troll areas in years of high king salmon abundance.

WHAT ARE THE CURRENT REGULATIONS? Spring troll fisheries are managed in season, according to board regulations and U.S./Canada Pacific Salmon Treaty (PST) provisions. The management plan provides for the opportunity to harvest Alaska hatchery-produced king salmon while minimizing the harvest of non-Alaska hatchery king salmon. Non-Alaska hatchery (treaty) fish are counted toward the annual PST king salmon harvest limit but most of the Alaska hatchery-produced fish are not. While there is no ceiling on the number of king salmon harvested in the spring fisheries, the take of non-Alaska hatchery-produced king salmon is limited according to the percentage of the Alaska hatchery fish taken in the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would lower spring troll hatchery percentage triggers during years when the preseason abundance index, as determined by the Chinook Technical Committee of the Pacific Salmon Commission (PSC), is at a level equivalent to 1.95 or higher as measured by the PSC Chinook model. Lowering the Alaska hatchery percentage triggers in these years would provide opportunity to harvest a greater number of treaty king salmon in each spring troll area. Any increase in the non-Alaska hatchery harvest would increase the number of spring troll caught king salmon that count toward the total troll allocation, resulting in a reduction of the allocation available for the summer troll season.

BACKGROUND: In 1986, the board established experimental spring troll fisheries to provide opportunity to harvest Alaska hatchery-produced king salmon in areas along suspected migration routes of king salmon returning to hatchery release sites. At that time, the board limited the number of non-Alaska hatchery king salmon to 1,000 fish in each of the three open areas, and openings were limited to two days per week. From 1987 to 1990, more experimental areas were opened and the board modified regulations to allow for a higher cap of treaty fish as the contribution of Alaska hatchery fish increased in the harvest. In 1991, the board enacted regulations that allowed for a larger harvest of treaty fish as the contribution of Alaska hatchery fish increased, establishing tiers using increasing levels of Alaska hatchery contribution and treaty harvest, with a minimum annual hatchery contribution of 20% for an area to continue without modification. By 1998, 24 experimental and terminal fishery areas were open as boundaries of fishing areas were modified and new, larger areas were opened that were created from consolidation of two or more previous areas. From 1999 to 2002, board guideline limits of treaty fish and Alaska hatchery contribution percentages remained the same. These criteria were liberalized in 2003 when the treaty fish limits were increased and were liberalized again in 2006 when the Alaska hatchery contribution percentages were reduced to allow for greater treaty fish limits at smaller trigger percentages.

Spring troll fisheries may begin following the closure of the winter troll fishery and are typically conducted between May 1 and June 30. In recent years, over 30 spring fishery areas have opened for varying lengths of time and are managed individually on both a weekly and seasonal basis. Decisions on fishing time are based on the cumulative harvest and contribution of Alaska hatchery-produced stocks as well as the historical performance of a particular spring fishery area.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. Increasing harvest of treaty king salmon in the spring would reallocate available harvest for summer to spring fisheries. The department **OPPOSES** the concept of liberalizing king salmon triggers in the spring troll fishery. The current spring management plan harvest tiers already allow for the liberalized harvest of non-Alaska hatchery-produced king salmon in areas with high Alaska hatchery compositions. With wild Southeast Alaska king salmon stocks in a period of low productivity, the department has concerns with reducing triggers and increasing non-Alaska hatchery harvest in the spring fisheries as incidental harvest of wild Southeast Alaska stocks would also increase.

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.

PROPOSAL 181 - 5 AAC 29.100. Management of the summer salmon troll fishery.

PROPOSED BY: John Murray.

WHAT WOULD THE PROPOSAL DO? This would reduce the percentage of remaining commercial king salmon troll fishery harvest taken during the initial summer king salmon retention period from 70% to 60% during years when the preseason abundance index is greater than 1.60.

WHAT ARE THE CURRENT REGULATIONS? The summer troll fishery is managed to target 70% of the remaining king salmon troll allocation during the initial summer opening, leaving 30% to be taken during a second opening. If approximately 70% or more of the remaining king salmon allocation is taken, the Waters of Frequent High King Salmon Abundance close for the rest of the summer season to slow down the harvest. If less than 30% of the king salmon harvest target is taken during the initial king salmon opening, the Waters of Frequent High King Salmon Abundance will reopen.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If the preseason abundance index is greater than 1.60, the length of the initial summer king salmon opening would likely be reduced along with the number of king salmon harvested. The length of the second king salmon opening would likely increase, as would the number of fish harvested. In other words, this proposal would "move fish" from the initial opening in July to the second opening in August.

The value of the fishery may increase to some degree, as king salmon average price and weight tend to be slightly higher during the second opening than earlier in the season. It is uncertain whether the number of king salmon retention days would increase or whether incidental mortality would be reduced as a result, since the difference in fleet catch rates during the first and second openings has become smaller in recent years.

Increasing the percentage allocated to the second king salmon opening during years of high king salmon abundance may lead to difficulty in taking the entire troll allocation, since effort, catch rates, and fishable weather days typically decline during the late summer. It may also be more difficult to harvest the troll king salmon allocation during years in which fishing time or area is reduced late in the season due to coho salmon conservation concerns.

BACKGROUND: The current regulations addressed in this proposal originated as part of the Troll Task Force Plan adopted by the board in 1994. The provisions of that plan were intended to help ensure a summer troll king salmon season of at least 10 days, minimize incidental mortality, maximize the value of the troll product, and recognize the historic composition of the troll fishery. Reserving 30% of summer troll king salmon allocation for the second opening in August was intended to increase the number of king salmon retention days, since lower catch rates and higher Alaska hatchery contributions were anticipated compared with those in July. The Waters of Frequent High King Salmon Abundance are open during July and usually closed for the remainder of the season.

Proposals to change the percentage of the summer troll king salmon allocation targeted during the July opening have been submitted to the board in the past but were not adopted. A similar proposal to modify the summer catch allocation percentage from 70% and 30% to 60% and 40% was submitted to the board in 2015 (Proposal 223). The board determined that the proposal was allocative, since it favored trollers fishing in parts of the region where catch rates tend to be more

stable throughout the summer, and also acknowledged the possibility that the fleet may not catch the entire king salmon allocation in the second opening if abundance is low.

The preseason abundance index was above 1.60 eight times since 1999, when the abundance-based management regime was adopted under the Pacific Salmon Treaty. On average, for those eight years, moving an additional 10% of the summer troll king salmon allocation to the second retention period would have increased the king salmon retention period in August by three days, with ex-vessel troll king salmon values increasing by $94,000 for the summer season. Correspondingly, the average reduction in the first retention period opening would have been two days, for a net reduction in king salmon non-retention days for summer of one day.

With record to near record low wild SEAK king salmon runs in 2017, and a poor outlook moving forward to 2018, the department will try to minimize harvest of these stocks throughout regional fisheries. The *Mixed Stock Analysis of Chinook Salmon Harvested in Southeast Alaska Commercial Troll Fisheries, 2010–2014* report showed the average SEAK king salmon proportion of the harvest from the second troll summer retention period to be higher than the first retention period in July.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal, which could benefit some portion of the troll fleet more than others.

Moving fish from the first to the second king salmon opening of summer would increase the likelihood that the second opening would be long enough to allow for inseason management, rather than setting a predetermined number of days. Inseason management allows the department the advantage of responding to factors affecting troll catch rates and effort which cannot be anticipated prior to the opening, such as weather and targeting of species other than king salmon.

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.

PROPOSAL 182 – 5 AAC 29.100. Management of the summer salmon troll fishery.

PROPOSED BY: Charlie Piercy.

WHAT WOULD THE PROPOSAL DO? Notwithstanding the timing of any necessary coho salmon conservation closure in mid-August, this proposal would establish a starting date for the second summer commercial king salmon troll fishery opening should any troll allocation remain following the initial summer opening,

WHAT ARE THE CURRENT REGULATIONS? Under the provisions of the *Management of the summer salmon troll fishery*, the department shall re-open the retention of king salmon to harvest any remaining portion of the annual troll king salmon allocation following the first opening of summer. The re-opening of king salmon retention follows any necessary conservation closure of the coho salmon troll fishery. If a coho salmon conservation closure is not necessary, and if king salmon remain on the annual troll allocation to be harvested in a second summer retention period, a two-day closure is required to allow a fair start of the fishery, with the re-opening of king salmon beginning no later than August 20.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Setting an annual date for the second king salmon opening of summer would eliminate the flexibility the department currently has to vary the opening date dependent on the assessed run strength of coho salmon at that time.

BACKGROUND: Each August, the department is required to assess the Southeast Alaska coho salmon fishery and determine if a closure of the troll fishery is required to meet allocation and conservation requirements established by the board under provisions of the *Management of coho salmon troll fishery* (5 AAC 29.110). Current year harvests and catch rates in the troll, purse seine, drift gillnet, and set gillnet fisheries are summarized and compared to historical averages. The coho salmon troll fishery may close for up to 10 days, if the department determines that the number of coho salmon reaching inside waters might be inadequate to provide for spawning requirements or if the proportional share of coho salmon harvested by the salmon troll fishery is larger than that of inside gillnet and recreational fisheries compared to average 1971–1980 levels.

The length of coho salmon conservation closures has varied the past 25 years, ranging from zero to 10 days closed. Consequently, the opening date of the second troll king salmon retention period has also varied. Flexibility in the starting date of the second summer retention period allows the department to open earlier in August in years when a coho salmon conservation closure is not warranted. It also allows the department to delay the second summer retention period so that additional data may be collected for assessment in years where coho salmon runs may be late, and have not yet materialized through the traditional time period used for assessment.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal to put a start date to the second troll king salmon retention period into regulation. Reduced coho salmon conservation closure lengths and correspondingly earlier opening dates to the second king salmon retention period are potential benefits of current regulations that allow flexibility to both the assessment and retention period dates. 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.

PROPOSAL 183 – 5 AAC 29.100. Management of the summer salmon troll fishery.

PROPOSED BY: Yakutat Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This would adjust the southern boundary of an area near the Situk River which is closed to troll gear during the summer fishery.

WHAT ARE THE CURRENT REGULATIONS? Both the *Management of the summer salmon troll fishery* and the *Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan* (5 AAC 30.365) define closed waters near the mouth of the Situk River from August 7 through September 20.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would move the eastern boundary of the closed troll area outside the Situk-Ahrnklin Inlet approximately two miles to the northwest, while maintaining the current western boundary which was modified by the board in 2012. This change would reduce the area which is closed to trolling adjacent to the Situk-Ahrnklin Inlet by seven square miles.

BACKGROUND: This closed area has been in regulation for at least 30 years and was originally proposed by the Yakutat Fish and Game Advisory Committee. At that time, there was a large power troll fleet in Yakutat, which fished outside the area open to set gillnet gear. The closure was implemented in order to reduce troll exploitation of Situk River coho salmon. The same closed area was implemented in order to reduce troll exploitation of Situk River king salmon (*Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan*). Reducing troll exploitation on these stocks would allow more fish to move into waters open to set gillnet gear.

The Situk River mouth has moved to the west over the years. The Yakutat Fish and Game Advisory Committee submitted a proposal to move the no-trolling corridor around the mouth of the Situk-Ahrnklin Inlet westward approximately 2 miles to account for the river's movement in 2012 and this proposal was adopted. However, only the western boundaries moved as a result of this action, while the eastern boundary remained unchanged. The current eastern boundary is still set at the mouth of the Dangerous River. The oversight of not moving the eastern boundary concurrent with the western boundary in 2012 increased the no-trolling zone around the mouth of the estuary, which was not the intent.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Reducing the troll closure area outside the Situk-Ahrnklin Inlet has the potential to increase the exploitation of stocks migrating through the newly opened waters to the troll fleet.

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.

PROPOSAL 184 – 5 AAC 29.120. Gear specifications and operations.

PROPOSED BY: Shawn Mcconnell.

WHAT WOULD THE PROPOSAL DO? Modify gear specifications for the commercial salmon hand troll fishery to allow downriggers in conjunction with sport rods for the entire year.

WHAT ARE THE CURRENT REGULATIONS? During spring and summer, a downrigger may not be used in conjunction with a fishing rod from a hand troll vessel. During the winter season, a hand troll gurdy or downrigger powered by hand or hand crank may be used in conjunction with a fishing rod. It is further defined for winter that an aggregate of only two rods connected to two downriggers or hand troll gurdies may be used.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Allowing the use of hand-operated downriggers in spring and summer would likely increase efficiency for hand trollers opting to use fishing rods. The use of fishing rods in conjunction with downriggers allows for greater control over desired depth of gear operation compared to using a rod and reel without downriggers. It is likely that improved efficiency and ease of gear operation may increase the number of hand troll permits fished and consequently the harvest by hand trollers.

BACKGROUND: In 2006, the board adopted regulations that allowed for the use of two fishing rods in conjunction with two downriggers for hand troll during the winter troll fishery. Since the winter fishery differs in many aspects from the spring and summer, adoption of these gear changes during that part of the year was of lesser concern. During the winter troll season, fishermen are subjected to adverse weather conditions, reducing the number of days fished. Winter trollers are confined to more restrictive, less abundant, salmon fishing areas than in summer. They are limited to fishing within the winter boundaries that were modified in 1994 which eliminated the more open ocean fishing areas. Participation is generally reduced to local residents during winter, decreasing overall effort. Sport angler effort also decreases to annual lows in winter, reducing enforcement concerns with sport client bag limits and personal use harvest reporting when vessels are dual registered for commercial hand troll and guided sport. The board found that, because of these seasonal differences, operation of fishing rods in conjunction with downriggers would not significantly affect the hand troll harvest during winter, and consequently adopted the proposal as amended, excluding spring and summer. Similar proposals were submitted in 2012 and 2015 and the board did not adopt the modified hand troll gear language for the same reasons identified in 2006.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Alaska Wildlife Troopers have enforcement concerns in regard to decreasing the separation between legal gear for commercial hand troll and sport fishing. Segregation of these two gear types helps alleviate a number of issues that arise when hand troll and sport anglers fish adjacently.

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.

COMMITTEE OF THE WHOLE GROUP 6: Personal Use and Sport Fisheries (20 Proposals: Chair- Morisky)

Personal Use (9 Proposals)

PROPOSAL 185 – 5 AAC 77.682. Personal Use Salmon Fishery.

PROPOSED BY: Mike Fox.

WHAT WOULD THE PROPOSAL DO? This would add troll gear with multiple lines as an allowed personal use gear type, expand personal use fishing to all areas that are open to commercial fishing, and include king and coho salmon as target species.

WHAT ARE THE CURRENT REGULATIONS? Personal use fishing is restricted to Alaska residents and is allowed in areas that are not designated as customary and traditional use subsistence salmon fishing areas. Personal use regulations include gillnets and seines as allowed gear types but prohibit the use of hook and line. Personal use fishing areas, fishing times, and harvest limits for sockeye, pink, and chum salmon are defined in regulation. Coho and king salmon may only be taken incidentally and the incidental harvest is limited, except in select hatchery THAs where directed harvest of king and coho salmon is permitted. Those THAs and associated harvest limits and seasons are listed in regulation. A person must have a valid sport fishing license and a permit must be obtained to personal use fish for salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Personal use fishermen would be able to use multiple line and hook, commercial troll gear. The area allowed to personal use fish would expand. King and coho salmon would be included as targeted species outside THAs. The personal use harvest of king and coho salmon would increase, including harvest of wild fish. The personal use harvest of other salmon species would likely increase as well. The personal use fishery would become more liberal in allowed gear and area than the subsistence salmon fishery. The addition of a personal use king salmon fishery (a "new" fishery) throughout Southeast Alaska and the resultant additional harvest may result in complications with the Pacific Salmon Treaty.

BACKGROUND: The current framework that guides personal use and subsistence fishing in Southeast Alaska is based largely on Title VIII of the Alaska National Interest Land Conservation Act (ANILCA, 1980), which places a priority on subsistence fishing. The board designates areas and species through customary and traditional subsistence use findings. In order to give residents an opportunity to harvest salmon using gear outside of that allowed for salmon sport fishing in areas which do not have a customary and traditional subsistence use finding, the state developed personal use fisheries. These allow residents of the state with a valid sport fishing license, through the use of a permit, to harvest salmon outside of areas with customary and traditional subsistence use findings, to use gear types that are prohibited by sport fish regulations, and to generally have higher possession limits than sport fish regulations allow.

Personal use and/or subsistence fishing are permitted in most areas in Southeast Alaska. The Yakutat Management Area is entirely a subsistence area. The Haines, Sitka, and Petersburg management areas are mostly subsistence fishing areas. The Juneau and Ketchikan management areas are comprised mixture of personal use fishing areas and subsistence fishing areas; personal use near the population centers of Ketchikan and Juneau and subsistence in the outlying areas

around rural communities (i.e. Klawock, Craig, Hydaburg, Hoonah, and Angoon). Sockeye salmon fishing areas are generally site specific whether it is for personal use or subsistence. Pink and chum salmon fishing generally encompasses broad areas (i.e. all streams in a C&T area) for both personal use and subsistence. Coho salmon fishing is typically broadly permitted in subsistence areas whereas it is restricted to just hatchery THAs for personal use. Directed king salmon fishing is restricted to personal use fishing only in hatchery THAs. Possession and annual limits vary per species and by area.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because its intent is to expand personal use area, gear, and target species. Alaska residents can participate in subsistence, personal use, and sport salmon fisheries. There is opportunity provided in many areas throughout Southeast Alaska to participate in personal use fisheries for sockeye, pink, and chum salmon. The department is concerned that this proposal would create confusion between where subsistence and personal use fisheries occur, decreasing the separation between legal gear for personal use and sport fishers. The additional harvest could create conservation concerns for some systems and/or some salmon species. Finally, additional harvest of king salmon could increase the difficulty of meeting the obligations of the PST. 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.

PROPOSAL 187 – 5AAC 77.682. Personal Use Salmon Fishery.

PROPOSED BY: Klawock Tribe.

WHAT WOULD THE PROPOSAL DO? This would open waters of Klawock River upstream of the Klawock River bridge to the harvest of salmon by beach seine gear for the personal use fishery. Regulations would not change for the subsistence fishery and the river would remain closed.

WHAT ARE THE CURRENT REGULATIONS? Subsistence and personal use fishing for salmon is allowed in the Klawock Inlet and estuary downstream of the Klawock River bridge (Figure 187-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would allow additional harvest of sockeye salmon on the Klawock River; however, the additional harvest would be in an area where fish are highly susceptible to harvest. This could reduce sockeye salmon escapement in the Klawock River and the department may need to reduce possession limits on the system if a downward trend in sockeye salmon escapement is observed.

BACKGROUND: Klawock River sockeye salmon have always been an important food resource to the residents of Craig and Klawock and have been under a department permit system since 1969. Although pink, coho, and chum salmon return to the Klawock River, sockeye salmon are the preferred subsistence food fish and compose the majority of the subsistence and personal use harvest. In 1986, the board established regulations that closed fishing on weekend days due to a combination of poor runs and concerns that access to the area increased as a result of improvements to the Prince of Wales road system and increased ferry service from Ketchikan. In 2010, the board extended the fishing season from July 31 to August 7 to provide additional opportunity on years with later runs. In 2015, the board adopted Proposal 151 closing the area described in this proposal to subsistence and personal use harvest of sockeye. The board felt that sockeye salmon in the estuary above the bridge were susceptible to harvest and could be targeted in years of weak returns.

Total escapement of sockeye salmon to the Klawock River has been estimated by a variety of methods. Although a weir has been maintained most years at the Klawock River Hatchery, after 1978 counts were often incomplete due to high water events, hatchery counting priorities, and yearly variation in dates of weir installation. Klawock River weir counts thus often represent minimum estimates of abundance due to unreliable weir operations. Estimated sockeye salmon escapements from 2001 to 2010 averaged 16,900 fish based primarily on a monitoring project conducted by the department on the lake and tributaries. From 2011 to 2016, escapements averaged only 4,578 sockeye salmon, based solely on weir counts. Although reliable exploitation rates cannot be estimated from the available information, it is thought to be very high in some years. In 2014, the United States Forest Service (USFS) assisted the Prince of Wales Hatchery Association with funds to install the Klawock River weir earlier than normal to obtain a more accurate escapement count.

From 1985 to 2016, the number of subsistence permits that reported harvest averaged 100 while the recent 5-year average is 51 permits and the 10-year average is 70 permits. In 2016, salmon harvests were reported on only 49 permits, with a reported harvest of 1,423 sockeye salmon. Reported harvest in the fishery has declined in recent years from a historical average harvest of 2,940 sockeye salmon to a recent 5-year average reported harvest of 1,310 sockeye salmon.

Based on department studies, it is estimated the reported harvest represents about 60% of the total subsistence harvest.

In addition to a state subsistence fishery on this stock, subsistence harvests have also occurred in federal waters above the bridge by federally qualified users since 2002. The average yearly harvest from 2002 to 2016 has been 90 sockeye salmon. Although the harvest in federal waters is much smaller, this additional harvest is outside of the state's control. In January 2011, the Federal Subsistence Board voted to remove the defined season in federal regulations and open the fishery in federal waters for the entire year. In 2015, under their delegated authority, the USFS closed the waters above the bridge to federally-qualified fishermen.

At various meetings throughout the years, three main issues have been identified that may be contributing to the depressed nature of this stock. These include habitat concerns related to logging, road building, and development in the Klawock watershed, both commercial and subsistence harvest management, and hatchery practices.

In 1989, the board made the determination that salmon, Dolly Varden char, and steelhead trout in Section 3-B in waters east of a line from Point Ildenfonso to Trainquil Point and in waters of Warm Chuck Inlet north of a line from a point on Hecata Island at 55°44′ N. lat., 133°20′ W. long., and in waters of Sarkar Cove and Sarkar Lakes are customarily and traditionally taken for subsistence uses. This area includes stocks in the closed waters that the proposal seeks to reopen. The board has established a range of 9,068–17,503 salmon are reasonably necessary for subsistence purposes for Districts 1–4. The department estimates that during the years that the Klawock River was open above the bridge, more than 90% of the harvest occurred below the Klawock River bridge.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Additional harvest of sockeye salmon at this time could be detrimental to the health of the stock.

The department is concerned with the health of the Klawock River sockeye salmon stock. This proposal would increase personal use harvest of Klawock River sockeye salmon by allowing harvest of sockeye salmon in an area where they are highly susceptible to harvest. In addition, many users of the resource, along with USFS, have voiced concerns to the department that Klawock River sockeye salmon runs have been below average in recent years. The department does not have the ability to manage this fishery inseason because escapement through the Klawock River weir peaks in the middle of August, after the personal use fishery has closed. If this proposal is adopted, and observed escapements continue to be below average, the department may need to reduce personal use possession limits.

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

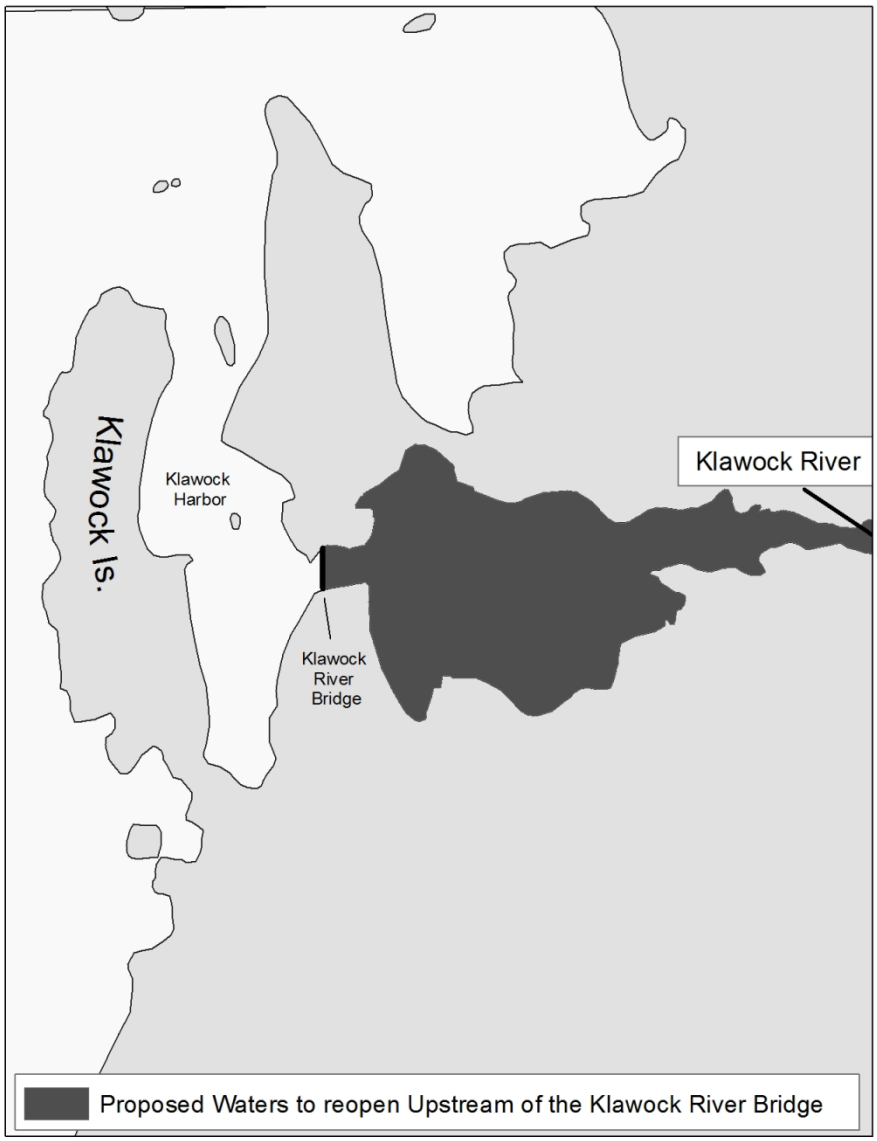

Figure 187-1.–Klawock River and the proposed expansion for the personal use fishery.

Table 187-1–Klawock subsistence fishery. Number of permits and sockeye 1985–2017

Year	Number of Permits	Number of Sockeye
1985	138	2,336
1986	156	2,762
1987	117	2,118
1988	96	1,851
1989	120	3,048
1990	100	2,631
1991	77	1,989
1992	133	4,322
1993	162	5,763
1994	133	4,848
1995	118	3,489
1996	159	5,553
1997	126	4,746
1998	125	4,670
1999	124	3,506
2000	113	3,015
2001	130	4,433
2002	116	3,778
2003	91	3,195
2004	80	2,697
2005	34	238
2006	65	1,859
2007	57	2,042
2008	70	3,000
2009	127	4,296
2010	99	3,260
2011	76	2,079
2012	68	2,327
2013	53	1,071
2014	58	1,182
2015	29	549
2016	49	1,423
2017*	28	846
1985–2016 Avg.	100	2,940
5-yr Avg. 2012–2016	51	1,310
10-yr Avg. 2007–2016	69	2,123

PROPOSAL 188 – 5 AAC 77.683. Personal Use Fishery Management Plan for the Juneau, Petersburg, Wrangell, Sitka, And Ketchikan Road Systems.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would allow for a personal use fishery on excess hatchery-produced salmon in Ketchikan Creek.

WHAT ARE THE CURRENT REGULATIONS? Personal use fishing in salmon streams flowing across or adjacent to the road systems of Juneau, Petersburg, Wrangell, Sitka, and Ketchikan is not allowed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would allow harvest of excess hatchery-produced salmon in Ketchikan Creek that are not currently utilized.

BACKGROUND: The Deer Mountain Hatchery was established on Ketchikan Creek in 1925 and the existing facility was built in 1954. The Southern Southeast Regional Aquaculture Association (SSRAA) has recently taken over operations of the Deer Mountain Hatchery and began to release king salmon in 2014. The hatchery will have annual returns of salmon returning to Ketchikan Creek beginning in 2017. SSRAA does not need to collect broodstock or perform cost recovery in Ketchikan Creek since those operations are conducted at their Whitman Lake and Neets Bay hatchery sites. This will result in potentially large numbers of excess king salmon. Historically, the department has worked with the Deer Mountain Hatchery operator and opened a portion of Ketchikan Creek by emergency order under 5 AAC 77.685 and 5 AAC 77.683 for a personal use dip net fishery to harvest excess hatchery fish. Current regulations prevent a personal use fishery targeting these excess hatchery fish.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. If this proposal is adopted, the board should consider amending 5 AAC 77.682 (c) to allow personal use harvest of king salmon.

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.

PROPOSAL 189 – 5 AAC 77.XXX. Personal Use Aquatic Plant Fishery.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would establish personal use provisions for harvest of aquatic plants in the Ketchikan and Juneau nonsubsistence areas.

WHAT ARE THE CURRENT REGULATIONS? Aquatic plants may be taken for noncommercial use outside of nonsubsistence areas with no season or bag limit but personal use harvest of aquatic plants is not allowed within nonsubsistence areas in Southeast Alaska.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would have little effect on local abundance of aquatic plants. The department estimates that harvest would be minimal in the areas described. This would also allow lawful continuation of harvest activity that is commonly believed to occur.

BACKGROUND: Harvest of aquatic plants for personal use consistently garners interest with local residents, whether used for fertilizer in home gardens or directly as food. Current regulations for personal use harvest of aquatic plants stipulate that aquatic plants may only be taken as provided in Chapter 77; however, no provisions exist in Chapter 77 for the harvest of aquatic plants in Southeast Alaska. Without regulations covering the personal use harvest of aquatic plants, there has been confusion among the public about what is allowed. Since Juneau and Ketchikan are located inside nonsubsistence areas and there are no provisions for personal use harvest of aquatic plants, residents of those cities must travel outside of the nonsubsistence areas to legally harvest aquatic plants. Residents may not have means to successfully travel outside the nonsubsistence area or may simply not realize that it is illegal to harvest personal use aquatic plants.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Provisions of this proposal will allow limited harvest of aquatic plants and will allow for enforcement of sustainable personal use aquatic plant harvest inside the Juneau and Ketchikan nonsubsistence areas.

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.

PROPOSAL 190 – 5 AAC 77.682. Personal use salmon fishery.

PROPOSED BY: Mike Fox**.**

WHAT WOULD THIS PROPOSAL DO? Increase the annual household limits of Taku River sockeye salmon in the personal use fishery to 10 fish for a household of one and 20 fish for a household of two or more.

WHAT ARE THE CURRENT REGULATIONS? The current annual household limits in the Taku River personal use fishery are 5 sockeye salmon for a household of one and 10 sockeye salmon for a household of two or more. King and coho salmon taken incidentally by gear operated under the terms of a personal use permit for other salmon are legally taken and possessed for personal use purposes. The possession limit for king salmon is two fish and the possession limit for coho salmon is six fish.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? This would likely result in nearly doubling the sockeye salmon harvested in the Taku River personal use fishery as most permit holders that fish in the Taku River currently take their full limit. There would also be an increase in the harvest of Taku River king and coho salmon.

BACKGROUND: The Taku River personal use salmon fishery is mainly utilized by Juneau/Douglas residents. Under current regulations, the fishing period occurs July 1–31, although timing has varied from mid-June to mid-August. For example, in 2017, the fishery was shifted later by nine days (July 10–August 9) to reduce the number of incidentally caught king salmon present during the beginning of the fishery while maintaining 31 days of fishing opportunity. The fishery was closed 1977–1984 and 1986–1988, reopening from 1989 to present. The recent 10-year average annual harvest (2007–2016) recorded on permits is 1,053 sockeye and 31 king salmon from an average of 129 permits.

The Taku River is a transboundary river, originating in Canada and flowing through Alaska to saltwater, and escapement goals, assessment procedures, and allocation of harvest shares between the U.S. and Canada are defined in the Transboundary Annex of the Pacific Salmon Treaty (PST). The PST allows each party to determine the allocation of their respective harvest shares among their domestic user groups. Since implementation of the PST in 1985, the terminal run size of Taku River sockeye salmon has averaged 215,000 fish with escapement averaging 106,000 fish. The current Taku River sockeye salmon spawning objective is a range from 71,000 to 80,000 fish with a point goal of 75,000 fish. The spawning objective has been achieved in all but two years since 1984; in 1998 escapement was 99.5% and in 2008 was 95.8% of the 71,000 fish minimum of the objective range. The average annual U.S. harvest (both commercial and personal use) of terminal run Taku River sockeye salmon during this period is 84,000 fish. Since 1995, there has been surplus unharvested U.S. allowed catch (AC) in all but two years. On average, a doubling of the personal use catch would not affect the domestic allocation between personal use and commercial fishermen, but could be a factor in years of low sockeye salmon terminal run size. Through the PST process, it has been acknowledged that there could be issues with current assessment projects utilized to determine run size leading to overestimation. Steps are under way to review the assessment program and reevaluate the Taku River drainagewide sockeye salmon escapement goal.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative implications of this proposal but notes approval could increase the incidental harvest of king salmon in the

personal use sockeye salmon fishery. Taku River king salmon are currently in a period of low productivity and commercial and sport fishery restrictions have been applied. Fisheries on the Taku River are managed under the PST with commercial and existing personal use harvests of king, sockeye, and coho salmon factored in to the U.S. AC. Significant increases in personal use harvest could require reductions in commercial harvest in years of low sockeye salmon abundance to keep U.S. harvests of Taku River sockeye salmon within the U.S. AC defined in the PST.

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.

PROPOSAL 191 – 5 AAC 77.682. Personal use salmon fishery.

PROPOSED BY: Mike Fox.

WHAT WOULD THIS PROPOSAL DO? This would allow personal use salmon fishing to occur on the Taku River up to nine days earlier than the current time period provided in regulation.

WHAT ARE THE CURRENT REGULATIONS? Sockeye salmon may be taken by set gillnets only in waters from the Taku River Lodge upstream to the U.S./Canada border from July 1 to July 31. The annual household limits in the Taku River personal use fishery are 5 sockeye salmon for a household of one and 10 sockeye salmon for a household of two or more. King and coho salmon taken incidentally by gear operated under the terms of a personal use permit for other salmon are legally taken and possessed for personal use purposes. The possession limit for king salmon is two fish and the possession limit for coho salmon is six fish.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? Fishing earlier would increase the harvest of incidentally caught Taku River king salmon. In years of low king salmon returns, minimizing or eliminating interception of king salmon may be a high priority in which case this fishery would be closed or restricted by emergency order. Extending the personal use fishing season would likely increase sockeye salmon harvests in the Taku River personal use fishery.

BACKGROUND: The Taku River personal use salmon fishery is a directed sockeye salmon fishery mainly utilized by Juneau/Douglas residents. Under current regulations, the open fishing period occurs July 1–31 although timing has varied from mid-June to mid-August. For example, in 2017, the fishery was shifted later by nine days (July 10–August 9) to reduce the number of incidentally caught king salmon present during the beginning of the fishery while maintaining 31 days of fishing opportunity. The Taku River large king salmon escapement goal range is 19,000 to 36,000 fish. The lower end of this range was not met in 2016 or 2017, with significant commercial fishing restrictions in place, particularly in 2017. The 2018 Taku River large king salmon run is forecast to be below the lower end of the escapement goal range. King salmon are allowed to be retained incidentally when personal use fishing for sockeye salmon on the Taku River.

The Taku River personal use salmon fishery was closed from 1977 to 1984 and 1986–1988, reopening from 1989 to present. The recent 10-year average annual harvest (2007–2016) recorded on permits is 1,053 sockeye salmon and 31 king salmon from an average of 129 permits. Since 1989, regulations have allowed taking of salmon in the Taku River personal use fishery only by set gillnets.

U.S. and Canadian harvest allocations of king, sockeye, and coho salmon from the Taku River are described in the Transboundary Annex of the Pacific Salmon Treaty (PST). Since implementation of the PST in 1985, the terminal run size of Taku River sockeye salmon has averaged 215,000 fish with escapement averaging 106,000 fish. The current Taku River sockeye salmon spawning objective is a range of 71,000–80,000 fish with a point goal of 75,000 fish. The average annual U.S. commercial and personal use harvest of Taku River sockeye salmon during this period is 84,000 fish.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal and **OPPOSES** shifting the personal use fishing season to an earlier start date.

Opening the personal use fishery on the Taku River earlier than July 1 may increase the number of Taku River king and sockeye salmon harvested by personal use fishermen to unsustainable levels.

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.

PROPOSAL 192 – 5 AAC 77.682. Personal use salmon fishery.

PROPOSED BY: Mike Fox.

WHAT WOULD THIS PROPOSAL DO? This would limit personal use fishing for salmon in District 11 to periods closed to commercial fishing. Although unclear, this proposal may be seeking personal use drift gillnet opportunity in District 11 outside of the terminal stream areas where personal use salmon fishing opportunities are currently provided.

WHAT ARE THE CURRENT REGULATIONS? Salmon may only be taken under the authority of a personal use fishing permit designating the species and numbers of fish to be harvested, time and area for taking, the type and amount of fishing gear, and other conditions necessary for management or conservation purposes. Personal use salmon fishing is allowed in and around all streams in District 11, except along the Juneau road system. Unless otherwise specified, gaffs, spears, beach seines, dip nets, cast nets, and drift gillnets not exceeding 50 fathoms in length are the types of gear allowed. Salmon may be taken for personal use in the Taku River drainage by set gillnets only. In District 11, sockeye salmon personal use possession limits are provided in regulation only for the Taku River upstream from the Taku River Lodge to the U.S./Canada border and at Sweetheart Creek upstream from a department marker near the stream mouth. The Taku River sockeye salmon season dates are July 1–July 31 with an annual limit of 5 sockeye salmon for a household of one person and 10 sockeye salmon for a household of two of more. Sockeye salmon season dates for Sweetheart Creek are June 1–October 31 with a possession limit of 25 sockeye salmon and no annual limit. Pink salmon season dates are June 1–September 30 with the annual and possession limit of 150 pink salmon, and chum salmon season dates are June 1–October 31 with the annual and possession limit of 50 chum salmon. Pink and chum salmon may be taken for personal use from all streams in District 11, except those along the Juneau road system. The department will not issue a personal use permit for the directed taking of king or coho salmon in District 11, but king and coho salmon taken incidentally by gear operated under the terms of a personal use permit for other salmon species are legally taken and possessed for personal use purposes. The possession limit for king salmon is two fish and the possession limit for coho salmon is six fish.

WHAT WOULD BE THE EFFECT IF THIS PROPOSAL WAS ADOPTED? This would result in reduced fishing time and salmon harvest for personal use fishermen in District 11 because it would only allow personal use fishing during periods closed to commercial fishing. District 11 is currently open to personal use salmon fishing, depending on the targeted species and location, from June 1 through October 31. If the proposal is requesting personal use fishing opportunity with drift gillnets in the mixed stock areas in District 11, the result could be increased harvests of king, coho, and sockeye salmon returning to the Taku River which have harvest sharing provisions between the U.S. and Canada outlined in the Pacific Salmon Treaty (PST). New personal use fishery opportunities targeting these stocks could be viewed as new or expanded fisheries that have not been addressed in the PST. District 11 has several smaller sockeye salmon systems (Auke Creek, Windfall Creek, Steep Creek and other Mendenhall River drainage streams) where personal use fishing is currently prohibited due to their small run size. If personal use fishery participants could use drift gillnets throughout District 11 waters, sockeye salmon returns to these streams could be reduced.

BACKGROUND: The Taku River and Sweetheart Creek sockeye salmon personal use fisheries have made up the bulk of the personal use salmon harvest in District 11 since 1985.

The Taku River personal use salmon fishery is a directed sockeye salmon fishery mainly utilized by Juneau/Douglas residents. Under current regulations, the open fishing period occurs July 1–31. The Taku River personal use salmon fishery was closed from 1977 to 1984 and 1986–1988, reopening from 1989 to present. The recent 10-year average annual harvest (2007–2016) recorded on permits is 1,053 sockeye salmon and 31 king salmon from an average of 129 permits. Since 1989, regulations have allowed taking of salmon in the Taku River personal use fishery only by set gillnets.

U.S. and Canadian harvest allocations of king, sockeye, and coho salmon from the Taku River are described in the Transboundary Annex of the Pacific Salmon Treaty (PST). Since implementation of the PST in 1985, the terminal run size of Taku River sockeye salmon has averaged 215,000 fish with escapement averaging 106,000 fish. The current Taku River sockeye salmon spawning objective is a range of 71,000–80,000 fish with a point goal of 75,000 fish. The average annual U.S. commercial and personal use harvest of Taku River sockeye salmon during this period is 84,000 fish.

Sweetheart Creek is located in Port Snettisham and fed by Sweetheart Lake. A barrier falls exists a short distance above tide water blocking upstream passage to anadromous fish. Unfed sockeye salmon fry produced in the Douglas Island Pink and Chum Snettisham Hatchery nearby are stocked in the lake annually and all the returning adults are available to harvest in the personal use fishery. The recent 10-year average Sweetheart Creek personal use sockeye salmon harvest is 3,701 fish from an average of 237 permits.

Five other creeks draining into Stephens Passage in District 11 have had recorded personal use harvests of pink and chum salmon totaling approximately 340 pink and 270 chum salmon from 1985 to 2016.

Figure 192-1 shows District 11, the commercial drift gillnet area, the Juneau road system, and the location of important sockeye salmon stocks in the area.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because a personal use salmon fishery in District 11 is already in place, drift gillnet is an allowed gear type, and the fishery is not tied to commercial salmon fishing periods. This proposal would reduce the time currently available for personal use fishermen to harvest salmon in District 11 outside of the Taku River drainage.

The department is **NEUTRAL** on the allocative aspects of developing a personal use drift gillnet fishery in District 11 away from specific streams with defined possession limits, but has concerns regarding negative impacts to small sockeye salmon systems currently not open to personal use salmon fishing.

COST ANALYSIS: Approval of this proposal could result in the additional direct cost of a drift gillnet for a private person to participate in this fishery.

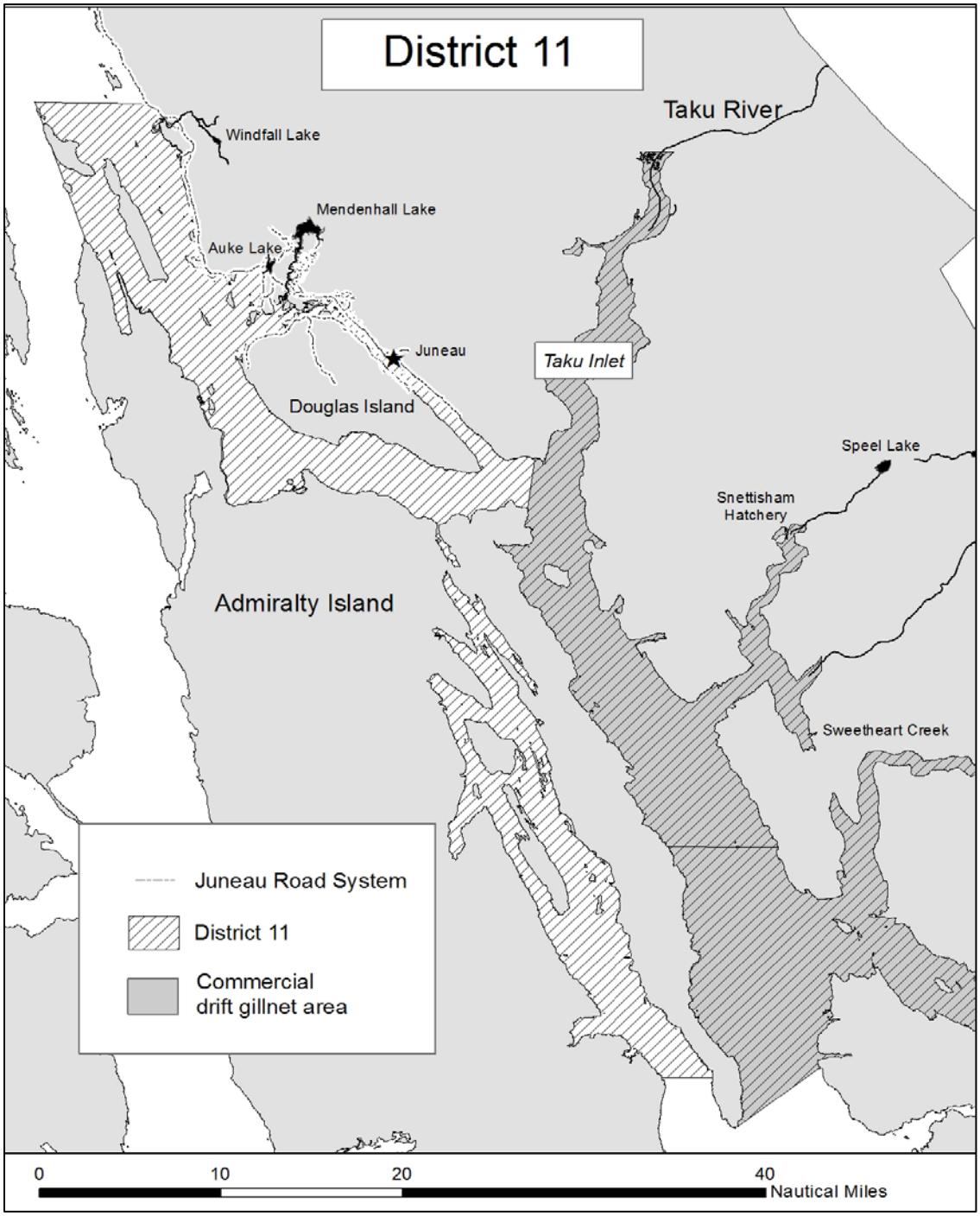

Figure 192-1.–District 11, commercial drift gillnet area, Juneau road system and important sockeye salmon systems.

PROPOSAL 193 - 5 AAC 77.682. Personal Use Salmon Fishery.

PROPOSED BY: Ken Kreitzer.

WHAT WOULD THE PROPOSAL DO? This would establish a personal use salmon set gillnet fishery in Section 15-A (Figure 193-1) with an unspecified harvest limit not to exceed reasonable household yearly consumption.

WHAT ARE THE CURRENT REGULATIONS? Salmon may not be taken for personal use in the Haines Management Area (District 15), except that in the Taiya River near Skagway, limited numbers of pink and chum salmon can be taken. There is specific language that addresses the use of set gillnets to harvest salmon in the Haines Management Area. The regulation states that set gillnets may not be used to take salmon except in the mainstream and side channels, but not the tributaries, of the Chilkat River.

Under *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716), specific salmon stocks in the Haines Management Area are found to be customarily and traditionally taken or used for subsistence. In District 15, this includes salmon in all waters of the Chilkat River and Chilkat Inlet north of the latitude of Glacier Point, as well as salmon in Lutak and Chilkoot inlets north of the latitude of Battery Point, excluding waters of Taiya Inlet north of the latitude of the tip of Taiya Point (Figure 193-2). The numbers of salmon reasonably necessary for subsistence users in District 15 are 7,174—10,414 salmon.

Under *Policy for the management of mixed stock salmon fisheries* (5 AAC 39.220(d)), it is stated that most wild Alaska salmon stocks are fully allocated to fisheries capable of harvesting available surpluses. Consequently, the board will restrict new or expanding mixed stock fisheries unless otherwise provided for by management plans or by application of the board's allocation criteria.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would add an additional salmon fishery to the Haines Management Area, potentially decreasing the number of salmon available to the current subsistence, sport, and commercial users. A set gillnet fishery in Section 15-A would also create the possibility of conflicts between commercial drift gillnet fishermen and set gillnet fishermen. Commercial gillnets can now be operated along the shoreline of Section 15-A and are allowed to drift freely. This would not be possible if set gillnets were in place along the shore, thus the current fishing patterns may be disrupted.

BACKGROUND: The northern portions of the Chilkoot and Chilkat inlets in the Haines Management Area are subsistence salmon fishing areas through a customary and traditional use finding on stocks in those areas. The subsistence fisheries in these areas are actively managed by the department from the Haines office. Since the subsistence fisheries are in the northern portion of District 15, most salmon stock separation has already occurred by the time the fish are available to harvest and it is possible to manage the fisheries in response to the projected returns of salmon stocks. For example, if the Chilkat River king salmon run is projected to be below goal, then the Chilkat Inlet subsistence fishery can be curtailed in time or area, as was done this year. Similarly, the subsistence sockeye salmon fisheries in Chilkoot and Chilkat inlets can be

managed separately if there are concerns about achieving escapement goals. There is an established stock separation program in the District 15 commercial sockeye salmon fishery, also allowing for the management of the individual sockeye stocks.

Drift gillnets are allowed in the salt water salmon subsistence fishery in District 15, but set gillnets are allowed only in the Chilkat River. When limited entry was instituted in the commercial salmon fishery, the use of commercial set gillnets was disallowed in District 15. The use of drift gillnets in the salt water subsistence fishery eliminates claiming of a particular spot for subsistence fishing and also reduces the chance of conflicts when commercial and subsistence fishermen share the same area.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because its intent is to establish a personal use fishery with new gear in a new area. There is a well-established and regulated subsistence fishery in the Haines Management Area that provides residents of Alaska with opportunity to harvest salmon. The subsistence fishery allows for the management of individual salmon stocks, while the proposed fishery would target mixed stocks of salmon. 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.

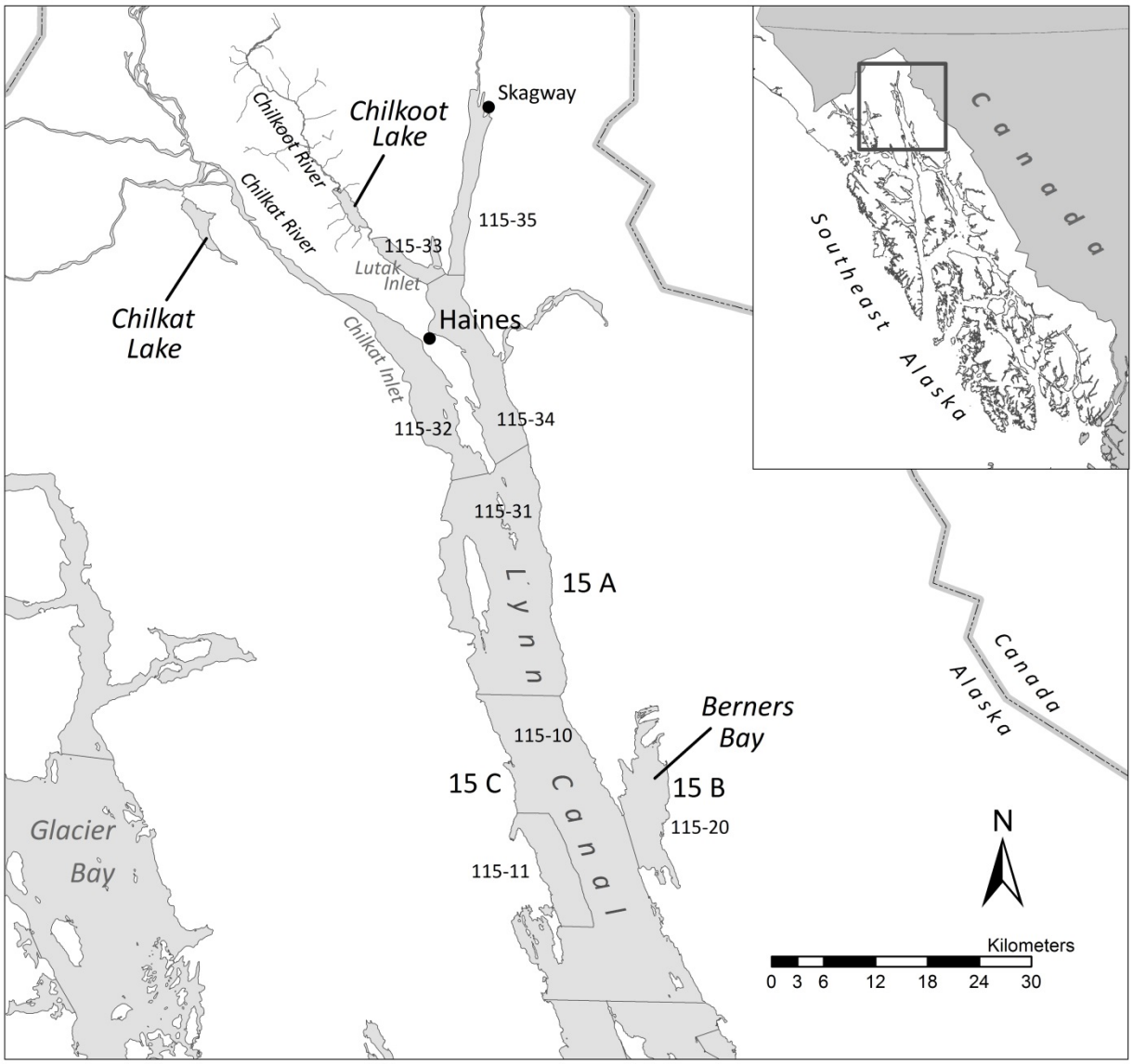

Figure 193-1.–Commercial fishing subdistrict and management boundary lines within District 15 in the Haines area, Southeast Alaska.

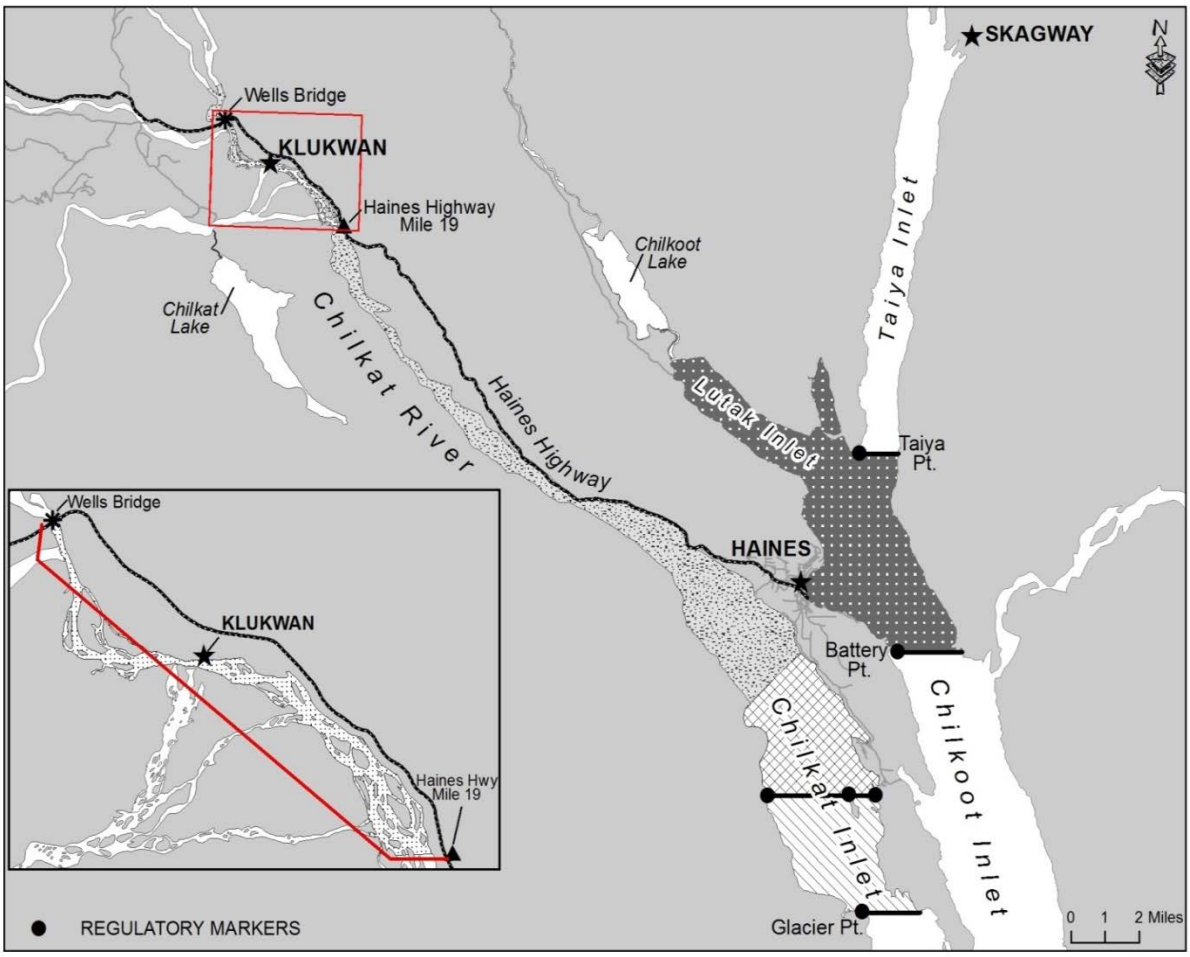

Figure 193-2.–Map of the Haines salmon subsistence fishery areas.

PROPOSAL 194 - 5 AAC 77.682. Personal use salmon fishery.

PROPOSED BY: Mike Fox.

WHAT WOULD THE PROPOSAL DO? This would establish a personal use salmon fishery in District 15 and would allow that fishery to be prosecuted during periods closed to commercial fishing.

WHAT ARE THE CURRENT REGULATIONS? Salmon may not be taken for personal use in the Haines Management Area (District 15), except that in the Taiya River near Skagway, limited numbers of pink and chum salmon can be taken.

Under *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716), specific salmon stocks in the Haines Management Area are found to be customarily and traditionally taken or used for subsistence. In District 15, this includes salmon in all waters of the Chilkat River and Chilkat Inlet north of the latitude of Glacier Point, as well as salmon in Lutak and Chilkoot inlets north of the latitude of Battery Point, excluding waters of Taiya Inlet north of the latitude of the tip of Taiya Point (Figure 194-2). It is specified that the numbers of salmon reasonably necessary for subsistence users in District 15 are 7,174—10,414 salmon.

Under *Policy for the management of mixed stock salmon fisheries* (5 AAC 39.220(d)), it is stated that most wild Alaska salmon stocks are fully allocated to fisheries capable of harvesting available surpluses. Consequently, the board will restrict new or expanding mixed stock fisheries unless otherwise provided for by management plans or by application of the board's allocation criteria.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would add an additional salmon fishery to the Haines Management Area, potentially decreasing the number of salmon available to the current subsistence, sport, and commercial users. The personal use fishery would be open during the time that the commercial fisheries are closed so there would not be direct gear conflict with the commercial gillnet fleet.

BACKGROUND: The northern portions of the Chilkoot and Chilkat inlets in the Haines Management Area have been designated subsistence salmon fishing areas through a customary and traditional use finding. The subsistence fisheries in these areas are actively managed by the department from the Haines office. Since the subsistence areas are in the northern portion of District 15, most salmon stock separation has already occurred by the time the fish are available to harvest and it is possible to manage the fisheries in response to the projected return of salmon stocks. For example, if the Chilkat River king salmon return is projected to be below goal, then the Chilkat Inlet subsistence fishery can be curtailed in time or area, as was done this year. Similarly, the subsistence sockeye fisheries in Chilkoot and Chilkat inlets can be managed separately if there are concerns about achieving escapement goals. There is an established stock separation program in the District 15 commercial sockeye salmon fishery, also allowing for the management of the individual sockeye stocks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because its intent is to establish a personal use fishery in a new area. There is a well-established and regulated subsistence fishery in the Haines Management Area that provides residents of Alaska with opportunity to harvest salmon. The subsistence fishery allows for management of individual salmon stocks, while the fishery proposed in this proposal would target mixed stocks of salmon. 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.

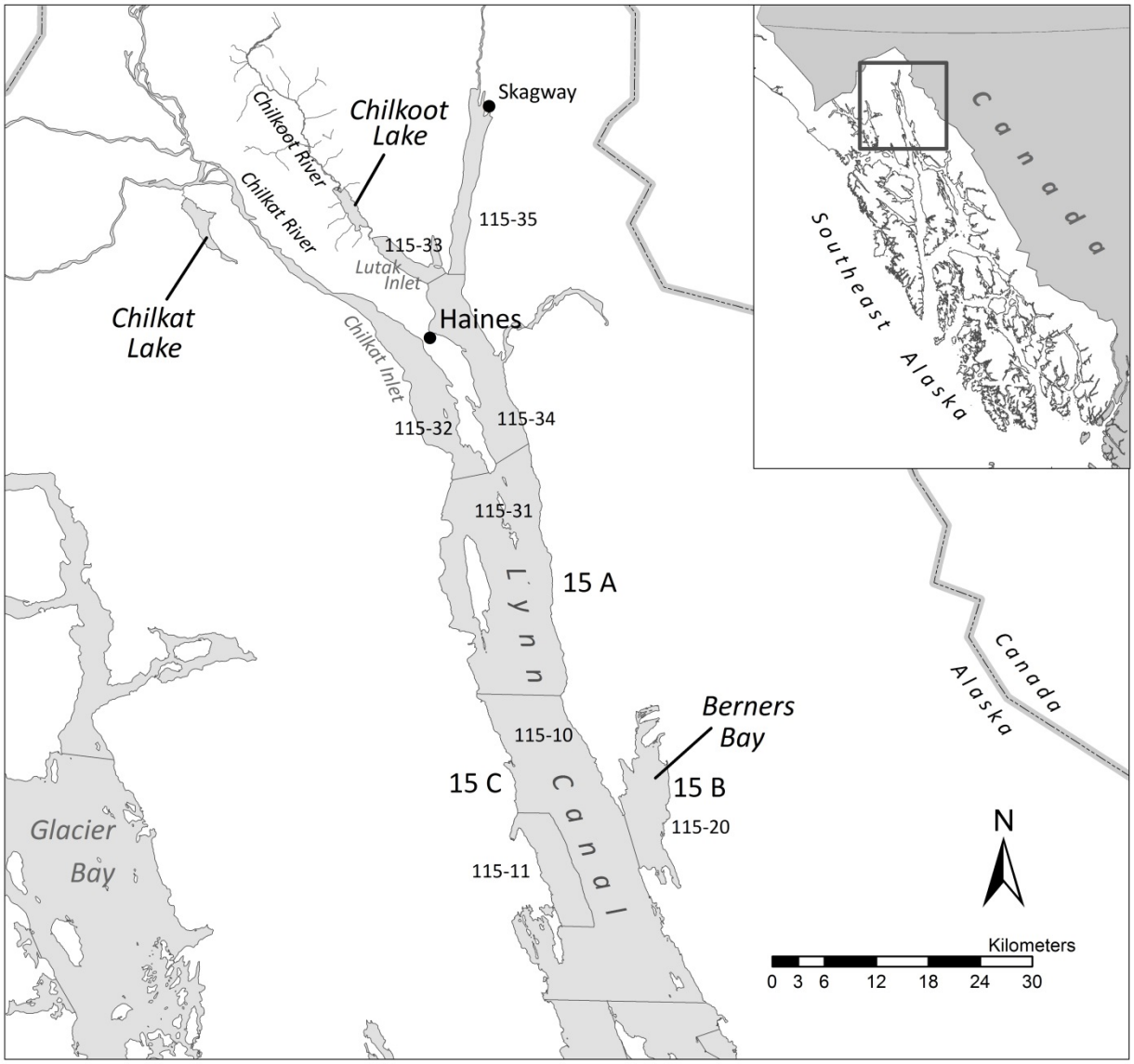

Figure 194-1.–Commercial fishing subdistrict and management boundary lines within District 15 in the Haines area, Southeast Alaska.

Sport Regionwide (2 Proposals)

PROPOSALS 195 and 196 – 5 AAC 47.020. General provisions for seasons and bag, possession, annual, and size limits for the salt waters of the Southeast Alaska Area; and 5 AAC 47.022. General provisions for seasons and bag, possession, annual, and size limits for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Southeast Subsistence Regional Advisory Council.

WHAT WOULD THESE PROPOSALS DO? These would establish a nonresident annual limit for sockeye salmon in the salt (proposal 195) and fresh (proposal 196) waters of the Southeast Alaska Area.

WHAT ARE THE CURRENT REGULATIONS? The Southeast Alaska Area bag and possession limit for sockeye salmon, 16 inches or greater in length, is six and 12 fish.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? These would reduce sport harvest opportunity and harvest of sockeye salmon by nonresident anglers in Southeast Alaska. Immediately after landing a salmon, nonresident anglers would be required to record the date and location of harvest, in ink, on their harvest record. Harvest records are not required to be returned to the department and the proposed changes would not affect or improve estimates of sport harvest.

BACKGROUND: The department does not have conservation concerns for sockeye salmon within Southeast Alaska except for the McDonald Lake stock. The department has a long history of utilizing emergency order authority in nearshore and fresh waters with terminal salmon runs in response to indications of poor run strength, or when combined with high levels of effort or harvest relative to run sizes.

Annual limits have been established for specific fisheries in addition to bag and possession limits to further restrict harvests if, after other measures are taken, harvest cannot be contained to sustainable levels. This can occur when bag limits have been reduced to very low levels but angling success and/or levels of effort lead to unsustainable harvests or otherwise result in the sport fishery exceeding its allocation.

The sport harvest of sockeye salmon by guided nonresidents is recorded in charter logbooks. Guides are required to record fishing effort, catch, and harvest on a daily basis for each client. The SWHS estimates harvest by sport anglers through a mail-out survey, and this data can be stratified by residency. Establishing an annual limit would not result in better estimates of sport harvest. While anglers are required to record the harvest of all species with an annual limit, the harvest records are not submitted to the department, but are used solely for enforcement of annual limits in the field.

In the recent 10 years, annual harvest of sockeye salmon in the Southeast Alaska Area has averaged approximately 1.2 million fish in commercial fisheries, 19,000 fish in subsistence and personal use fisheries, and 17,000 fish in sport fisheries (Table 195-1). The recent 10-year average annual sport sockeye salmon harvest has ranged from 564 fish in the Petersburg Management Area to 8,451 fish in the Yakutat Management Area (Table 195-2). On average, nonresidents accounted for 76% of the annual Southeast Alaska Area sport sockeye salmon harvest, and 64% of the harvest occurred in fresh water (Table 195-3).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of these proposals. The department is **OPPOSED** to establishing annual limits in the absence of a conservation concern or management need.

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, subsistence and personal use, and sport fishery harvest of sockeye salmon in the Southeast Alaska Area, 2007–2016.

	Fishery		
Year	Commercial	Subsistence & Personal Use	Sport
2007	1,904,802	15,692	17,421
2008	436,302	19,954	14,144
2009	925,749	18,537	14,736
2010	720,926	19,315	12,494
2011	1,242,445	16,445	20,769
2012	947,219	21,854	15,025
2013	974,665	22,476	21,146
2014	1,669,932	22,091	19,013
2015	1,528,774	14,812	19,976
2016	1,505,976	21,446	15,990
10-year average	1,185,679	19,262	17,071

Table 195-2.–Statewide Harvest Survey estimates of the number of sockeye salmon harvested by sport anglers, by Southeast Alaska management area, 2007–2016.

	Management Area							
Year	Ketchikan	Prince of Wales	Petersburg	Sitka	Juneau	Haines	Yakutat	Southeast Total
2007	1,622	1,894	596	2,009	1,559	725	9,016	17,421
2008	727	1,337	763	407	2,808	1,100	7,002	14,144
2009	1,546	1,364	1,264	725	2,715	430	6,692	14,736
2010	994	926	184	1,729	2,077	972	5,612	12,494
2011	1,216	2,482	402	1,504	1,914	1,297	11,954	20,769
2012	1,776	1,611	283	1,686	2,036	1,814	5,819	15,025
2013	2,185	2,784	716	2,189	2,998	548	9,726	21,146
2014	2,491	1,650	346	1,150	1,304	650	11,422	19,013
2015	1,404	2,254	622	1,192	3,232	1,508	9,764	19,976
2016	1,193	1,718	460	2,007	1,979	1,134	7,499	15,990
10-year average	1,515	1,802	564	1,460	2,262	1,018	8,451	17,071

Table 195-3.–Ten-year average percentage of sport sockeye salmon harvest by nonresident and resident anglers, fresh and salt waters, in Southeast Alaska management areas, 2007–2016.

Management Area															
Ketchikan		Prince of Wales		Petersburg		Sitka		Juneau		Haines		Yakutat		Southeast Total	
Harvest percentage by nonresident and resident															
Non-res.	Res.	Non-res.	Res.	Non-res.	Res.	Non-res.	Res.	Non-res.	Res.	Non-res.	Res.	Non-res.	Res.	Non-res.	Res.
87%	13%	72%	28%	53%	47%	57%	43%	46%	54%	59%	41%	92%	8%	76%	24%
Harvest percentage by fresh water (FW) and salt water (SW)															
FW	SW	FW	SW	FW	SW	FW	SW	FW	SW	FW	SW	FW	SW	FW	SW
8%	92%	35%	65%	43%	57%	2%	98%	35%	65%	81%	19%	97%	3%	64%	36%

PROPOSAL 197 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for fresh waters of the Southeast Alaska Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would simplify current sport fishing regulations for king salmon in freshwater drainages of the Sitka Sound Special Use Area by removing size-specific bag and possession limits and allowing for 10 king salmon of any size to be harvested.

WHAT ARE THE CURRENT REGULATIONS? In the freshwaters that drain into Sitka Sound, the bag limit for king salmon 28 inches or greater in length is five fish and the bag limit of king salmon less than 28 inches in length is also five fish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would simplify management and enforcement of freshwater king salmon sport fishing regulations in the Sitka Sound Special Use Area. No significant changes to the fishery are expected.

BACKGROUND: There are no wild runs of king salmon in the Sitka Sound Special Use Area. Liberal king salmon freshwater sport fishing bag and possession limits in this area are intended to provide opportunity for anglers to harvest straying king salmon of hatchery origin.

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.

PROPOSAL 198 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Bruce Weyhrauch.

WHAT WOULD THE PROPOSAL DO? This would shift the Auke Bay Dolly Varden sport fishery closure by one month from April and May to May and June.

WHAT ARE THE CURRENT REGULATIONS? In Auke Bay, east of a line from Waydelich (Wadleigh) Creek to a department regulatory marker located approximately one-quarter mile south of the mouth of Auke Creek, Dolly Varden may not be taken in April and May.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Harvest of Dolly Varden emigrating Auke Creek during April may increase.

BACKGROUND: In the Juneau vicinity, Dolly Varden bag limits for both fresh and salt water areas were reduced from 10 to 5 fish in 1978. In 1980, bag limits were further reduced to 2 fish and closures were implemented in all fresh waters during September–May, and in salt waters within ¼ mile of the shoreline during April–May. The board took these actions in the 1980s following a 20-year decline in Dolly Varden catch-per-angler trip and to protect Dolly Varden populations when they are concentrated off river mouths of overwintering systems.

Dolly Varden abundance in Auke Creek appears to be stable under the current regulations. If adopted, harvest of Dolly Varden may increase during the month of April when these fish are concentrated off the mouth of Auke Creek. Emigrant Dolly Varden weir counts have been collected at Auke Creek since 1970. Emigration counts over the last 10 years appear to be stable at about 6,000 Dolly Varden counted annually with a range of 3,472 to 9,805 (Table 198-1). Based on weir counts made at Auke Creek during February–June every year from 2008 to 2017, an average of 99% of the annual Dolly Varden emigration occurred during April and May. Dolly Varden emigration in April averaged about 22% of the total run for 2008–2017.

Tagging studies have indicated that the Auke Creek system is an important overwintering site for Dolly Varden populations that spawn in streams throughout the Juneau Management Area.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The current closure protects those emigrants during the time they are concentrated in the Auke Bay estuary. These fish then disperse along the entire road system and provide catch and harvest opportunity throughout summer and fall. Adjacent areas open to Dolly Varden retention during April and May will still continue to provide spring fishing opportunities.

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 198-1.–Auke Creek Emigrant weir count of Dolly Varden, 2008–2017.

Year	Dolly Varden
2008	5,364
2009	5,319
2010	4,625
2011	4,382
2012	3,472
2013	6,405
2014	8,187
2015	9,805
2016	5,899
2017	5,756
Average 2008–2017	5,921

PROPOSAL 199 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area; and 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Verne Skagerberg.

WHAT WOULD THE PROPOSAL DO? This would increase the bag and possession limit of Dolly Varden in all salt waters within ¼ mile of shore on the Juneau road system and all freshwater drainages crossed by the Juneau road system to four fish of any size.

WHAT ARE THE CURRENT REGULATIONS? In the Juneau vicinity, in the waters that are adjacent to the Juneau City and Borough road system to a distance ¼ mile offshore and in all freshwater drainages crossed by the Juneau City and Borough road system, the bag and possession limit for Dolly Varden is two fish, no size limit.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The increase in bag limit may lead to an increase in effort and harvest of Dolly Varden.

BACKGROUND: In the Juneau vicinity, Dolly Varden bag limits for both fresh and salt water areas were reduced from 10 to 5 fish in 1978. In 1980, bag limits were further reduced to 2 fish and closures were implemented in all fresh waters during September–May and in salt waters within ¼ mile of the shoreline during April–May.

The board took these actions following a 20-year decline in sport fishing catch-per-angler trip. The action was based on results from multi-year Dolly Varden tagging research at Auke Creek, Lake Eva, and Saook Creek, as well as prior Juneau roadside creel interviews. Results from the tagging studies indicated that Dolly Varden in the Juneau vicinity had late age-at-maturity and a declining average size. These trends, combined with the popularity of springtime fishing for Dolly Varden, prior to salmon enhancement in the Juneau vicinity in the early 1980s, prompted the regulatory action.

In 1983, the seasonal closures for most Juneau roadside areas were lifted. Historical survey data and technical reports for the Juneau roadside fishery conveyed that angler preferences around 1980 were changing dramatically due to increasing numbers of returning enhanced fish (initially pink salmon, and later, king and coho salmon).

Information from the SWHS (2007–2016) indicates that harvest of Dolly Varden on the Juneau road system has been variable but fairly stable for the last 10 years (Table 199-1). The only long-term data set at Auke Creek weir suggests that the Dolly Varden population in that system is stable. Auke Creek is considered to be an indicator system for the Juneau Management Area (Table 198-1).

DEPARTMENT COMMENTS: The department **OPPOSED** to this proposal. Increasing the bag limit on the road system may result in an increase in effort and harvest. Juneau has the largest population in Southeast Alaska and conservative bag limits are needed due to high fishing effort. Under current regulations, Dolly Varden populations appear to be stable and harvest sustainable.

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 199-1.–Statewide harvest survey estimates of Dolly Varden harvest on the Juneau road system, 2007–2016.

Year	Freshwater Harvest	Saltwater Harvest	Total Harvest
2007	477	779	1,256
2008	372	1,150	1,522
2009	917	1,420	2,337
2010	652	699	1,351
2011	227	490	717
2012	142	270	412
2013	920	495	1,415
2014	1,037	512	1,549
2015	217	1,694	1,911
2016	350	145	495
Average 2007–2016	531	765	1,297

PROPOSAL 200 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area; and 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Michael Cole.

WHAT WOULD THE PROPOSAL DO? This would prohibit snagging in all salt and fresh waters along the Juneau road system with the exception that snagging would be allowed in Fish Creek Pond and a saltwater area near Wayside Park when hatchery returns are strong.

WHAT ARE THE CURRENT REGULATIONS? It is unlawful to intentionally snag or attempt to snag any fish in fresh water with the exception of Fish Creek Pond from June 1 to August 31 when anglers are targeting hatchery king salmon—Saltwater shorelines along the Juneau road system are open to snagging with the exception that snagging is prohibited within 150 feet of the Wayside Park Fishing Dock, and within a 200 yard radius seaward of Auke Creek.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Eliminating this method of sport fishing may lead to a decrease in effort and harvest along the Juneau road system.

BACKGROUND: Snagging is a popular method of sport fishing in the saltwater shoreline along the Juneau road system. This is especially true near the hatchery release sites where large concentrations of salmon can be found throughout the summer and fall. Since Juneau is a nonsubsistence area and no personal-use salmon fisheries are offered on the Juneau road system, snagging provides an effective means of harvesting salmon from saltwater for shore fishermen. Although a popular fishing method, SWHS information does not differentiate between snagging and other fishing methods, so saltwater catch and harvest from SWHS cannot be assigned to a particular fishing method; therefore it is not possible to gage the effects associated with adoption of this proposal.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal as it would require gear restrictions that limit harvest opportunity where no conservation concern exists. 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.

PROPOSAL 201 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Tony Soltys.

WHAT WOULD THE PROPOSAL DO? Implement catch-and-release only sport fishing in the Dredge Lakes Area also known as the Mendenhall Glacier Recreation Area (MGRA).

WHAT ARE THE CURRENT REGULATIONS? In all drainages crossed by the Juneau City and Borough road system, the following bag and possession regulations apply; king salmon limit is four fish of any size; coho salmon 16 inches or greater in length is two fish; rainbow and cutthroat trout, in combination, must be no less than 14 inches and no greater than 22 inches in length with a limit of two fish; the limit for Dolly Varden is two fish of any size.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Implementing catch-and-release only fishing would lead to a decrease in effort and harvest in the Dredge Lakes Area.

BACKGROUND: The MGRA is a popular place to go hiking and fishing. It is made up of a series of trails that provide access to a number of man-made and natural lakes that occur near the Mendenhall Glacier. Beginning in 2010, after hearing from members of the public that it was important to have a safe place for anglers to fish near their homes in the Mendenhall Valley, particularly youth anglers, the department stocked three lakes in the area (Crystal, Glacier and Moraine lakes). These lakes were stocked with catchable-sized king salmon 7–10 inches in length. Additional stockings took place in 2012, 2013, and 2014. Feedback from the stockings has been positive due to increase in catch rates. The department would like to continue to stock these lakes when additional fish become available.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal as it would limit opportunity to harvest fish where no conservation concern exists. The department is stocking fish in the lakes specifically to provide more opportunity for catch and harvest.

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.

PROPOSAL 202 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Tony Soltys.

WHAT WOULD THE PROPOSAL DO? Only barbless, single-hook, artificial lures may be used in the Dredge Lakes Area also known as the Mendenhall Glacier Recreation Area (MGRA).

WHAT ARE THE CURRENT REGULATIONS? Waters within the MGRA fall under statewide and regional regulations that allow anglers to use a single line with not more than one plug, spoon, spinner or series of spinners or two flies or two hooks, as well as allowing the use of multiple and barbed hooks. The use of bait is prohibited in the waters within the MGRA, except between September 15–November 15, with the exception of two lakes (Glacier and Moraine) that prohibit the use of bait year-round.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adding gear restrictions to the fresh waters of the MGRA may lead to a decrease in effort and harvest by an unknown amount. Requiring the use of barbless, single-hook, artificial lures may reduce release mortality by a small amount but would add regulatory complexity.

BACKGROUND: Studies have documented that mortality of released fish is largely dependent on hook placement, fish handling, and angler experience. Studies indicate that the use of bait results in ingestion and deeper hook placement causing a higher mortality rate than hook type such as treble, single, circle, and/or barbless. To reduce release mortality in Southeast Alaska freshwater fisheries, the use of bait is prohibited for 10 months allowing for a two month period during the fall coho salmon season when bait may be used.

The department engages in various education and outreach efforts to reduce unintended mortality by promoting best practices when releasing fish. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or address sustainability concerns. This includes the ability to modify sport fishing methods and means, such as prohibiting the use of bait.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal as it would require gear restrictions and add regulatory complexity where no conservation concern exists.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Anglers may have to purchase new tackle to comply with the single barbless hook regulation.

PROPOSAL 203 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would rescind the salmon sport fishing closure in the freshwaters of Sheep Creek near Juneau.

WHAT ARE THE CURRENT REGULATIONS? Sheep Creek is currently closed to sport fishing for salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would simplify Juneau Management Area sport fishing regulations and provide more opportunity by removing a sport fishing closure that is no longer necessary.

BACKGROUND: The salmon fishing closure on Sheep Creek has been in place since the mid-1970s when enhancement activity began. It was intended to protect broodstock for the hatchery facility. This closure is no longer necessary since the hatchery facility on Sheep Creek no longer exists and the creek is no longer used for collection of broodstock.

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.

PROPOSAL 204 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Michael Cole.

WHAT WOULD THE PROPOSAL DO? This would modify bag limits and establish annual limits, and the open period for harvesting sockeye salmon in Windfall Creek by emergency order based on sockeye salmon run strength.

WHAT ARE THE CURRENT REGULATIONS? Sockeye salmon bag and possession limit is one fish. Windfall Creek (the outlet stream of Windfall Lake) and the portion of the Herbert River within 100 yards of the confluence of Windfall Creek is closed to sport fishing from June 1 to July 31, except that sport fishing is allowed on Wednesdays and Saturdays during the month of June.

In Windfall Lake and all inlet streams, only unbaited, artificial lures may be used; the retention of sockeye salmon is prohibited.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Effort and harvest may increase in the Windfall Creek sockeye salmon sport fishery.

BACKGROUND: In the 1990s, increased sport fishing pressure and declining escapement counts of sockeye salmon at Windfall Creek and Lake, near Juneau, led to a series of restrictive regulations to curtail harvest. To prevent overharvest, the department issued emergency orders annually from 1991 to 1997 to either restrict or prevent harvest of sockeye salmon at Windfall Creek. In 1997, a study at Windfall Creek indicated that a limited opportunity to fish for these sockeye salmon could be allowed without jeopardizing the stock. Therefore, the department opened the area by emergency order to two days of sport fishing per week during the month of June in 1998 and 1999. During the 2000 board meeting the current regulations were adopted. These regulations also closed the lake and inlet streams to sockeye salmon retention to protect spawners and the sockeye salmon bag and possession limit was set at 1 fish, 16 inches or longer. The average foot survey escapement counts from 1979 to 2017 is 857 fish. The recent 10-year average count for 2008–2017 is 519 fish (Table 204-1). Escapement counts have been below the 39-year average for 8 of the last 10 years of survey. Estimates of sockeye salmon harvest from Windfall Creek are not available through SWHS due to the low number of responses; however average harvest of sockeye salmon from all streams and lakes on the Juneau road system (which includes Windfall Creek) based on SWHS estimates was 103 fish a year between 2007–2016. Even if every sockeye salmon harvested from the Juneau road system was attributed to Windfall Creek, the average annual harvest would be 103 fish.

DEPARTMENT COMMENTS: The department **OPPOSES** liberalizing bag and possession limits due to low sockeye salmon escapements in the last 10 years. This is a small return of sockeye salmon and the only opportunity for Juneau anglers on the road system to target and harvest sockeye salmon. 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.

Table 204-1.–Annual sockeye foot survey counts in the Windfall Lake/Slate Creek spawning grounds.

Year	Number of sockeye salmon
2008	513
2009	589
2010	341
2011	978
2012	144
2013	254
2014	942
2015	592
2016	619
2017	216
Average 2008–2017	519

PROPOSAL 205 – 5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area.

PROPOSED BY: Harold Perantie.

WHAT WOULD THE PROPOSAL DO? Prohibit the use of multiple and barbed hooks for sport fishing in fresh waters of the Tsiu River drainage.

WHAT ARE THE CURRENT REGULATIONS? Under statewide regulations, anglers may use a single line having attached to it not more than one plug, spoon, spinner, or series of spinners, or two flies or two hooks; statewide regulations allow for the use of multiple and barbed hooks. In Southeast Alaska, including the Yakutat Management Area, only unbaited, artificial lures may be used in fresh water from November 16 to September 14.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adding gear restrictions to the Tsiu River drainage may lead to a decrease in effort and harvest by an unknown amount. Requiring the use of barbless, single-hook, artificial lures may reduce release mortality by a small amount but would add regulatory complexity.

BACKGROUND: Mortality of released fish is largely dependent on hook placement, fish handling, and angler experience. Studies indicate the use of bait influences the ingestion and deeper hook placement causing a higher mortality rate than hook type choices, such as treble, single, circle, and or barbless. To reduce release mortality in Southeast Alaska freshwater fisheries, the use of bait is prohibited for 10 months, allowing for a two month period during the fall coho salmon season when bait may be used.

The department engages in various education and outreach efforts to reduce unintended mortality by promoting best practices when releasing fish. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or address sustainability concerns. Emergency order authority includes the ability to modify sport fishing methods and means, such as prohibiting the use of bait.

The sport fishery on the Tsiu River primarily targets coho salmon. The BEG for Tsiu River coho salmon is 10,000–29,000. The department conducts multiple aerial escapement surveys of the Tsiu River for coho salmon each year. Since 1996, peak survey counts have ranged from 4,000 to 47,000 fish and only twice (1999 and 2004) has the lower bound of the escapement goal not been reached (Table 205-1). No conservation concerns exist for any fish species in the Tsiu River drainage.

DEPARTMENT COMMENTS: The department **OPPOSES** these proposed gear restrictions without a biological or conservation need.

COST ANALYSIS: Approval of this proposal may result in a small additional direct cost for a private person participating in this fishery. Treble hook and multiple hook lures would require a barbless, single hook to be purchased and attached.

Table 205-1.–SWHS effort, catch, and harvest data for Tsiu River coho salmon sport fishery and annual peak coho salmon aerial escapement survey count for Tsiu River, 1996–2016.

Year	Days Fished	Coho Salmon Catch	Coho Salmon Harvest	Peak Escapement Aerial Survey Count (BEG 10,000–29,000)
1996	773	11,552	1,244	20,000
1997	1,369	7,587	2,283	17,000
1998	788	6,595	764	12,000
1999	1,418	17,221	1,728	4,000
2000	1,576	11,818	2,057	12,000
2001	1,307	10,788	1,783	17,000
2002	1,883	13,934	2,713	31,000
2003	2,891	34,080	4,286	35,000
2004	2,060	40,452	2,372	9,800
2005	1,771	17,037	2,325	10,600
2006	1,904	11,929	2,158	14,200
2007	3,090	12,011	2,752	14,000
2008	2,178	18,520	3,317	25,200
2009	1,938	15,705	3,399	28,000
2010	3,855	28,237	3,862	11,000
2011	2,092	19,932	2,490	21,000
2012	2,279	22,216	3,417	11,000
2013	2,554	30,242	2,615	47,000
2014	3,805	32,490	5,232	27,000
2015	1,777	17,522	1,587	19,500
2016	1,762	17,780	2,127	31,000

COMMITTEE OF THE WHOLE GROUP 7: Groundfish (17 proposals: Chair - Cain)

General (2 Proposals)

PROPOSAL 113 – 5 AAC 28.190. Harvest of bait by commercial permit holders in Eastern Gulf of Alaska Area.

PROPOSED BY: Tad Fujioka.

WHAT WOULD THE PROPOSAL DO? This would expand the description of allowable parts of certain groundfish species that may be used as bait.

WHAT ARE THE CURRENT REGULATIONS? Groundfish may be taken and used for bait in a commercial fishery for which a permit is held with the exception that only the head, tail, fins, and viscera of delivered and processed commercial sablefish, lingcod, and rockfish (thornyhead, shortraker, rougheye, and yelloweye) may be used for bait. For other species of groundfish the whole fish may be used for bait.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would permit a commercial fisherman to utilize an entire filleted carcass of a sablefish, lingcod, or any of the aforementioned rockfish as bait in a commercial fishery.

BACKGROUND: The board prohibited use of sablefish for bait in 2003, as well as lingcod, thornyhead, shortraker, rougheye, and yelloweye rockfishes in 2006. The primary reason was that these species were either fully allocated or long-lived. Additionally, the department had little information with which to gauge the extent of unreported mortality because groundfish taken for bait use were rarely reported on fish tickets. An unforeseen result of these regulations was that all parts of these species were prohibited for bait use, including the heads, tails, fins, and viscera. In 2012, the board approved a department proposal to allow the use of these fish parts for bait after processing was completed.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal because it follows the intent of the regulatory change that the department submitted to the board in 2012. Approval of this proposal will also align commercial and sport fishery regulations with respect to the allowable use of a closely trimmed fish skeleton as bait.

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.

PROPOSAL 114 – 5 AAC 28.180. Prohibitions for Eastern Gulf of Alaska Area.

PROPOSED BY: John M. Johanson.

WHAT WOULD THE PROPOSAL DO? This would allow for the live transport of sablefish and other groundfish in order to be sold for human consumption.

WHAT ARE THE CURRENT REGULATIONS? In the EGOA, a person may not possess groundfish in a manner that indicates intent to keep groundfish alive except as authorized by the terms of a scientific, propagative, or educational permit.

A person may not grow or cultivate finfish in captivity or under positive control for commercial purposes per A.S. 16.40.210.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would likely increase the exvessel value of groundfish that are marketed as live product. The increased value to the product is unknown and would likely vary by species. It is not clear whether the price of fresh iced or frozen groundfish would be negatively affected should this proposal be adopted. It is conceivable that much of the live transported fish would be destined for Canada or the northwestern United States and this may equate to some reduction in fish processing, sales, and fish tax income to communities of Southeast Alaska. It is unknown which species of groundfish could be successfully transported as live product but the proposer seems particularly interested in live transport of sablefish.

Adoption of this proposal could cause changes to fishing locations and the way fisheries are prosecuted in order to target smaller immature fish for live markets. The effects on fish populations and the near shore ecosystem are unknown and would require extensive research to evaluate.

BACKGROUND: In 2000, the board adopted a department proposal to prohibit live groundfish fisheries. Live fish command a higher price when compared to iced or frozen fish; however, these fisheries had proven to be difficult to manage and caused significant resource issues along the west coast of North America. These fisheries often occur in near-shore areas and may result in recruitment overfishing of immature fish and localized depletion. At the time of the proposal the department's primary concerns were for rockfish and other near shore species such as sculpin, lingcod, and greenling. These fisheries were known to target small fish of dinner portion size and were nonselective on species caught. The department had concerns of barotrauma injuries and other mortality with less desirable size or species of fish. The board ultimately prohibited live fish fisheries for all groundfish citing additional concerns regarding the transportation of pests, pathogens, and other disease agents.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal to allow live groundfish fisheries based on the same conservation concerns previously expressed when the board prohibited this activity in 2000. The department does not have the resources available to address possible changes to stock structure and population status should live fish fisheries be permitted on juvenile fish in directed rockfish fisheries.

State sablefish limited entry fisheries occur in NSEI and SSEI subdistricts. These fisheries are operated on an equal quota share system so this proposal would not increase exploitation of these stocks: fish harvested would be counted against a permit holders' quota share.

It is not clear what live sablefish marketing would look like and whether there would be an increase in the amount of sablefish discarded in order to meet live fish market demands. An increase in discarded fish would cause concern for overharvest. The department also has concerns regarding accurate accounting and documentation of harvest. Should the board adopt this proposal, the department recommends requiring submission of fully completed fish tickets documenting PQS harvest prior to the exportation of fish out of state. The department also recommends restriction on the amount of time live product can be held and to require that all live product is removed from the vessel prior to the resumption of fishing activity: i.e., prohibit mixing of fish on board a vessel from multiple fishing trips.

If this proposal is adopted, the department would need authority to gain reasonable access to live fish product in order to collect important biological data for evaluating that sector of the 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. An individual who chooses to participate in live fish fisheries would likely incur some costs in vessel upgrades to maintain live fish product.

Spiny Dogfish Sharks (1 Proposal)

PROPOSAL 115 – 5AAC 28.1XX. Spiny dogfish pot fishery in Eastern Gulf of Alaska Area; and 5 AAC 28.174. Spiny dogfish (Squalus acanthias) possession and landing requirements for Eastern Gulf of Alaska Area.

PROPOSED BY: Don Westlund and Larry McQuarrie.

WHAT WOULD THE PROPOSAL DO? This would create a state waters directed fishery for spiny dogfish in the Southern Southeast Inside (SSEI) and Northern Southeast Inside (NSEI) subdistricts (Figure 115-1).

WHAT ARE THE CURRENT REGULATIONS? In the EGOA, spiny dogfish may be taken and retained only as follows: (1) in the Southeast District, a longline vessel may retain spiny dogfish as bycatch that is not more than 35 percent, by round weight, of all target species taken in the directed fishery on the vessel; (2) in the Southeast District, a power troll or hand troll vessel may retain spiny dogfish as bycatch that is not more than 35 percent, by round weight, of all salmon on board the vessel; (3) in the East Yakutat Section and the Icy Bay Subdistrict, a salmon set gillnet CFEC permit holder may retain all spiny dogfish taken as bycatch during salmon set gillnet operations; all spiny dogfish taken must be recorded on a department salmon fish ticket.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would likely substantially increase spiny dogfish harvest in SSEI and NSEI subdistricts. The department does not have a stock assessment or biomass estimate for spiny dogfish; therefore, the impact of a directed fishery on spiny dogfish stocks in these subdistricts is unknown. A directed fishery would result in incidental bycatch of other species, including, but not limited to, halibut, rockfish, sablefish, lingcod, and Pacific cod.

BACKGROUND: Spiny dogfish are a long-lived, late maturing 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. Spiny dogfish are highly migratory and are often found in dense aggregations.

Prior to 1998, there were no commercial or recreational fishery harvest limits for dogfish in the state waters of Alaska. In 1998, concerns about overharvest of shark species led the board to implement bag and annual limits of one shark per day/two per year in the sport fishery and prohibit directed commercial fishing for spiny dogfish, even though there had been no directed commercial fisheries in Southeast Alaska. In 2010, the board liberalized sport spiny dogfish bag and possession limits to five daily with no annual limit; however, current bag limits are rarely utilized.

Currently, there are no directed fisheries for spiny dogfish in state or federal waters in the Gulf of Alaska; spiny dogfish are caught incidentally with almost all catch discarded. Spiny dogfish are commonly caught in commercial longline fisheries for sablefish, halibut, rockfish, and Pacific cod. In the EGOA subdistricts of NSEI and SSEI, a total of 143,126 round lb of spiny dogfish have been recorded on fish tickets since 2000 as discarded at-sea or at-port. However, shark discards are rarely reported and bycatch mortality is unknown for dogfish, but is assumed to be high. Prior to 2013, little data exist to calculate dogfish catch rates for the directed Pacific halibut IFQ fleet. In 2013, an increase occurred in the estimated dogfish catch for NMFS area 659,

which corresponds to SSEI and NSEI management areas; it is unknown if the increase in catch is a result of a change in fishing behavior or due to the restructuring of the federal observer system.

In the GOA, the acceptable biological catch (ABC) for spiny dogfish was estimated at 4,087 mt for 2017. This estimate is calculated using biomass estimates from the federal trawl survey; however, these estimates are considered minimum estimates and are not reliable due to large fluctuations occurring from year to year.

Since 1998, the board has not adopted several proposals to establish directed commercial shark fisheries in Prince William Sound, Yakutat, the Ketchikan area, and statewide. The proposals to establish spiny dogfish fisheries near Yakutat resulted in the opportunity for unlimited harvest of dogfish in the salmon set gillnet fishery and a 35% bycatch allowance in longline and salmon troll fisheries.

DEPARTMENT COMMENTS: The department is OPPOSED to this proposal. The department does not have a stock assessment program for spiny dogfish in EGOA and does not support establishing a spiny dogfish fishery prior to development of a biologically-sound management plan. Based on anecdotal reports there is likely already considerable spiny dogfish fishing mortality occurring as bycatch in other fisheries. This species is highly migratory and may have large temporal shifts in its distribution; thus, area-based management for spiny dogfish is problematic. Spiny dogfish tend to segregate spatially by sex and by size, and directed fisheries for spiny dogfish are often selective for larger individuals: i.e., mature females. Because of this tendency to target mature females; spiny dogfish fisheries have the potential to significantly impact recruitment.

There continues to be an opportunity to prosecute a spiny dogfish fishery under a Commissioner's permit; however, the department has not received any permit applications to date for spiny dogfish harvest.

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.

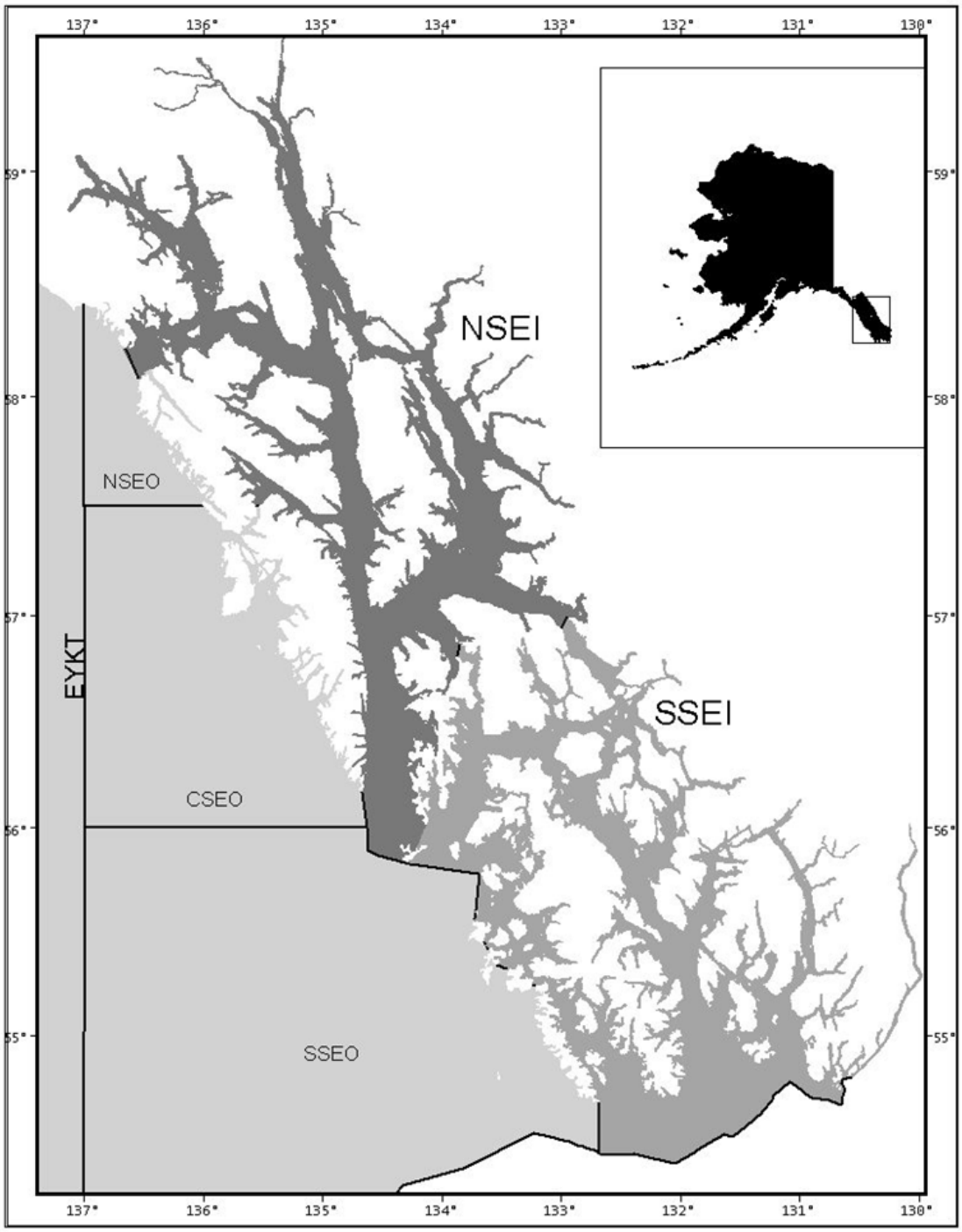

Figure 115-1.–Groundfish Management Areas: Northern Southeast Outside (NSEO), Central Southeast Outside (CSEO), and Southern Southeast Outside (SSEO) sections; Northern Southeast Inside (NSEI) and Southern Southeast Inside (SSEI) subdistricts.

Sablefish (7 Proposals)

PROPOSAL 116 – 5 AAC 47.020. General provisions for seasons and bag, possession, annual, and size limits for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Carina Nichols.

WHAT WOULD THE PROPOSAL DO? This would establish a sablefish nonresident annual limit of eight fish throughout the Southeast Alaska Area.

WHAT ARE THE CURRENT REGULATIONS? The Southeast Alaska Area sablefish bag limit and possession limit is four fish with no annual limit, except for a nonresident annual limit of eight fish in District 12, consisting of Chatham Strait and lower Lynn Canal (Figure 116-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The sablefish harvest by nonresidents outside District 12 could decrease by an unknown amount. Analysis of charter logbook data showed that an annual limit of eight sablefish would be expected to reduce charter harvest outside of District 12 by about 2.5% assuming effort levels similar to 2015–2016. There are no data to estimate the effect of the annual limit on unguided nonresident harvest.

BACKGROUND: Southeast Alaska commercial and sport sablefish harvests occur in offshore federal waters and deeper state waters located largely within Chatham Strait (commercially managed as Northern Southeast Inside, or NSEI) and in Clarence Strait and Dixon Entrance (managed as Southern Southeast Inside, or SSEI). Sablefish taken in Alaskan waters belong to a northern stock of sablefish ranging from British Columbia, throughout the Gulf of Alaska, and to the Bering Sea. The general trend for sablefish, in both state and federal stock assessments, shows a decline that is believed to be due, in part, to reductions in recruitment.

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, the board established a sablefish bag limit of two fish and four in possession, and an annual limit of eight for all anglers. In April 2009, the board acted on a board-generated proposal by increasing the bag limit from two to four fish and rescinding the resident annual limit; these changes went into effect in late June 2009. In 2010, the board rejected a statewide proposal to establish a statewide sablefish bag limit of two fish and a possession limit of four fish with an annual limit of four fish for nonresidents. In 2012 the board rescinded the Southeast Alaska Area nonresident sablefish annual limit of eight fish except in District 12.

From 2011 to 2016 the statewide harvest survey estimates of sablefish sport harvest for the Southeast Alaska area have averaged 10,529 fish (range 6,705–13,338 fish). A majority (65%), of this harvest occurs outside District 12, averaging 6,818 fish (range 4,163–8,948 fish) of which nonresident harvest comprises 96% (Table 116-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal. The department is **OPPOSED** to establishing annual limits in the absence of a conservation concern or management need. Annual limits may be more difficult to enforce than traditional sport fishing seasons, bag limits, and size limits, and carry associated harvest recording requirements for all anglers that harvest a fish of that species.

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.

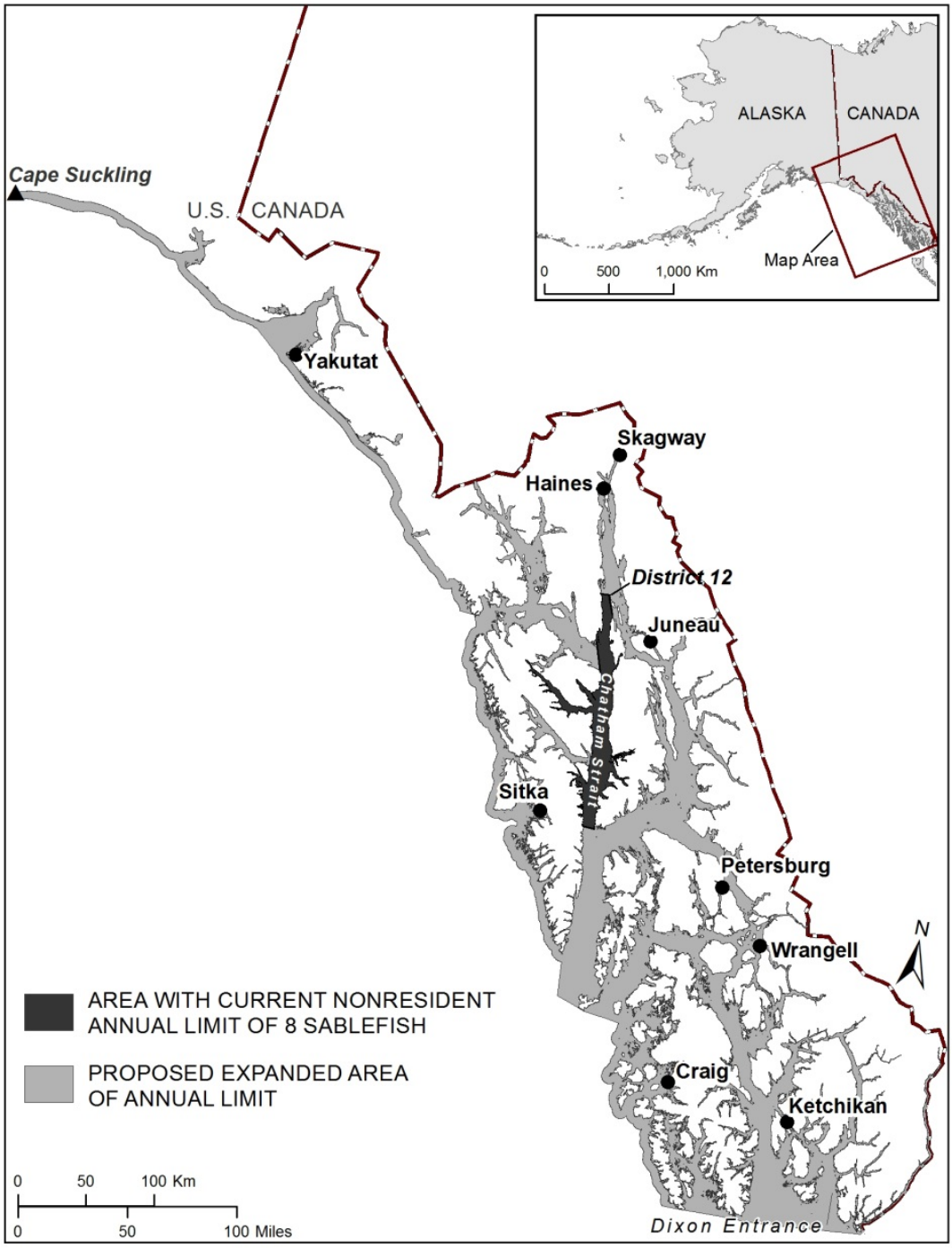

Figure 116-1.–District 12 and the remainder of the Southeast Alaska Area.

Table 116-1.–Statewide Harvest Survey estimates of sport sablefish harvest from and outside SWHS Area E (Juneau area), by angler residency; and total Southeast Alaska Area sport sablefish harvest, 2011–2016.

YEAR	Area E (Juneau area) Harvest[a]			Harvest for Remainder of Southeast Alaska Area Excluding Area E			Southeast Alaska Area Total Harvest
	Resident	Nonresident	Total	Resident	Nonresident	Total	
2011	186	2,356	2,542	186	3,977	4,163	6,705
2012	40	2,810	2,850	194	8,754	8,948	11,798
2013	0	5,013	5,013	238	7,144	7,382	12,395
2014	435	2,614	3,049	456	5,117	5,573	8,622
2015	0	4,602	4,602	326	8,410	8,736	13,338
2016	142	4,068	4,210	63	6,043	6,106	10,316
Average 2011–16	134	3,577	3,711	244	6,574	6,818	10,529

[a] Based on the SWHS all angler sablefish harvest by specific locations within Area E (cannot be done by resident and nonresident), sablefish harvest in District 12 (location of nonresident annual limit) represents an average of 85% (range of 70–93%) of total sablefish harvest in Area E during 2011–2016.

PROPOSAL 117 – 5 AAC 77.674. Personal use bottomfish fishery.

PROPOSED BY: Aaron Woodrow.

WHAT WOULD THE PROPOSAL DO? This would add pots as a legal gear type in the Southeast Alaska personal use sablefish fishery where longline and handheld lines are the only gear types currently allowed.

WHAT ARE THE CURRENT REGULATIONS? A Southeast Alaska Subsistence and Personal Use Sablefish Fishing Permit is required for harvest of subsistence or personal use sablefish by Alaska residents. One permit is issued per household and the permit holder or a designated household member listed on the permit must be present when fishing. Sablefish harvest information is required to be reported on harvest forms provided by the department.

In Southeast Alaska, subsistence fishing for sablefish is allowed in ten areas where bottomfish stocks are recognized by the board for customary and traditional (C&T) uses (Figure 117-1). Personal use bottomfish regulations apply outside of those areas. Bottomfish means any marine finfish except halibut, smelt, herring and salmonids.

Allowable gear for subsistence bottomfish fishing includes longlines, pots, and mechanical jigging machines, as well as other gear described in regulation. Personal use bottomfish gear is restricted to longlines or hand held lines. To provide a preference for subsistence fishing, personal use regulations permit the use of no more than 350 hooks per permit for longline gear, an annual harvest limit of 50 fish per household permit, and no more than 200 fish can be retained on board a vessel when four or more sablefish personal use permit holders are present on board. A valid Alaska sport fishing license is required for personal use fishing.

The buoys of unattended subsistence fishing gear must be inscribed with the first initial, last name, and address of the subsistence fisherman. Personal use gear must be labeled with first initial, last name, home address, and the name or the boat registration number of the vessel used to operate the gear.

Statewide personal use and subsistence regulations allow proxy fishing for certain beneficiaries and a proxy may fish for a beneficiary and the proxy's own use at the same time. A proxy may not take or possess more than twice the bag or possession limit and may not fish with more than one legal limit of gear.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would reduce confusion over sablefish personal use and subsistence fishery regulations. Allowable gear types for the personal use fishery would be less restrictive and more consistent with the subsistence fishery, which already allows pots as a legal gear type.

BACKGROUND: Personal use fishing for groundfish (referred to as bottomfish in the personal use regulations) was authorized in the Southeastern Alaska Area in 1989. Since that time, personal use sablefish fishing has been largely unrestricted except that Northern Southeast Inside (NSEI) and Southern Southeast Inside (SSEI) Subdistrict commercial sablefish vessels were prohibited from operating longline gear in these areas during the periods immediately prior to the start of a sablefish opening and following the closure of the fishery (or until all commercial sablefish are offloaded from the vessel).

In 2012, the board adopted a regulation which required residents of Alaska to obtain a harvest permit prior to participating in subsistence/personal use sablefish fisheries in the Southeastern

Alaska Area. In 2015, longline gear restrictions, household harvest limits, and vessel limits were adopted due to concerns of declining sablefish biomass. The permit was designed to provide managers with sablefish effort and harvest information in order to more accurately estimate total sablefish removals from these fisheries.

Pot gear is allowed in the SSEI commercial sablefish fishery from September 1 to November 15. In 2017, pot gear was authorized for the commercial sablefish individual fishing quota (IFQ) fishery in the Gulf of Alaska and longline permits (C61C) for SSEI were expanded to longline/pot permits due to concerns over whale depredation and bycatch when using longline gear. The department has been using pot gear since 2000 to conduct a mark-recapture biomass-based stock assessment in NSEI and has been conducting annual longline surveys in NSEI and SSEI since 1988. In NSEI, the pot survey stations are distributed by statistical area and depth in proportion to the average commercial harvest in the last three years while the longline survey has defined station locations. The quantity and species incidentally caught during these surveys varies by gear type (Table 117-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. Should the board adopt this proposal the department recommends adopting a pot limit of two pots per permit (eight pots per vessel when four or more permit holders are present) which would constrain harvest near the 50 fish per permit (200 fish per vessel when four or more permit holders are present) limit.

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.

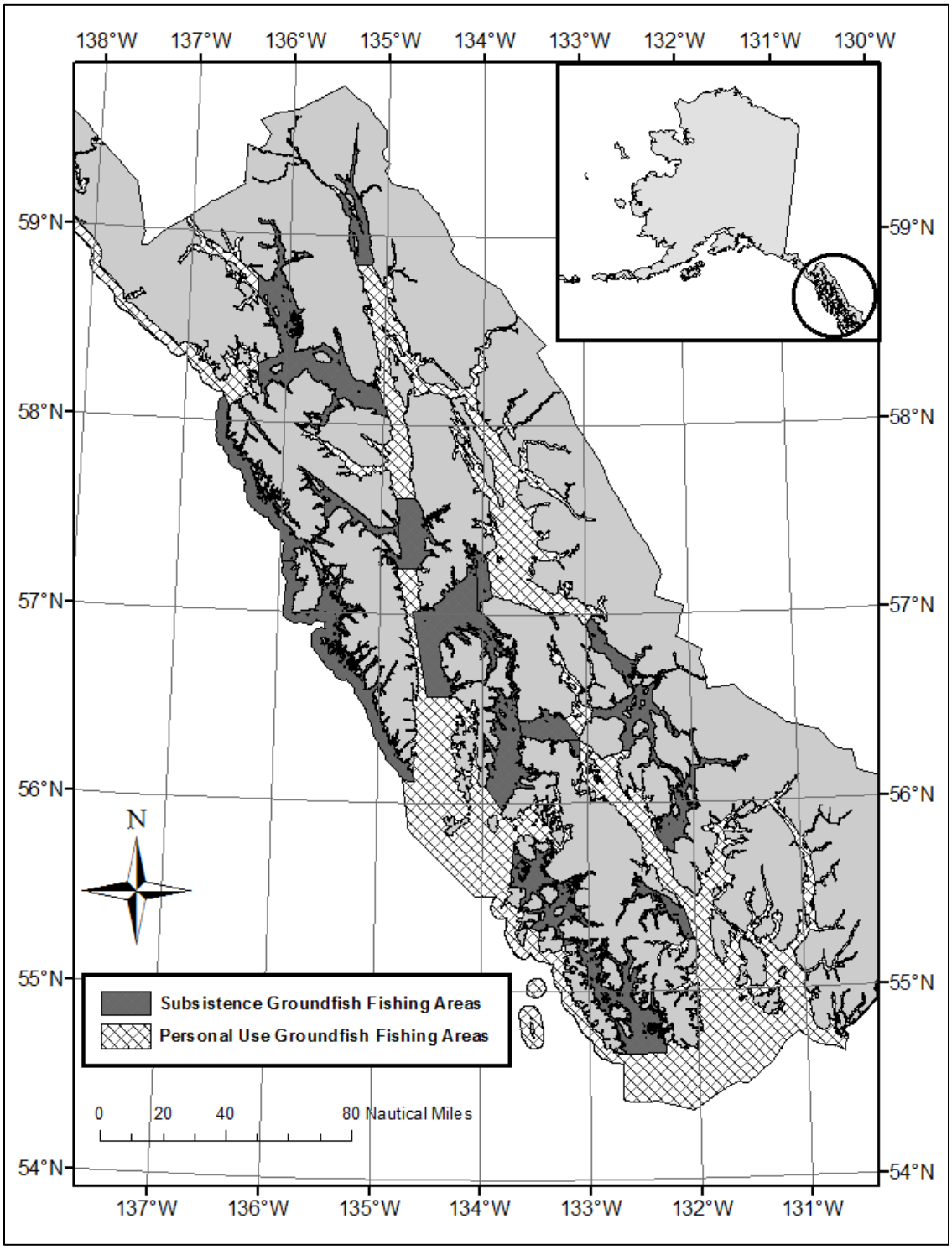

Figure 117-1.–Map of subsistence and personal use groundfish fishing areas in Southeastern Alaska Area.

Table 117-1.–Total number of sablefish and bycatch species caught during the annual Northern Southeast Inside (NSEI) Subdistrict sablefish longline and pot surveys, 2000–2017. Proportion of the total catch was calculated from all surveys combined. The department did not conduct a pot survey in 2011, 2014, and 2016 because of budget reductions.

Species	Number of Fish		Proportion of Total Catch	
	Longline	Pot	Longline	Pot
Arrowtooth Flounder	2,266	9,310	0.45%	1.87%
Coral	246	32	0.05%	0.01%
Crab, Box	0	1	0.00%	0.00%
Crab, Golden King	78	1,649	0.02%	0.33%
Crab, Grooved Tanner	0	1	0.00%	0.00%
Crab, Red King	2	0	0.00%	0.00%
Crab, Tanner	0	21	0.00%	0.00%
Greenland Turbot	2	0	0.00%	0.00%
Grenadier (rattail)	201	3	0.04%	0.00%
Halibut	4,585	3,470	0.92%	0.70%
Lingcod	0	1	0.00%	0.00%
Misc. Groundfish	3	122	0.00%	0.02%
Misc. Shellfish	3	0	0.00%	0.00%
Octopus	2	5	0.00%	0.00%
Pacific Cod	673	332	0.13%	0.07%
Pacific Hake	8	0	0.00%	0.00%
Pacific Tomcod	1	0	0.00%	0.00%
Ratfish	12	3	0.00%	0.00%
Rockfish spp.	36,610	1,553	7.34%	0.31%
Sablefish	280,465	129,644	56.2%	26.1%
Salmon spp.	19	0	0.00%	0.00%
Sculpin spp.	2	1	0.00%	0.00%
Shark, Dogfish	36	3	0.01%	0.00%
Shark, Misc.	3	0	0.00%	0.00%
Shark, Sleeper	674	35	0.14%	0.01%
Skate spp.	18,526	2	3.71%	0.00%
Skilfish	1	0	0.00%	0.00%
Sole spp.	3,163	5,255	0.63%	1.06%
Walleye Pollock	10	1	0.00%	0.00%

PROPOSAL 118 – 5AAC 28.110. Sablefish fishing seasons for Eastern Gulf of Alaska Area.

PROPOSED BY: Bill Connor.

WHAT WOULD THE PROPOSAL DO? This would change the current season definitions for the SSEI sablefish longline and pot gear fisheries and allow for a combined gear season, with an opening date that coincides with the federal IFQ sablefish fishery (typically late February or early March) and close on November 15.

WHAT ARE THE CURRENT REGULATIONS? The SSEI sablefish commercial fishing season is open from June 1 to August 15 for longline gear only and from September 1 to November 15 for pot gear only.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would create a new SSEI sablefish commercial fishery season for both longline and pot gear and extend the season opening date to coincide with the federal IFQ sablefish fishery.

This would have a negative impact on sablefish stocks in SSEI by allowing harvest of sablefish during the winter through spring spawning periods, potentially leading to recruitment overfishing. The department would not be able to utilize its current stock assessment approach to make informed decisions on setting annual harvest limits.

BACKGROUND: The Southeast Alaska sablefish fishery occurs in SSEI (Clarence Strait); harvest has been occurring since the early 1900s. Initially, harvest of sablefish primarily occurred as bycatch in the halibut fishery and in the late 1940s halibut gear was modified to use smaller hooks and reduced hook spacing to target sablefish. Sablefish harvest fluctuated until the 1970s due to market demand and other fishing opportunities. Pot gear was first introduced in 1970 and by 1973 a large fishery had developed in the SSEI management area. From 1973 to 1975, pot gear averaged 33% of the total sablefish harvest and by 1979 pot gear accounted for less than 5% of the total harvest. In 1981, the NSEI fishery was restricted to longline gear only.

Seasonal limitations were first introduced in 1945 to reduce fishing intensity due to declines in fishery catch per unit of effort (CPUE) and average weight of sablefish harvested. Season dates were further justified to allow the protection of sablefish stocks during the winter through spring spawning periods and reduce the potential of halibut bycatch mortality. Fishing seasons continued to be shortened in both areas as effort escalated in the 1970s and 1980s, and in 1989 the SSEI fishery was reduced to June 1–November 15. In 1992, several SSEI permit holders petitioned to change the sablefish fishing season to open in September to take advantage of potentially harvesting larger fish and favorable market pricing. The department contacted permit holders on whether they preferred a June or October opening date for the SSEI sablefish fishery; more permit holders favored a June opening, resulting in the fishery season remaining unchanged.

Guideline harvest ranges (GHR) based on historical catches were established in 1980, and in 1985 a limited entry program was implemented for SSEI sablefish fisheries. However, the number of vessels and overall operating efficiency of the longline fleet increased significantly after the limited entry program was implemented. In order to stay within GHRs, the department continued to reduce the number of fishing days. To improve the management of the fisheries, the board adopted an equal quota share (EQS) system for SSEI in 1997 and established separate seasons for the longline and pot fisheries to reduce gear conflicts and enable pot fishers to more

effectively utilize their gear. Since then the number of permit holders authorized to fish in SSEI for sablefish has been 20 C61C (longline) permits and 3 C91C (pot) permits.

In 2017, the CFEC approved a petition from industry to allow SSEI sablefish C61C permits to be used with either longline or pot gear due to whale depredation issues and bycatch concerns in the longline fishery. Currently, C61C permits have the flexibility to fish either gear types within their defined seasons, thus extending their total fishing season, while C91C permits still remain as pot permits only and are restricted to fishing during the pot season.

In 1988, the department began annual longline research surveys in SSEI (Figure 118-1) to assess the relative abundance of sablefish over time using fixed survey stations. The annual longline survey occurs in May. The department conducts surveys a few weeks prior to the start of the fishery to examine relative abundance and sablefish population composition. During the annual longline survey, biological data are collected on sablefish and include length, weight, sex, stage of maturity, and otoliths (aging structures). These data are used to describe the age and size structure of the populations and detect recruitment events.

Unlike NSEI, the department does not currently estimate the absolute abundance of the SSEI sablefish stock. There appears to be substantial movement of sablefish in and out of the SSEI area so mark-recapture estimates of abundance or exploitation rates are not possible for this fishery. Instead, the SSEI sablefish population is managed based on relative abundance indices from survey and fishery CPUE data, as well as with survey and fishery biological data that are used to describe the age and size structure of the population and detect recruitment events.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. Starting the SSEI sablefish commercial season for longline and pot gear types at an earlier date would interrupt critical spawning periods for sablefish that spawn winter through spring and has the potential for recruitment overfishing. Both the department and federal sablefish stock assessments occur approximately from May to August so that they do not interrupt these critical reproductive processes.

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.

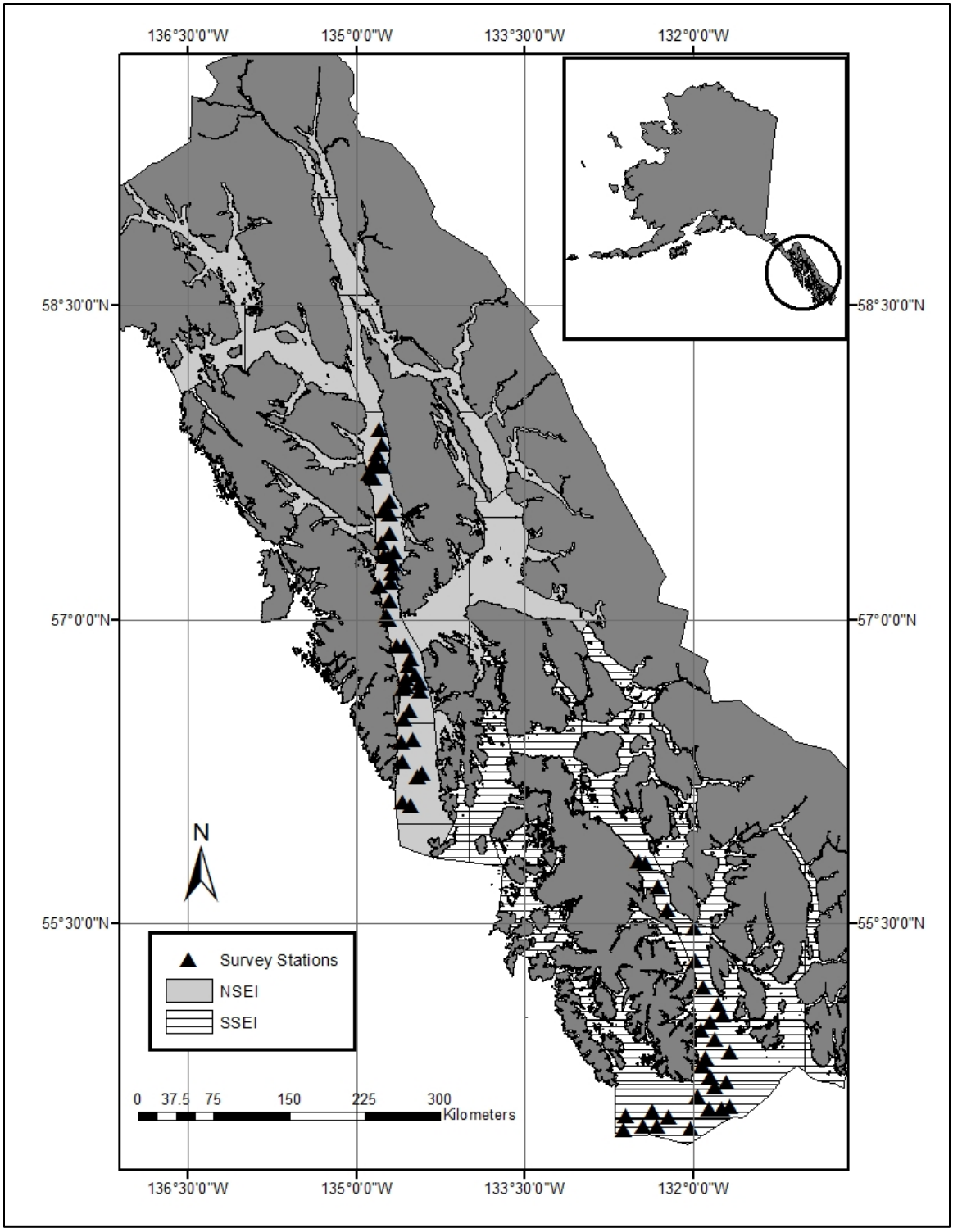

Figure 118-1.–2017 ADF&G sablefish longline survey stations for the NSEI and SSEI management areas.

PROPOSAL 119 – 5AAC 28.110. Sablefish fishing seasons for Eastern Gulf of Alaska Area.

PROPOSED BY: John M. Johanson.

WHAT WOULD THE PROPOSAL DO? This would increase the SSEI sablefish season length by three months and eliminate the seasonal separation of longline and pot gear, except that a portion of the season would be reserved for pot permits (C91C) only.

WHAT ARE THE CURRENT REGULATIONS? The SSEI sablefish commercial fishery season is open from June 1 to August 15 for longline gear only and from September 1 to November 15 for pot gear only. Longline permits (C61C) have the flexibility to fish both gear types within their defined seasons; pot permits (C91C) are restricted to fishing during the pot season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would create a new SSEI sablefish commercial fishery season allowing both longline and pot gear from March 1 to August 15 and create an exclusive season for pot permit holders (C91C) from September 1 to November 15 or until the pot permit holders have caught their personal quota share (PQS). If C91C permit holders catch their PQS prior to November 15, the fishery would reopen to those C61C permit holders with remaining PQS, using either pot or longline gear. The SSEI sablefish season end date would remain as November 15.

This proposal would have a negative impact on sablefish stocks in SSEI by allowing harvest of sablefish during the spring spawning period, potentially leading to recruitment overfishing. The department would not be able to utilize its current stock assessment approach to make informed decisions on setting annual harvest limits. The longline survey is conducted prior to the start of the fishery and the data series has not previously been influenced by in-season commercial harvest.

BACKGROUND: The Southeast Alaska sablefish fishery occurs in SSEI (Clarence Strait); harvest has been occurring since the early 1900s. Initially, harvest of sablefish primarily occurred as bycatch in the halibut fishery and in the late 1940s halibut gear was modified to use smaller hooks and reduced hook spacing to target sablefish. Sablefish harvest fluctuated until the 1970s due to market demand and other fishing opportunities. Pot gear was first introduced in 1970 and by 1973 a large fishery had developed in the SSEI management area. From 1973 to 1975, pot gear averaged 33% of the total sablefish harvest and by 1979 pot gear accounted for less than 5% of the total harvest. In 1981, the NSEI fishery was restricted to longline gear only.

Seasonal limitations were first introduced in 1945 to reduce fishing intensity due to declines in fishery catch per unit of effort (CPUE) and average weight of sablefish harvested. Season dates were further justified to allow the protection of sablefish stocks during the winter through spring spawning periods and reduce the potential of halibut bycatch mortality. Fishing seasons continued to be shortened in both areas as effort escalated in the 1970s and 1980s, and in 1989 the SSEI fishery was reduced to June 1–November 15. In 1992, several SSEI permit holders petitioned to change the sablefish fishing season to open in September to take advantage of potentially harvesting larger fish and favorable market pricing. The department contacted permit holders on whether they preferred a June or October opening date for the SSEI sablefish fishery: more permit holders favored a June opening, resulting in the fishery season remaining unchanged.

Guideline harvest ranges (GHR) based on historical catches were established in 1980, and in 1985 a limited entry program was implemented for SSEI sablefish fisheries. However, the number of vessels and overall operating efficiency of the longline fleet increased significantly after the limited entry program was implemented. In order to stay within GHRs, the department continued to reduce the number of fishing days. To improve the management of the fisheries, the board adopted an equal quota share (EQS) system for SSEI in 1997 and established separate seasons for the longline and pot fisheries to reduce gear conflicts and enable pot fishers to more effectively utilize their gear. Since then the number of permit holders authorized to fish in SSEI for sablefish has been 20 C61C permits and 3 C91C permits.

In 2017, CFEC approved a petition from industry to allow SSEI sablefish C61C permits to be used with either longline or pot gear due to whale depredation issues and bycatch concerns in the longline fishery. Currently, C61C permits have the flexibility to fish either gear types within their defined seasons, thus extending their total fishing season, while C91C permits still remain as pot permits only and are restricted to fishing during the pot season.

In 1988, the department began annual longline research surveys in SSEI (Figure 119-1) to assess the relative abundance of sablefish over time using fixed survey stations. The annual longline survey occurs in May. The department conducts surveys a few weeks prior to the start of the fishery to examine relative abundance and sablefish population composition. During the annual longline survey, biological data are collected on sablefish and include length, weight, sex, stage of maturity, and otoliths (aging structures). These data are used to describe the age and size structure of the populations and detect recruitment events.

Unlike NSEI, the department does not currently estimate the absolute abundance of the SSEI sablefish stock. There appears to be substantial movement of sablefish in and out of the SSEI area so mark-recapture estimates of abundance or exploitation rates are not possible for this fishery. Instead, the SSEI sablefish population is managed based on relative abundance indices from survey and fishery CPUE data, as well as with survey and fishery biological data that are used to describe the age and size structure of the population and detect recruitment events.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. Starting the SSEI sablefish commercial season for longline and pot gear types at an earlier date, March 1, would interrupt critical spawning periods for sablefish that spawn during the spring and has the potential for recruitment overfishing. Should this proposal be adopted the department would need to consider whether to conduct the survey two months earlier or to maintain historical survey timing with the understanding that a particular station's catch or overall survey results may be impacted by another vessels' fishing activity. In either case, changes in sablefish abundance may be masked by changes to survey protocol.

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.

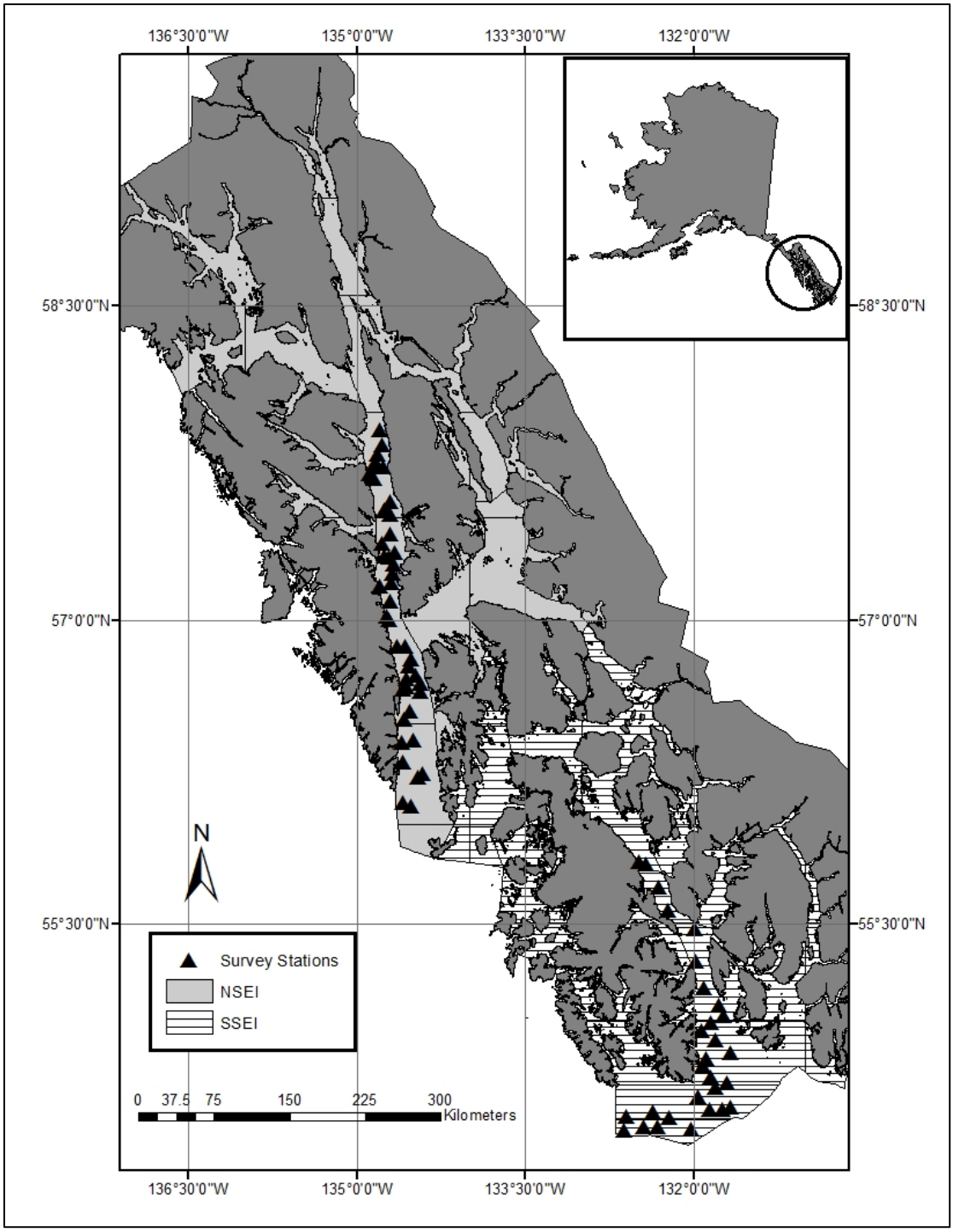

Figure 119-1.–2017 ADF&G sablefish longline survey stations for the NSEI and SSEI management areas.

PROPOSAL 120 – 5AAC 28.110. Sablefish fishing seasons for Eastern Gulf of Alaska Area.

PROPOSED BY: Andrew Kittams.

WHAT WOULD THE PROPOSAL DO? This would allow the use of longline and pot gear concurrently in the SSEI sablefish commercial fishery and extend the commercial fishing season for both permit types (C61C and C91A) by removing current season restrictions based on gear type.

WHAT ARE THE CURRENT REGULATIONS? The SSEI sablefish commercial fishery season is open from June 1 to August 15 for longline gear only and from September 1 to November 15 for pot gear only. Longline permits (C61C) have the flexibility to fish both gear types within their defined seasons; pot permits (C91C) are restricted to fishing during the pot season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would not affect sablefish harvest, but could result in gear conflicts between fishermen using pot and longline gear.

BACKGROUND: The Southeast Alaska sablefish fishery occurs in SSEI (Clarence Strait); harvest has been occurring since the early 1900s. Initially, harvest of sablefish primarily occurred as bycatch in the halibut fishery and in the late 1940s halibut gear was modified to use smaller hooks and reduced hook spacing to target sablefish. Sablefish harvest fluctuated until the 1970s due to market demand and other fishing opportunities. Pot gear was first introduced in 1970 and by 1973 a large fishery had developed in the SSEI management area. From 1973 to 1975, pot gear averaged 33% of the total sablefish harvest and by 1979 pot gear accounted for less than 5% of the total harvest. In 1981, the NSEI fishery was restricted to longline gear only.

Seasonal limitations were first introduced in 1945 to reduce fishing intensity due to declines in fishery catch per unit of effort (CPUE) and average weight of sablefish harvested. Season dates were further justified to allow the protection of sablefish stocks during the winter through spring spawning periods and reduce the potential of halibut bycatch mortality. Fishing seasons continued to be shortened in both areas as effort escalated in the 1970s and 1980s, and in 1989 the SSEI fishery was reduced to June 1–November 15. In 1992, several SSEI permit holders petitioned to change the sablefish fishing season to open in September to take advantage of potentially harvesting larger fish and favorable market pricing. The department contacted permit holders on whether they preferred a June or October opening date for the SSEI sablefish fishery: more permit holders favored a June opening, resulting in the fishery season remaining unchanged.

Guideline harvest ranges (GHR) based on historical catches were established in 1980, and in 1985 a limited entry program was implemented for SSEI sablefish fisheries. However, the number of vessels and overall operating efficiency of the longline fleet increased significantly after the limited entry program was implemented. In order to stay within GHRs, the department continued to reduce the number of fishing days. To improve the management of the fisheries, the board adopted an equal quota share (EQS) system for SSEI in 1997 and established separate seasons for the longline and pot fisheries to reduce gear conflicts and enable pot fishers to more effectively utilize their gear. Since then the number of permit holders authorized to fish in SSEI for sablefish has been 20 C61C permits and 3 C91C permits.

In 2017, CFEC approved a petition from industry to allow SSEI sablefish C61C permits to be used with either longline or pot gear due to whale depredation issues and bycatch concerns in the longline fishery. Currently, C61C permits have the flexibility to fish either gear types within their defined seasons, thus extending their total fishing season, while C91C permits still remain as pot permits only and are restricted to fishing during the pot season.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The federally managed sablefish fishery in the Gulf of Alaska began to allow the use of pot gear in 2017 in an effort to reduce the number of whale interactions and depredation that was occurring on longline gear and was resulting in economic impact to permit holders. Since 2017, GOA federal sablefish fishery participants can fish both longline and pot gear concurrently.

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.

PROPOSAL 121 – 5 AAC 28.110. Sablefish fishing seasons for Eastern Gulf of Alaska Area; and 5 AAC 28.170 Sablefish possession and landing requirements for Eastern Gulf of Alaska Area.

PROPOSED BY: John M. Johanson.

WHAT WOULD THE PROPOSAL DO? This would allow SSEI sablefish pot permits (C91C) the option of using longline gear in the commercial fishery and penalize individuals with either permit type who use longline gear by reducing their EQS by 50%.

WHAT ARE THE CURRENT REGULATIONS? The SSEI sablefish commercial fishery season is open from June 1 to August 15 for longline gear only and from September 1 to November 15 for pot gear only. Longline permits (C61C) have the flexibility to fish both gear types within their defined seasons; pot permits (C91C) are restricted to fishing during the pot season.

The department uses the best available information to determine the annual harvest objective (AHO) which is divided by the number of SSEI sablefish permit holders to calculate the EQS.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The department does not have authority to change CFEC permit definitions to allow an additional gear type for C91C permits: this would need to be addressed by the CFEC. Additionally, permit holders who choose to use longline gear to harvest their EQS would be penalized significantly by reducing their EQS by 50%, thus effectively removing the EQS system.

BACKGROUND: The Southeast Alaska sablefish fishery occurs in SSEI (Clarence Strait); harvest has been occurring since the early 1900s. Initially, harvest of sablefish primarily occurred as bycatch in the halibut fishery and in the late 1940s halibut gear was modified to use smaller hooks and reduced hook spacing to target sablefish. Sablefish harvest fluctuated until the 1970s due to market demand and other fishing opportunities. Pot gear was first introduced in 1970 and by 1973 a large fishery had developed in the SSEI management area. From 1973 to 1975, pot gear averaged 33% of the total sablefish harvest and by 1979 pot gear accounted for less than 5% of the total harvest. In 1981, the NSEI fishery was restricted to longline gear only.

Seasonal limitations were first introduced in 1945 to reduce fishing intensity due to declines in fishery catch per unit of effort (CPUE) and average weight of sablefish harvested. Season dates were further justified to allow the protection of sablefish stocks during the winter through spring spawning periods and to reduce the potential of halibut bycatch mortality. Fishing seasons continued to be shortened in both areas as effort escalated in the 1970s and 1980s, and in 1989 the SSEI fishery was reduced to June 1 through November 15. In 1992, several SSEI permit holders petitioned to change the sablefish fishing season to open in September to take advantage of potentially harvesting larger fish and favorable market pricing. The department contacted permit holders on whether they preferred a June or October opening date for the SSEI sablefish fishery: more permit holders favored a June opening, resulting in the fishery season remaining unchanged.

Guideline harvest ranges (GHR) based on historical catches were established in 1980, and in 1985 a limited entry program was implemented for SSEI sablefish fisheries. However, the number of vessels and overall operating efficiency of the longline fleet increased significantly after the limited entry program was implemented. In order to stay within GHRs, the department continued to reduce the number of fishing days. To improve the management of the fisheries, the

board adopted an equal quota share (EQS) system for SSEI in 1997 and established separate seasons for the longline and pot fisheries to reduce gear conflicts and enable pot fishers to more effectively utilize their gear. Since then the number of permit holders authorized to fish in SSEI for sablefish has been 20 C61C permits and 3 C91C permits.

In 2017, CFEC approved a petition from industry to allow SSEI sablefish C61C permits to be used with either longline or pot gear due to whale depredation issues and bycatch concerns in the longline fishery. Currently, C61C permits have the flexibility to fish either gear types within their defined seasons, thus extending their total fishing season, while C91C permits still remain as pot permits only and are restricted to fishing during the pot season. While the department does not have specific data to document differences in whale depredation between pot and longline gear, it is generally understood that the impacts of whale depredation are greater on longline gear than pot gear.

DEPARTMENT COMMENTS: The department recommends **NO ACTION** on that portion of the proposal related to allowable gear. The board does not have the authority to change a CFEC permit definition to allow additional gear types.

The department **OPPOSES** penalizing permit holders who choose to utilize longline gear to harvest their EQS of sablefish in SSEI because this action alters the EQS system objective of providing full opportunity to harvest the AHO. Additionally, bycatch limits are in place to discourage harvest of bycatch species, and whale depredation is difficult to predict and then quantify the amount of sablefish being removed. Whale depredation has created economic hardship and difficulty in obtaining one's EQS in the longline fishery which prompted the change in CFEC regulations to allow SSEI longline permit holders the opportunity to use both longline and pot gear.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. Penalizing a permit holder who chooses to utilize longline gear to harvest their EQS would cause an economic hardship and could incentivize permit holders to invest in pot gear in order to harvest their EQS without penalty. This additional cost would be for purchase of pots and associated gear. The department purchased complete rigging for two strings of 40 pots in 2011 for the Chatham Strait sablefish mark-recapture project at an approximate cost of $40,000 (pots, buoy setup and trailer line, floating and sinking buoy line, groundline with beckets, bridles, C-links, etc.).

PROPOSAL 122 – 5AAC 28.160. Harvest guidelines and ranges for Eastern Gulf of Alaska Area.

PROPOSED BY: John M. Johanson.

WHAT WOULD THE PROPOSAL DO? This would specify that federal GOA sablefish stock assessment surveys be used to set annual sablefish harvest limits in the Northern Southeast Inside (NSEI) and Southern Southeast Inside (SSEI) subdistricts, rather than existing state surveys.

WHAT ARE THE CURRENT REGULATIONS? The department sets the annual guideline harvest limits for the taking of sablefish in the NSEI and SSEI management areas based on available information, including estimates of sablefish biomass from department assessments.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The department would lose the ability to use the best information available for NSEI and SSEI stocks to estimate sablefish biomass and determine appropriate harvest limits. This would require using the federal sablefish stock assessment survey rather than the state survey as the primary source for estimating sablefish biomass and determining annual harvest limits for the NSEI and SSEI management areas. This would limit the department's available local information to manage the sablefish stocks possibly leading to more conservative harvest strategies and reduced harvest opportunity.

BACKGROUND: The federal sablefish stock assessment includes a fixed-station longline survey and a multi-species bottom trawl survey based on a random stratified design. In the Southeastern area the federal sablefish longline program surveys 18 stations annually while the bottom-trawl program biennially surveys a similar area but with more stations (71) (Figure 122-1). The federal survey does not include waters of the NSEI and SSEI subdistricts.

The state and federal sablefish stock assessment surveys are conducted approximately at the same time. The federal longline (annually) and bottom trawl (biennially) surveys occur May through August. The department's SSEI longline and NSEI mark/tag surveys occur in May and the NSEI longline survey is in July/August.

In 1988, the department began annual longline research surveys in both NSEI and SSEI to assess the relative abundance of sablefish over time using fixed survey stations. The annual longline surveys occur in May for SSEI and July/August for NSEI. The department has conducted surveys a few weeks prior to the start of each fishery to examine relative abundance and sablefish population composition near the time of these fisheries. During the annual longline surveys, biological data are collected on sablefish and include length, weight, sex, stage of maturity, and otoliths (aging structures). These data are used to describe the age and size structure of the populations and detect recruitment events.

The longline surveys were designed as random stratified surveys where fixed stations were placed in sablefish habitat (based on depth) where the majority of the commercial SSEI and NSEI fishery harvest occurred (Figure 122-2). The department currently surveys 29 stations in SSEI and 42 stations in NSEI.

Since 1997, mark-recapture activities have occurred to estimate absolute abundance of sablefish in NSEI. From 1997 through 1999, sablefish were marked during the annual NSEI longline survey; however, tag recovery data indicated tagged fish originally captured on longline gear were avoiding subsequent capture with that same gear during the fishery. In 2000, to avoid this potential bias and more accurately assess abundance, the department began using longlined pots

for the initial capture phase of the study. Set locations of the pot gear are spatially distributed based on average commercial harvest and depth by statistical area (Figure 122-3).

Marking surveys also provide release and recapture locations for tagged sablefish. These data allow for estimation of migration rates and analysis of movement patterns between internal waters of southeast Alaska and the Gulf of Alaska, Bering Sea, Aleutian Islands, and British Columbia. The probability of sablefish in Chatham Strait moving to any other area is 10–14%, and for Clarence Strait, 30% (after one year of occupancy).

The department sets the AHO in NSEI for a given year using the survey and fishery data from previous years, because mark-recapture and fishery age structure data cannot be analyzed until after the NSEI fishery has been prosecuted. Prior to 1997, the department set the AHOs for the sablefish fisheries after the longline surveys were completed and before the opening of the fisheries. Currently, abundance is estimated in the current year, forecasted for the upcoming year, and converted to biomass using weight-at-age data; a $F_{50\%}$ harvest rate is applied to the forecast of biomass.

Unlike NSEI, the department does not currently estimate the absolute abundance of the SSEI sablefish stock. There appears to be substantial movement of sablefish in and out of the SSEI Subdistrict into the Gulf of Alaska and British Columbia, making mark-recapture estimates of abundance or exploitation rates unfeasible for this fishery. Instead, the SSEI sablefish population is managed based on relative abundance indices from survey and fishery CPUE and biological data that are used to describe the age and size structure of the population and detect recruitment events.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The federal sablefish stock assessment survey is conducted in federal waters of the EGOA at a limited number of stations and may only represent a portion of NSEI and SSEI stocks that migrate into the EGOA. The department's sablefish stock assessment surveys provide invaluable information on sablefish life history (length, weight, age, maturity, etc.) and CPUE within the NSEI and SSEI management areas.

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.

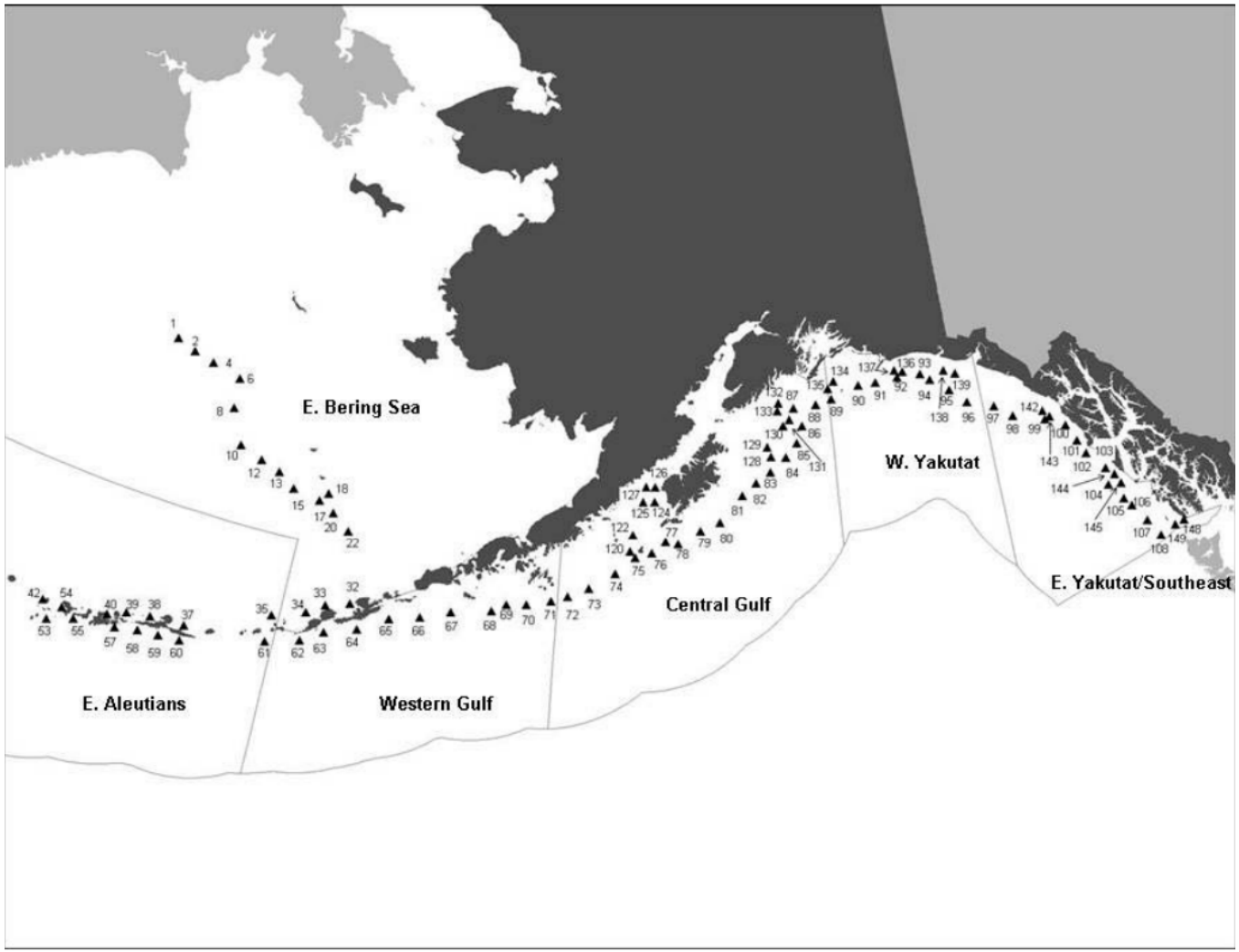

Figure 122-1.–Map of the federal sablefish longline survey station locations and corresponding management areas (Source: Alaska Fishery Science Center).

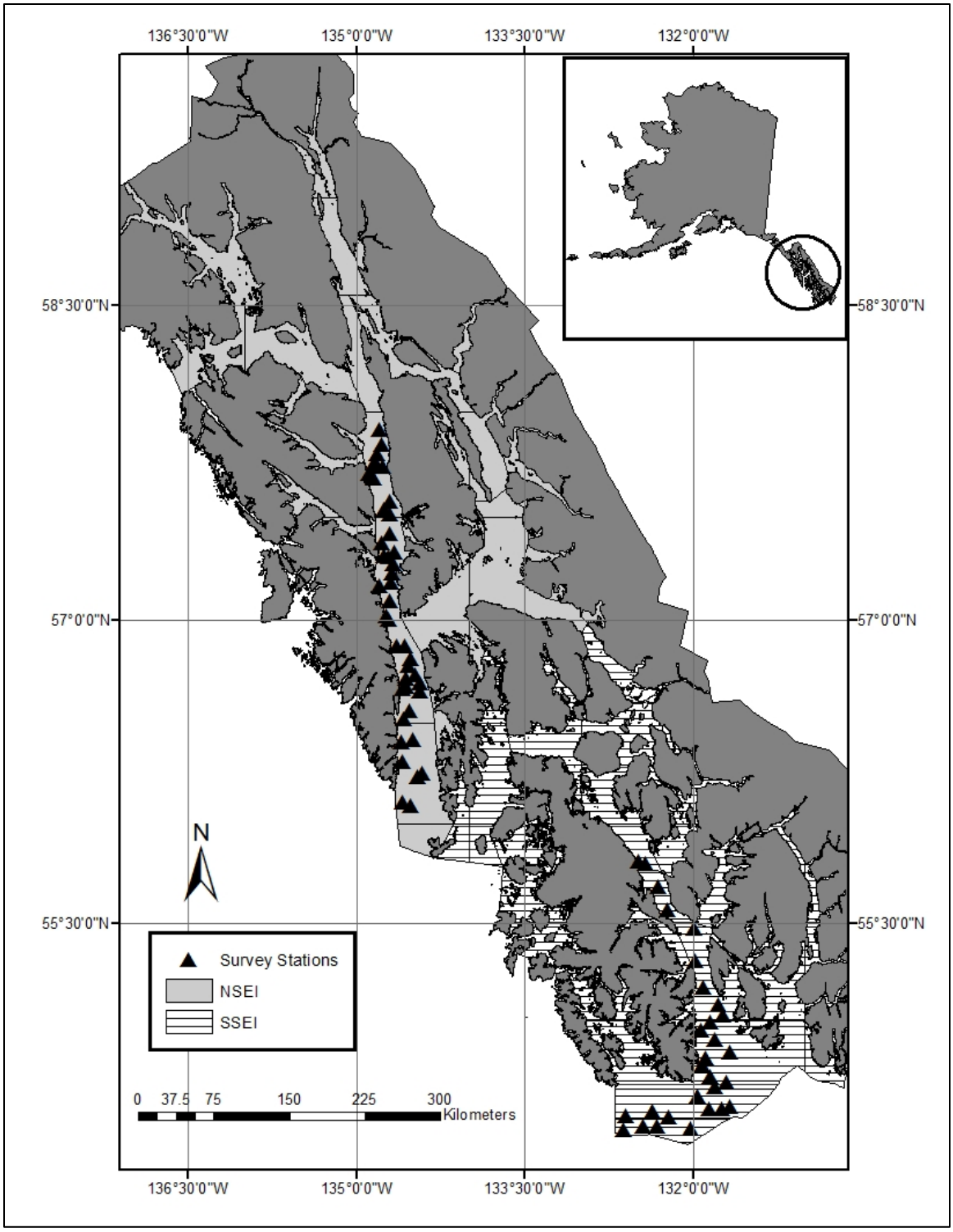

Figure 122-2.–2017 department sablefish longline survey stations for the NSEI and SSEI management areas.

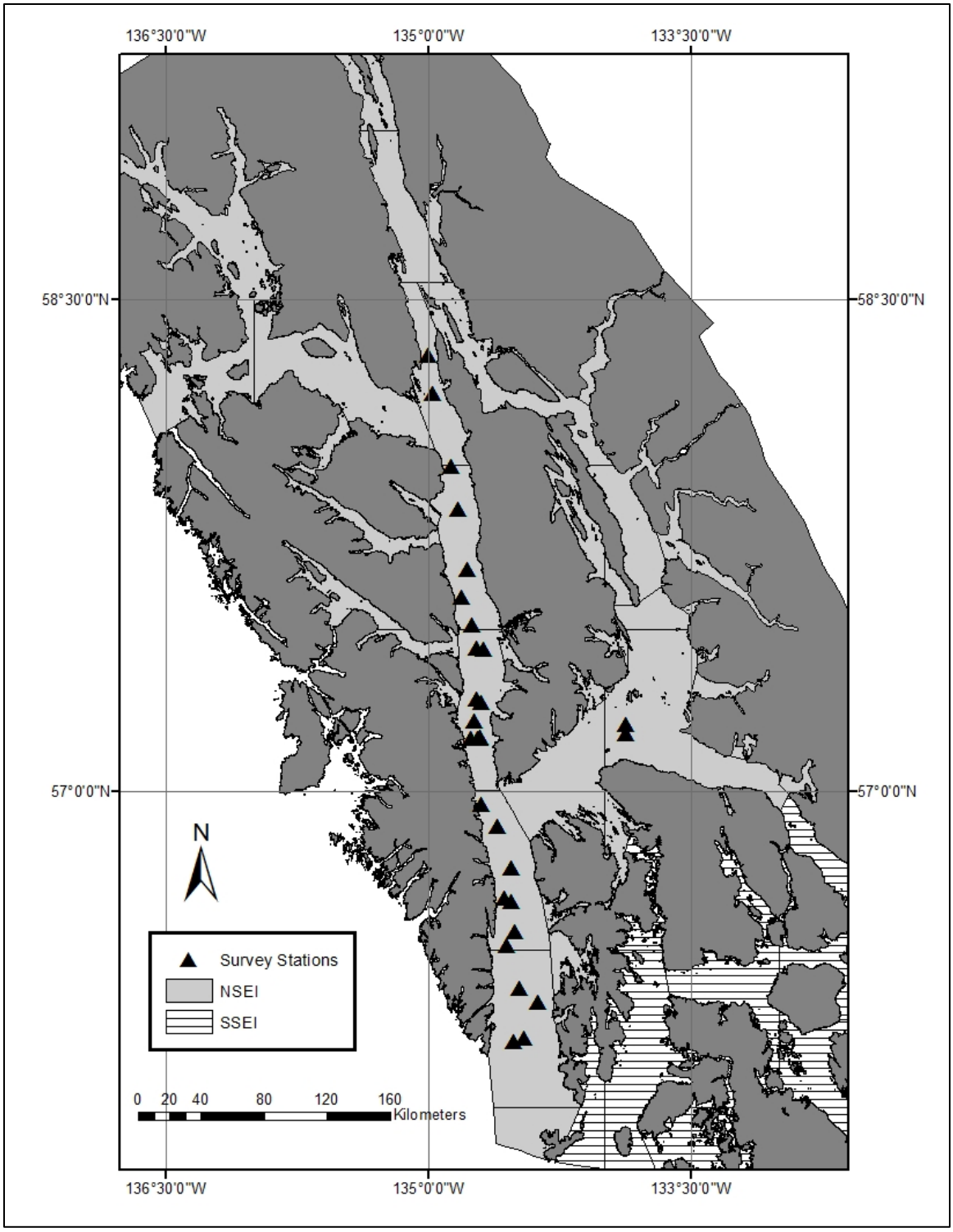

Figure 122-3.–2017 department sablefish mark/tag survey locations for the NSEI management area.

Lingcod (2 Proposals)

PROPOSAL 123 – 5AAC 28.173. Lingcod possession and landing requirements for Eastern Gulf of Alaska Area.

PROPOSED BY: Don Westlund and Larry McQuarrie.

WHAT WOULD THE PROPOSAL DO? This seeks to increase the minimum size limit for lingcod in commercial fisheries to 30 inches in length from tip of snout to tip of tail, or 22.75 inches from the front of the dorsal fin to the tip of the tail.

WHAT ARE THE CURRENT REGULATIONS? In the Eastern Gulf of Alaska, lingcod retained in commercial fisheries must measure at least 27 inches from the tip of the snout to the tip of the tail, or 20.5 inches from the front of the dorsal fin to the tip of the tail. Undersized lingcod must be returned to the water immediately without further harm. The commercial directed lingcod fishery and salmon troll and groundfish bycatch fisheries are open May 16–November 30 or until fishery allocations are taken. Lingcod bycatch in longline fisheries is open year round or until area allocations are taken.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would potentially enhance spawning biomass of lingcod populations in Southeast Alaska; however in the absence of a fecundity study specific to lingcod in this geographic area, the extent of this increased spawning biomass is unknown. An increase to the minimum length limit would decrease commercial lingcod harvest to some degree, more so in the directed and troll bycatch fisheries which are more likely to catch and land lingcod in this size range. Adoption of this proposal could contribute to local recruitment but the extent is unknown because fecundity studies specific to lingcod in Southeast Alaska are unavailable. Lingcod do not have a closed swim bladder and therefore experience minimal barotrauma compared to rockfish; however discard of fish in this size range likely will lead to some amount of mortality. The extent of this mortality is difficult to quantify due to the differences in how the commercial fisheries are prosecuted. It is unclear how the potential increase in recruitment would balance with additional discard mortality.

BACKGROUND: The board adopted the 27 inch minimum size limit for lingcod caught in the commercial fisheries in southeast Alaska in 1989 in order to protect sexually immature females and nest guarding males. The size limit was based on the size of 50% sexual maturity for females from British Columbia fishery data.

Department biological data collected from 5,807 lingcod sampled in the demersal shelf rockfish and halibut longline fisheries between 1995 and 2005 indicate that less than 1% of fish sampled were below the 30 inch threshold. The low incidence of longline caught lingcod in this size range may be a factor of fishing deeper depths that are inhabited by larger female lingcod and because longline fishermen are limited to a bycatch percentage and may tend to retain bigger fish.

Data collected from directed lingcod fishery samples show 18% of the 17,453 lingcod sampled between 1995 and 2017 were below the proposed 30 inch minimum length. This fishery is generally prosecuted in shallower water and encounters a higher percentage of smaller fish, when compared to longline fisheries. Additionally, directed fishery participants are not limited to a bycatch allowance so they have an incentive to retain all legal size lingcod.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department does not have a lingcod stock assessment program to provide reliable estimates of lingcod biomass or abundance; however, based on commercial fishery data, lingcod stocks throughout the region are believed to be healthy.

The proposal requests a three inch increase to the minimum total length measurement but only requests a 2.25 inch increase to the dorsal fin/tip of tail measurement. The department does not collect data to substantiate whether there is a difference in growth rates between these reference points or whether potential changes to the minimum length should be proportionate for each length measurement.

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.

PROPOSAL 124 – 5AAC 28.150. Closed waters in Eastern Gulf of Alaska Area and 5 AAC 28.173. Lingcod possession and landing requirements for Eastern Gulf of Alaska Area.

PROPOSED BY: Tad Fujioka.

WHAT WOULD THE PROPOSAL DO? This would allow for the retention, possession, and sale of up to two lingcod taken as bycatch in the commercial salmon troll fishery in Sitka Sound Special Use Area (Figure 124-1) that lies within the Central Southeast Outside (CSEO) Lingcod Management Area.

WHAT ARE THE CURRENT REGULATIONS? All lingcod retained in commercial fisheries must measure a minimum of 27 inches in length from the tip of snout to the tip of tail or 20.5 inches from the front of the dorsal fin to tip of tail. Annual lingcod GHLs are set by management area and allocated between the commercial directed lingcod fishery, salmon troll, longline and groundfish jig bycatch fisheries, and the sport fishery. Commercial fisheries are closed when an annual fishery allocation is taken.

The open season for retention of lingcod as bycatch in the troll fishery is May 16–November 30. The 2017 CSEO troll bycatch GHL was 16,800 round lb and the bycatch allowance was set by EO at 100% of the round weight of salmon on board the vessel. Troll vessels fishing for salmon in the waters of Sitka Sound as described in 5 AAC 28.150(a) may retain or have on board no more than two lingcod. The dorsal fin of all lingcod taken in or possessed while fishing in Sitka Sound must be immediately removed upon harvest to designate the fish for personal use and the head must remain attached to the fish as evidence of legal length. Lingcod taken in Sitka Sound may not be sold and must be reported on a department fish ticket as personal use.

Halibut longline fishermen operating vessels 35 feet or less in length are allowed to fish in the Sitka Sound Special Use Area during the IFQ season, except for the months of June, July, and August. Fishermen are restricted to a 2,000 lb halibut trip limit and a 20% lingcod bycatch allowance.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The amount of CSEO area lingcod taken in the Sitka Sound Special Use Area may increase as more salmon trollers become aware of this harvest opportunity; the amount or effect of increased harvest on local lingcod populations in the Sitka Sound area is unknown. This harvest would be accounted for and applied toward the commercial salmon troll lingcod GHL for CSEO.

BACKGROUND: There is a high volume of salmon troll effort that occurs within Sitka Sound but the number of commercial troll landings where lingcod have been retained for personal use has been negligible (Table 124-2). The CSEO area lingcod GHL for the salmon troll fishery was last taken in 2007; the second time in 18 years since current allocations were established.

In 1997, the board adopted a regulation that limited commercial lingcod retention in Sitka Sound. The proposal was part of a larger plan presented by the Sitka Halibut Task Force to reduce Sitka Sound groundfish harvest in commercial and sport charter fisheries. The new regulation permitted lingcod bycatch in the commercial halibut fishery, but prohibited directed lingcod fishing and retention of lingcod as bycatch in all other commercial fisheries. In a related action, guided and nonresident sport bag limits in Sitka Sound were reduced from two lingcod per day to one per day.

Lingcod bycatch in the commercial halibut fishery was limited to 5% in all areas of the Eastern Gulf between 1994 and 2008. In 2009, the board adopted a proposal that allowed the department

to increase lingcod bycatch in the halibut fishery in areas where the annual lingcod longline allocation was underutilized. The CSEO halibut lingcod bycatch allowance was increased to 15% in 2009 and 20% for the period of 2010–2017. Reported lingcod harvest in the halibut fishery in Sitka Sound from 2008 to 2017 has ranged between 435 and 2,833 round lb and averages 1,703 round lb.

In 2015 the board authorized the retention of up to two personal use lingcod for troll vessels fishing in the waters of Sitka Sound. This provided salmon trollers with an opportunity to retain incidental lingcod harvest for personal use and also ensured that vessels were not automatically precluded from fishing opportunities in Sitka Sound if they had already retained lingcod on board from another area.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal but does have concern for potential negative impacts of increasing harvest of lingcod in Sitka Sound because this stock is already heavily utilized.

If the board adopts this proposal the department recommends that the maximum number of lingcod retained or on board a vessel while fishing the Sitka Sound Special Use Area remains at two fish; however the amount of lingcod ultimately allowed is determined by weight and a permit holder shall not retain or sell an amount of lingcod that exceeds the CSEO bycatch allowance set by EO. The current requirements to keep the head attached to lingcod taken in Sitka Sound and to immediately remove the dorsal fin will no longer be necessary should this proposal be adopted.

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 124-1.–Lingcod harvest estimates (round pounds) in Sitka Sound Special Use Area, by fishery (commercial halibut, sport, and subsistence halibut).

Year	Commercial Halibut	Sport	Subsistence Halibut [a]	Total harvest
2008	435	9,274	21,648	31,357
2009	708	3,694	16,592	20,994
2010	2,766	3,520	14,720	21,006
2011	2,092	2,560	12,128	16,780
2012	2,117	7,231	10,821	20,169
2013	1,911	8,000	ND	
2014	1,126	8,062	ND	
2015	1,275	7,930	ND	
2016	2,833	5,069	ND	
2017	1,762	3,827	ND	
Average	1,703	5,917	15,182	22,061

[a] These data do not include lingcod taken in other subsistence groundfish fisheries.

ND = no data.

Table 124-2.–Lingcod reported as retained for personal use in commercial salmon troll fishery under Sitka Sound Special Use Area regulations, by number of landings and round pounds

Year	Landings	Round lb
2015	2	30
2016	8	234
2017	7	197
Total	17	461

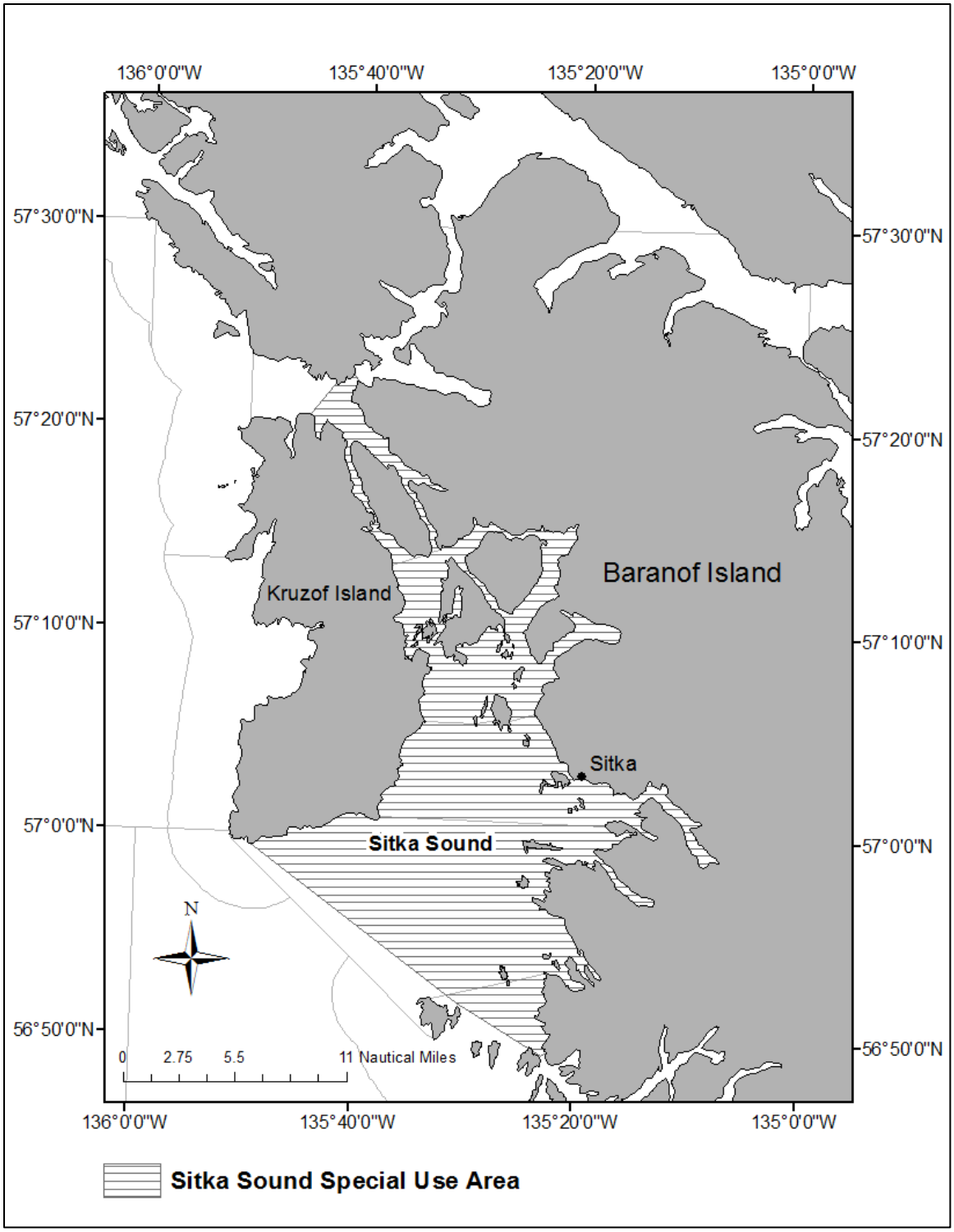

Figure 124-1.–The Southeast Alaska groundfish Sitka Sound Special Use Area.

Sport Rockfish (4 Proposals)

PROPOSAL 125 – 5 AAC 47.065. Demersal shelf rockfish delegation of authority and provisions for management.

PROPOSED BY: Don Westlund and Larry McQuarrie.

WHAT WOULD THE PROPOSAL DO? This would repeal mandatory retention requirements for nonpelagic rockfish.

WHAT ARE THE CURRENT REGULATIONS? Although not a standing regulation, the mandatory retention of nonpelagic rockfish by resident and nonresident anglers may be implemented by emergency order as prescribed in 5 AAC 47.065, *Demersal Shelf Rockfish Delegation of Authority and Provisions for Management*. This provision has been implemented by emergency order since 2006 for all anglers.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Loss of mandatory retention as a management tool would likely lead to an increase in the number of nonpelagic rockfish released and a reduction in the number harvested. Whether mortality of released fish would increase or decrease would depend on the magnitude of the number released, and the extent to which deep water release mechanisms (DRMs) are used. The net change to mortality that would occur as a result of this proposal is unknown.

BACKGROUND: Since 2006, when the sport fishery allocation was set for Southeast Outside Subdistrict, the department has implemented most of the management measures provided under its delegation of authority including the requirement to retain nonpelagic rockfish until the bag limit is reached. Sport harvest exceeded allocation in the Southeast Outside Subdistrict during 2015 and 2016 (Figure 125-1). There is no allocation for nonpelagic rockfish in Southeast Inside waters. Despite a conservative management strategy, the harvest of nonpelagic rockfish in Southeast Inside waters increased dramatically from the 2006-2011 average (19,500 fish) to 31,000 fish (2012-2016) (Figure 125-2). In response, emergency orders were issued during 2017 to reduce nonpelagic rockfish bag limits in all Southeast waters. In addition, a three week closure to nonpelagic rockfish retention was implemented for the Southeast Outside Subdistrict. All anglers fishing those waters during the closure were required by emergency order to use DRMs for incidentally caught nonpelagic rockfish.

Since 2012, the use of DRMs has been required by regulation for charter anglers. Non-charter anglers are not required to use a DRM. Creel interview data collected by the department during 2017 indicates that 31% of non-charter vessels utilized a DRM when releasing rockfish.

Prior to mandatory retention, anglers could choose to "high grade" their rockfish by releasing smaller or undesired rockfish. Mandatory retention is used to prohibit "high grading" and reduce incentive to continue fishing in areas of high rockfish abundance once anglers bag limits are reached. Due to uncertainties as to how mandatory retention affects individual anglers, it is not possible to estimate the effect of mandatory retention on numbers of nonpelagic rockfish harvested, released, or total mortality by the sport fishery.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. The effect of mandatory retention on nonpelagic harvest and total mortality is difficult to estimate and its conservation benefits unknown. The department has adequate tools such as bag, possession and annual limits, mandatory use of DRMs, as well as potential closure times and areas to manage nonpelagic rockfish without mandatory retention.

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.

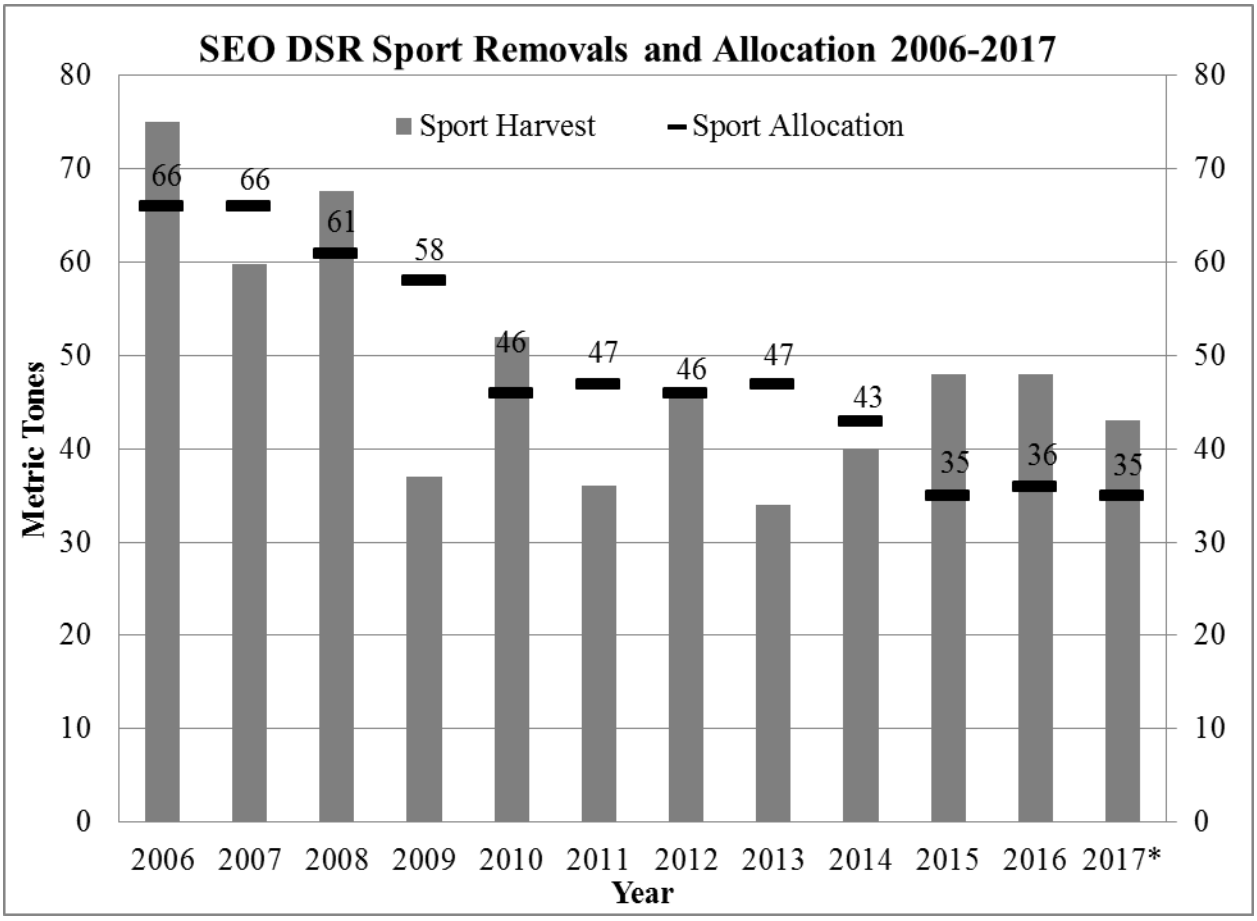

Figure 125-1.–Demersal shelf rockfish (DSR) allocation and mortality (removals in metric tons) in the sport fishery from the Southeast Outside Subdistrict 2006–2016 and projected removals and allocation for 2017.

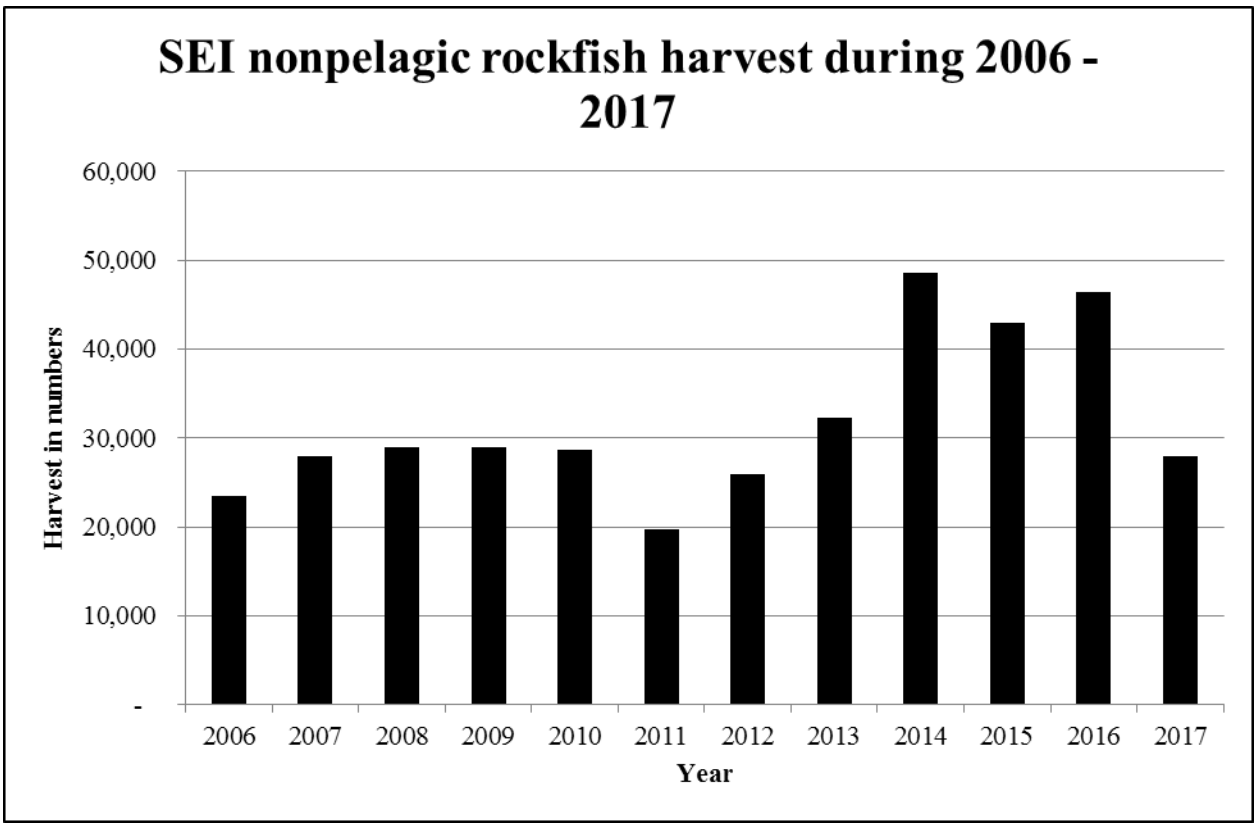

Figure 125-2.–Nonpelagic rockfish harvest in the sport fishery from Southeast Inside waters during 2006–2016 and projected harvest for 2017.

PROPOSAL 126 – 5 AAC 47.030. Methods, means, and general provisions—Finfish.

PROPOSED BY: Don Westlund and Larry McQuarrie.

WHAT WOULD THE PROPOSAL DO? This would require all anglers in Southeast Alaska to use a deep water release mechanism (DRM) to release nonpelagic rockfish at depth of capture or 100 feet, whichever is shallower. All anglers in salt water would also be required to have a functional DRM in possession while fishing.

WHAT ARE THE CURRENT REGULATIONS? Current regulations require chartered anglers in Southeast Alaska to use a DRM when releasing a nonpelagic rockfish. All charter boat operators must have a functional DRM on board. Charter anglers are required to release nonpelagic rockfish at depth of capture or at least 100 feet. Non-chartered anglers are not required by regulation to release rockfish at depth but may use a DRM to release rockfish.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The proper use of DRMs improves survival of released rockfish. By requiring non-charter anglers to use a DRM and have one on board, this proposal would be expected to increase use rates of the DRMs among non-charter anglers from the current measured rate of 31% to a higher rate. Currently, all released nonpelagic rockfish released by non-chartered anglers are assumed to die, but if 80% of the fish released survived this would equate to a savings of about 2,200 fish annually (average 2006-2017). This represents 4% of the total sport harvest. The actual conservation benefit, however, will depend on use rates, as well as angler skill in the proper use of the DRM and handling of fish released. The proposal will cause some rockfish to be released at depth unnecessarily, and require some anglers to have release devices on board unnecessarily.

BACKGROUND: Nonpelagic rockfish, including those in the demersal shelf rockfish (DSR) assemblage, live in deep water, high-pressure environments. These species are subject to high mortality rates when released at the surface due to the injuries (barotrauma) and positive buoyancy caused by expansion of swim bladder gasses when the fish is brought to the surface. Barotrauma injuries include crushed, displaced, or ruptured internal organs, everted esophagus and stomach, embolisms (air bubbles in blood), exophthalmia (bulging eye), ocular emphysemas (air bubbles inside eye), and detached retinas. Often, fish released at the surface are too buoyant to return to depth. Pelagic species also incur these injuries, but to a lesser extent, due to physiological and behavioral differences in depth regulation and their preference for shallower water.

Studies in Oregon and Alaska indicate that some portion of rockfish released at the surface are able to submerge on their own, but that this ability varies by species and depth of capture. Recent research has focused on ways to reduce the effects of barotrauma by lowering the fish back to deep water quickly after capture. Various recompression devices have been marketed to release fish at the depth of capture as quickly as possible. Research by the department suggests survival of released yelloweye rockfish could be increased from about 20% to over 95% by using these simple devices. Studies in the scientific literature demonstrate substantial increases in survival following deep water release for numerous rockfish species. Based on this information, DRM requirements were established in regulation in Southeast Alaska for chartered anglers in 2012. Data collected from the department port sampling program during 2017 indicates that 31% of non-chartered anglers used a DRM when releasing nonpelagic rockfish.

Outreach and education efforts, which began in 2012, have been aimed at promoting the use of DRMs when releasing rockfish and are ongoing in Southeast and in Southcentral. In accordance with a communications plan designed to promote rockfish conservation, the department will sponsor educational events in 2018 at major ports or coastal communities across the state. Printed and online materials are also being developed for distribution to the public that detail rockfish identification and release methods. All efforts are being tracked and recorded for future analysis.

Despite intensive management, sport harvests have recently exceeded allocations in the Southeast Outside Subdistrict and harvest in Southeast Inside waters has increased substantially. In response, emergency orders were issued during 2017 reducing bag limits throughout Southeast Alaska and prohibiting the retention of nonpelagic rockfish for three weeks in the Southeast Outside Subdistrict. In addition, all anglers sport fishing from a vessel in the Southeast Outside Subdistrict were required to have a functional DRM on board and required to release incidentally caught nonpelagic rockfish to the depth it was hooked or a depth of at least 100 feet.

Total mortality (harvest plus release mortality; charter and non-charter) of nonpelagic rockfish in the Southeast Alaska sport fishery averaged 59,440 fish during the period 2006-2017 (Figure 126-1) The assumed mortality rate for nonpelagic rockfish released with a DRM in the charter fishery is 20%, while the mortality rate for fish released by non-charter anglers is assumed to be 100%. Total mortality of nonpelagic rockfish for non-charter anglers averaged 27,574 fish, or 46% of the fishery total. In Southeast Alaska, an average of 4,859 nonpelagic rockfish were released per year (2006–2017) by all anglers. Non-charter anglers in Southeast Alaska released 2,833 of that total.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department promotes effective release of nonpelagic rockfish through outreach efforts and supports the use of DRM as a means to reduce release mortality of nonpelagic rockfish in excess of bag and possession limits. The department has documented increased voluntary use of DRMs. This proposal would complicate regulations and either unnecessarily burden anglers fishing in saltwater for species other than nonpelagic rockfish, or pose enforcement difficulties if applied only to some anglers, e.g. those fishing for bottomfish. For these reasons, the department prefers the use of DRM by non-chartered anglers continue to be promoted through outreach methods, rather than be required by regulation.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery. All anglers would need to purchase or manufacture a deep water release mechanism if they are angling in salt waters of Southeast Alaska regardless of their target species.

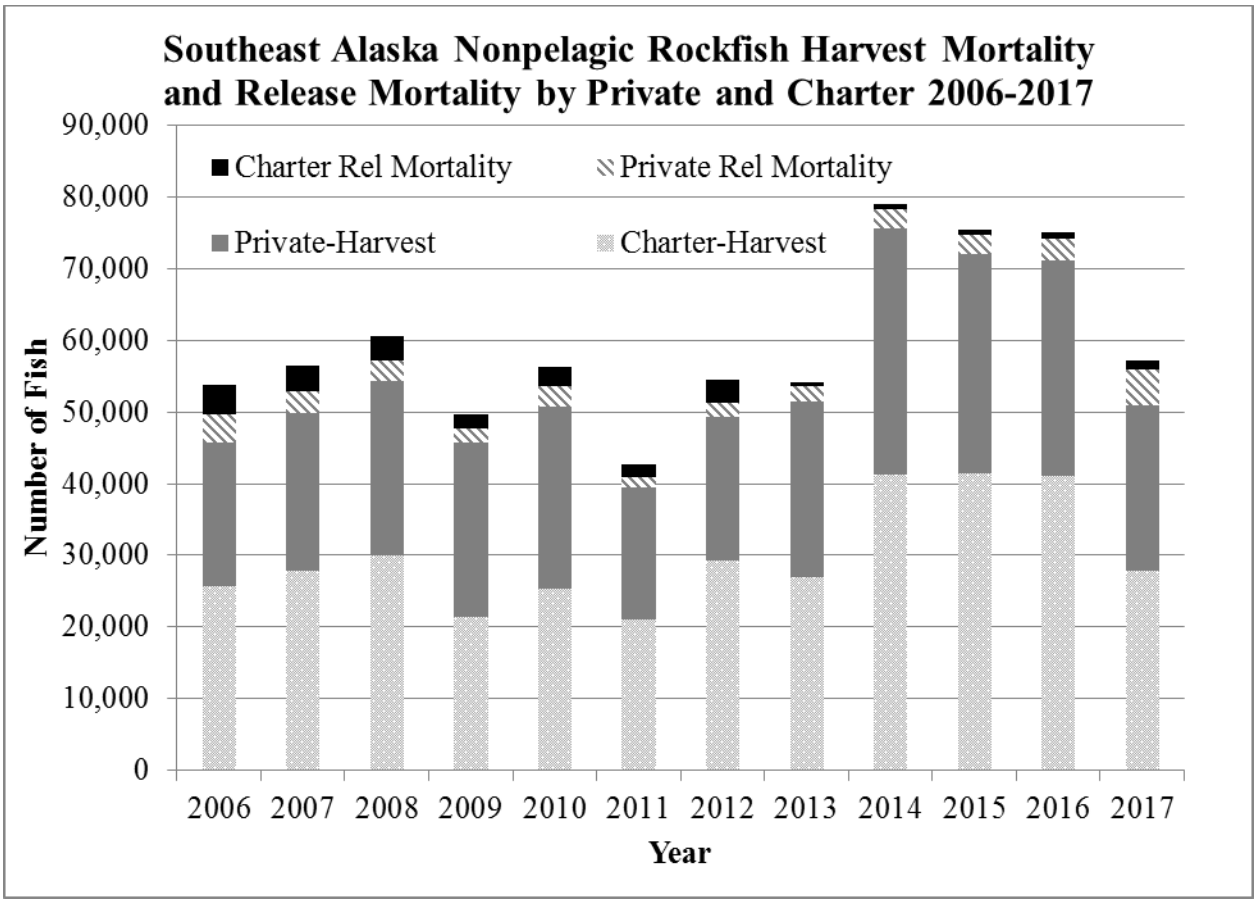

Figure 126-1.–Southeast Alaska nonpelagic rockfish harvest mortality and release mortality by private and charter 2006–2017.

PROPOSAL 127 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the salt waters of the Southeast Alaska Area.

PROPOSED BY: Tad Fujioka.

WHAT WOULD THE PROPOSAL DO? This would direct the department to refrain from reducing by emergency order the bag limit for pelagic rockfish in the Sitka Area (CSEO) for resident sport anglers unless the resident share of the harvest exceeds 50% of the total sport pelagic rockfish harvest in CSEO for two consecutive years.

WHAT ARE THE CURRENT REGULATIONS? The pelagic rockfish bag limit is five fish, ten in possession for the Southeast Alaska Area. The department does not have the authority to reduce pelagic rockfish bag limits by residency.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Resident harvest would remain stable while nonresident harvest would decrease. Residents would likely continue to harvest rockfish under regional regulations, while nonresident bag and possession limits would be reduced. By creating separate regulations for residents and nonresidents this would add regulatory complexity.

BACKGROUND: In 2016 and 2017, the department reduced the pelagic rockfish bag limit to three fish and six in possession for all anglers in order to reduce and stabilize increasing pelagic rockfish harvest in CSEO. The department has submitted Proposal 128 seeking to establish these same reduced pelagic rockfish bag and possession limits for the Sitka Area in regulation.

Estimates of harvest by residency are not available for the pelagic and nonpelagic components because of limitations related to SWHS and creel information. However, it is possible to estimate harvest estimates by residency for all rockfish (pelagic and nonpelagic combined) as a surrogate dataset. Between 2011–2016, the total harvest of both pelagic and nonpelagic rockfish (combined) across Southeast Alaska averaged approximately 155,000 fish, of which pelagic rockfish accounted for 61.5% (95,458). During the same timeframe, resident harvest of both pelagic and nonpelagic rockfish (combined) accounted for a fairly stable 11.7% or average of 18,210 fish, regionwide.

Harvest patterns in CSEO were similar to those observed across Southeast Alaska in terms of percentages over the same time period. During this timeframe, the total harvest of both pelagic and nonpelagic rockfish (combined) in CSEO averaged approximately 69,200 fish, of which pelagic rockfish accounted for 76.2% (52,697). Resident harvest of both pelagic and nonpelagic rockfish again accounted for a fairly stable 8.5% or average of 5,882 fish in CSEO, while nonresident harvest of all rockfish averaged 63,313 or over 91% of the total harvest.

It is estimated that between 96 and 98% of all guided anglers in SE Alaska are nonresidents. This suggests a large percentage of the total pelagic rockfish harvested in CSEO can be attributed to nonresidents. In contrast, the percentage of private anglers that are nonresidents has been highly variable and therefore it is inappropriate to provide harvest estimates, due to an unknown degree of precision.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal and suggests that reduction of pelagic rockfish harvest in the Sitka area be accomplished through regulations adopted by the board as proposed in Proposal 128, rather than by emergency order authority.

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.

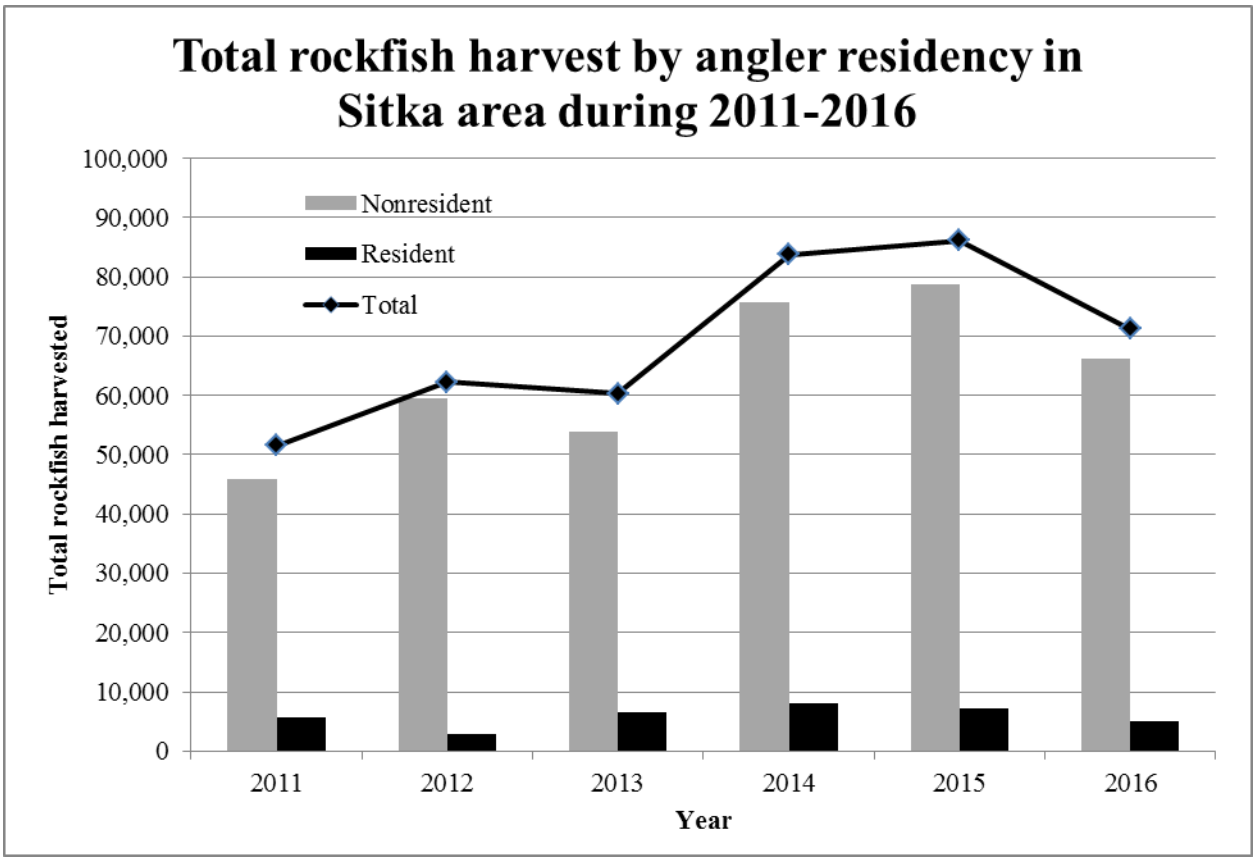

Figure 127-1.–Total rockfish harvest in the sport fishery by angler residency in the Sitka area Area (SWHS Area D) during 2011–2016.

PROPOSAL 128 – 5 AAC 47.021. Special provisions for seasons, bag, possession, annual, and size limits and methods and means for the salt waters of Southeast Alaska Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? Reduce the bag and possession limit for pelagic rockfish in the Sitka Area to three fish, six in possession.

WHAT ARE THE CURRENT REGULATIONS? The pelagic rockfish bag limit is five fish, ten in possession for the Southeast Alaska Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This will help stabilize the harvest of pelagic rockfish in the Sitka Area. Pelagic rockfish harvest in the Sitka Area was reduced 20% from the harvest level in 2015 when the proposed regulation was established by emergency order in 2016.

BACKGROUND: Pelagic rockfish harvest in the Sitka Area, as estimated by integration of statewide harvest survey and marine creel information had gradually increased from 20,000 fish in 2009 to over 60,000 fish in 2014 and 2015. In 2016 and 2017 the department reduced the bag limit of pelagic rockfish by emergency order from five fish, ten in possession to three fish, six in possession. Harvest in 2016 and 2017 was reduced 20% and 28%, respectively, from the harvest level in 2015, returning to a level similar to that of 2012–2013 (Figure 128-1).

There is currently no population assessment for pelagic rockfish in Southeast Alaska and little is known about the specific effect of current harvest rates in the sport fishery on local populations. However, pelagic rockfish are long-lived, late-maturing species that are susceptible to overharvest and localized depletion. Although there is limited stock assessment information, there is evidence of a slight, but gradual decline in average length since 2006 in the Sitka Area sport harvest, suggesting a change in the population structure that may be a result of recent increases in harvest.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal as a means to reduce pelagic rockfish harvest in the interest of conservation in light of uncertain stock status, increasing harvest and possibly decreasing fish size.

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.

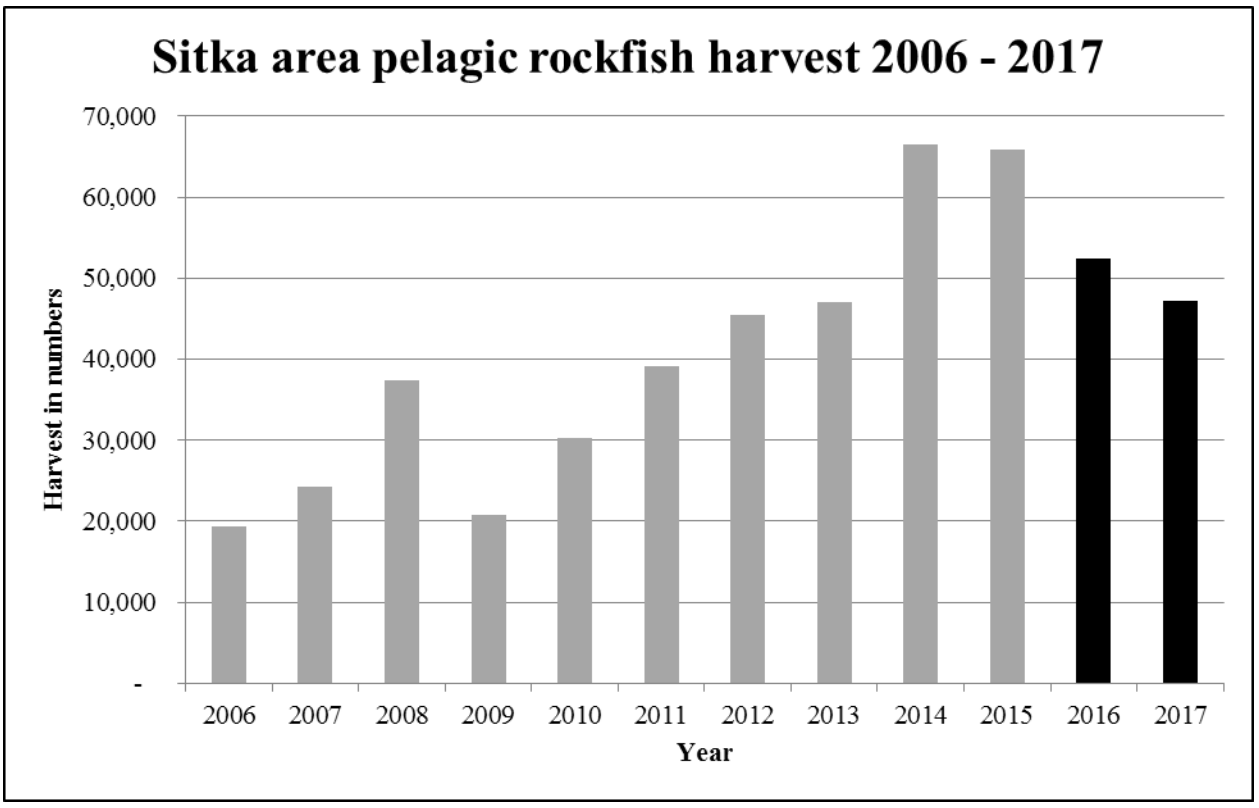

Figure 128-1.–Pelagic rockfish harvest in the sport fishery from Southeast Alaska 2006–2016 and projected harvest for 2017. The reduction in harvest starting in 2016 was the result of a reduction in the bag and possession limits.

Commercial Rockfish (1 Proposal)

PROPOSAL 129 – 5AAC 28.171. Rockfish possession and landing requirements for Eastern Gulf of Alaska Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would reduce the DSR fishery trip limit in the EYKT Section to 8,000 lb and reconfigure trip limit mechanics for all EGOA directed DSR fisheries in order to improve fishery manageability and maintain fish quality standards. This proposal would expand on the 5-day trip limit sale restriction and prohibit the catch, take, or possession of DSR in excess of the trip limit amount during that period.

WHAT ARE THE CURRENT REGULATIONS? In the EYKT Section, a vessel or CFEC permit holder may not sell more than 12,000 lb (bled weight) of DSR in any five-day period. All DSR taken in excess of 12,000 lb by a vessel or CFEC permit holder in any five-day period must be weighed and reported on a department fish ticket. All proceeds from the sale of DSR in excess of 12,000 lb shall be surrendered to the state. Trip limit regulations for DSR fisheries prosecuted in NSEO, CSEO, SSEO, NSEI and SSEI mirror those in EYKT except the limit is 6,000 lb.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The lower trip limit would slow the pace of the fishery and possibly extend the length of the fishery depending on size of the quota and level of participation. Smaller trips limits would improve fishery manageability by reducing the harvest potential of the fleet at any one time. Consequently, the trip limit reduction would decrease potential vessel earnings for a given fishing trip.

An additional component of this proposal relates to the mechanics of the trip limit period. The current regulation associates the trip limit period to the sale of fish, but does not prohibit the resumption of fishing activity. The adoption of this portion of the proposal would prohibit participation in the fishery until four days following the offload of a trip limit. This change would eliminate potential product quality issues for a vessel that might deliver a full limit of rockfish, immediately return to the fishing grounds for another round of fishing and then upon returning to port, be required to hold those fish until the 5-day period expires.

This modification would also serve to slow down the pace of this derby-style fishery which may provide managers with better accounting of overall harvest before vessels return to fishing. Slowing the fishery may also help maintain higher prices for the fleet by providing a window for the initial fish taken to be sold before another batch of product is introduced to the marketplace. This would eliminate the incentive to race to fish allowing for a safer and more manageable fishery.

Adoption of this proposal would also clarify that a trip limit amount is based on the weight of fish as landed and that DSR taken in excess of the trip limit are reported as a bycatch overage and forfeited to the state.

BACKGROUND: Since 1989, the state has had management authority for DSR in federal waters and has submitted an annual stock assessment to the North Pacific Fishery Management Council (council). The stock assessment is habitat-based and the biomass estimate is the product of estimated area of yelloweye rockfish habitat, density of yelloweye rockfish, and average

weight of yelloweye rockfish by management area. The ABC levels and TAC are set annually for the Southeast Outside (SEO) Subdistrict as part of the council's stock assessment and fishery evaluation process.

A 7,500 lb five-day trip limit was first established for the directed DSR fishery in 1989 in order to slow the pace of this fishery. In 1994, the trip limit for the Southeast District (east of 137° W. long.) was reduced to 6,000 lb in order to maintain the small vessel and fresh product nature of the fishery. A larger trip limit of 12,000 lb was also established at this time for the EYKT area based on the longer run time, rougher sea conditions, and larger vessel size needed to operate on the Fairweather Grounds.

The commercial SEO DSR quota is apportioned by management area based on the contribution of that area to the overall biomass. The quota remaining for the directed commercial DSR fishery is determined after deductions for DSR bycatch mortality in other fisheries are made. Areas are opened to directed fishing if there is sufficient resource to conduct an orderly fishery and if there are no area-specific conservation concerns. The season for the directed DSR fishery opens in early February, prior to the commercial halibut opening.

Recent declines in yelloweye biomass have reduced directed fishing opportunities and the 12,000 lb EYKT trip limit is no longer appropriate for the current quotas (Table 129-1). Interest in this open access fishery is high since yelloweye rockfish may bring up to $2.25 per pound. In most seasons the harvest potential of registered vessels exceeds the quota when considering the current trip limit; however, it is common that several registered vessels are unable to participate due to adverse weather conditions at that time of year. Weather windows are often short and in some years only larger vessels are able to participate, thus reducing overall harvest potential. The department has successfully managed the fishery under the current 12,000 lb trip limit; however, there is an increased risk of exceeding these smaller annual quotas. During the past four seasons total harvest has exceeded the annual quota (Table 129-1); reducing the EYKT trip limit would lead to better management control over this small fishery.

State groundfish management is generally based on round (whole fish) weights and the original trip limit regulation was adopted with trip limits specified to round pounds. The standard for this fresh market fishery is bled rockfish; the process of bleeding rockfish accounts for a two percent loss in weight. A trip limit of bled rockfish converted to round weight is equal to 6,122 or 12,245 lb which means that proper documentation of bled rockfish at time of landing only permits the sale of 5,880 or 11,760 lb. In 2003 the board amended this regulation to reflect a trip limit based on bled rockfish weights. The proposed language change here serves to clarify recent questions as to whether vessels that do not bleed their catch can sell an additional 122 or 245 lb of DSR to match the equivalent bled weight of rockfish. This was never the intention of the previous regulatory change.

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.

Table 129-1.–EYKT directed DSR fishery quota, number of vessels and landings by year.

Year	Quota	Harvest	No. Vessels	No. Landings	No. of Trip Limits Reached
2008	123,480	48,904	3	7	0
2009	106,502	99,177	9	13	1
2010	–	–	–	–	–
2011	–	–	–	–	–
2012	81,144	79,864	3	7	3
2013	88,200	81,305	5	9	2
2014	70,355	72,719	5	8	2
2015	71,625	72,261	5	8	2
2016	63,964	75,568	6	10	0
2017	59,228	71,005	6	6	3

– = no data.

COMMITTEE OF THE WHOLE GROUP 8: Herring (19 proposals: Chair - TBD)

Subsistence (1 Proposal)

PROPOSAL 94 – 5 AAC 01.716. Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses.

PROPOSED BY: Southeast Herring Conservation Alliance

WHAT WOULD THE PROPOSAL DO? This seeks to revise the amount reasonably necessary for subsistence (ANS) for herring spawn from Sitka Sound either by reducing the ANS to a range of 60,000–120,000 pounds, or by recommending a program for further study of harvest amounts to corroborate Southeast Herring Conservation Alliance (SHCA) harvest numbers.

WHAT ARE THE CURRENT REGULATIONS? The board has made a positive customary and traditional use finding for herring spawn on any substrate in the waters of Section 13-A and Section 13-B north of the latitude of Aspid Cape (5 AAC 01.716(a)(11)(D)), which includes the waters of Sitka Sound. Current regulations indicate that 136,000–227,000 pounds of herring spawn are reasonably necessary for subsistence uses in these waters (5 AAC 01.716(b)). Except for herring spawn on kelp, there is no permit required to harvest herring spawn and there are no restrictions on the amount of harvest. A permit is required for the harvest of herring spawn on kelp; under the conditions of the permit, an individual is limited to 32 pounds of spawn on kelp while a household is limited to 158 pounds. Additional permits may be granted to individuals or households upon request.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Determining the relationship between harvest level and the ANS range is one way to measure whether or not regulations provide a reasonable opportunity for subsistence uses of a stock or population. Changing a fisheries' ANS does not affect subsistence opportunity with respect to methods, means, or limits allowed under regulations. There would be no change to the current herring spawn subsistence fishery without an additional proposal.

BACKGROUND: An ANS is one way to measure if reasonable opportunity for subsistence uses is being provided through regulations: an ANS is not an in-season fisheries management tool. State law says reasonable opportunity is defined as "an opportunity, as determined by the appropriate board, that allows a subsistence user to participate in a subsistence hunt or fishery that provides a normally diligent participant with a reasonable expectation of success of taking of fish or game (AS 16.05.258(f)).

In 1989, the board made a positive customary and traditional use determination for herring and herring spawn in waters of section 13-A and that portion of Section 13-B that is north of the latitude of Aspid Cape. At its January 2002 meeting, the board made a determination that the amounts of herring spawn reasonably necessary for subsistence in these waters was 105,000-158,000 pounds. This finding was based on the best available harvest estimates of the department, which included results of a 1996 systematic household harvest survey and a 1989 herring spawn harvest estimate. During its 2009 meeting, the board revised the ANS finding to 136,000–227,000 pounds of herring spawn, based on the mean harvest estimate from 2002 to 2008, as determined through a systematic annual herring spawn harvest survey.

Since 2002, at the request of the board, the department has collaborated with the Sitka Tribe of Alaska (STA) to administer a household harvest survey to estimate subsistence herring spawn on all substrate types in Sitka Sound. The report of the 2016 harvest year is submitted to the board as Technical Paper #435. These annual reports are reviewed in draft form within the Division of Subsistence as well as with the Division of Commercial Fisheries, Sitka Tribe of Alaska, and the Southeast Herring Conservation Alliance; whenever possible, reviewers' questions and comments are addressed in the final report. The original survey method from 2002 was revised in 2010 using information collected during internal review and collaborative discussions, to increase the accuracy in estimating subsistence harvests of herring spawn. As part of this revision, the department and STA began weighing processed herring eggs to create conversion factors for common storage containers, such as quart- and gallon-sized zip-top bags and 25- and 50-lb wetlock boxes (see the methods described in Technical Paper No. 435). Harvest survey results are shown in Table 94-1. The average harvest estimate over the 15 years of the program is 150,729 pounds of herring spawn, with an average of 74 households attempting to harvest. Since 2010, the average harvest has been 111,131 pounds with an average of 51 households attempting to harvest. The harvest of herring spawn in Sitka Sound has been below the low end of the ANS range in 8 of the 15 years surveyed (Figure 94-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocative aspects of this proposal; however, the department recommends making ANS findings on the best available data.

The department administers a household harvest survey, in collaboration with the Sitka Tribe of Alaska, to produce estimates of the subsistence herring spawn harvest from Sitka Sound. The department presents the board with the best available data so that it may act appropriately to provide a reasonable opportunity for subsistence, and if needed, allocate resources to subsistence and other uses, and adopt amounts reasonable necessary for subsistence.

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.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is this stock customarily and traditionally taken or used for subsistence? The board has determined under 5 AAC 01.716(a)(11)(D) that herring and herring spawn in Section 13-A and Section 13-B north of the latitude of Aspid Cape are customarily and traditionally taken or used for subsistence.
3. Can a portion of the stock be harvested consistent with sustained yield? Yes.
4. What amount is reasonably necessary for subsistence uses? The board has established a range of 136,000–227,000 pounds of herring spawn reasonably necessary for subsistence uses (5 AAC 01.716(b)).
5. Do the regulations provide a reasonable opportunity for subsistence uses? This is a board determination.
6. Is it necessary to reduce or eliminate other uses to provide a reasonable opportunity for subsistence use? This is a board determination.

Table 94-1.–Estimated subsistence harvest of herring spawn from Sitka Sound, 2002–2016.

Year	Number of surveyed households	Estimated number of households attempting to harvest	Estimated number of households harvesting	Estimated harvest, all substrates, pounds	95% confidence interval (± %)	Range: low	Range: high
2002	86	n/a	77	151,717	23%	116,701	186,734
2003	118	117	116	278,799	19%	225,704	331,895
2004	144	120	118	381,226	18%	312,224	450,229
2005	159	111	95	79,064	9%	72,272	85,856
2006	127	93	88	219,356	20%	176,484	262,228
2007	126	92	81	87,211	22%	67,702	106,720
2008	128	59	54	71,936	6%	67,764	76,108
2009	150	91	91	213,712	9%	193,623	233,801
2010	132	40	40	154,620	10%	139,872	169,367
2011	109	57	53	83,443	5%	79,719	87,166
2012	75	50	47	115,799	12%	102,332	129,265
2013	59	52	50	78,090	10%	70,075	86,106
2014	60	68	68	154,412	13%	135,054	173,769
2015	58	52	51	106,998	21%	84,664	129,333
2016	64	38	35	84,554	41%	50,028	119,079
Historical average	106	74	71	150,729	0	126,281	175,177
Average 2010-2016	80	51	49	111,131	0	94,535	127,726

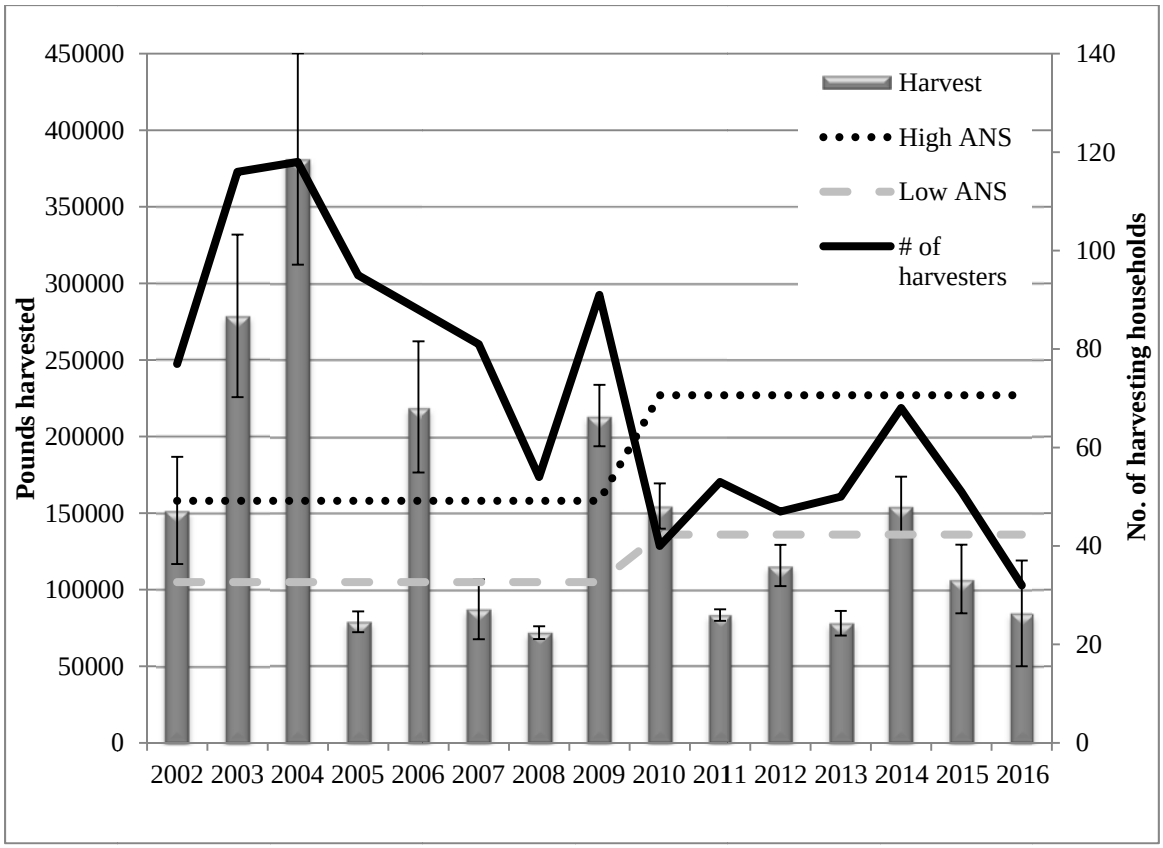

Figure 94-1.–Total pounds of herring spawn harvested, number of harvesting households, and amount reasonably necessary for subsistence (ANS) of herring spawn on all substrates in Sitka Sound, 2002–2016.

PROPOSALS 95 and 96 – 5 AAC 27.110. Fishing seasons for Southeastern Alaska Area.

PROPOSED BY: Rollin Young.

WHAT WOULD THIS PROPOSAL DO? These would rescind the provisions for commercial sac roe herring fisheries in Sections 11-A, 15-B, and 15-C.

WHAT ARE THE CURRENT REGULATIONS? Herring sac roe purse seine fisheries may occur in these areas when the forecast herring spawning biomass exceeds 5,000 tons.

WHAT WOULD BE THE EFFECT IF THESE PROPOSALS WERE ADOPTED? These would eliminate the opportunity for a commercial sac roe herring fishery in Sections 11-A, 15-B, and 15-C on the Lynn Canal herring stock. There would be little effect to existing fisheries since this area has not been opened to commercial herring fisheries since 1982. The potential for future sac roe fisheries in this area would be lost. Regulations providing for bait pound fisheries dependent on stock abundance would remain in effect.

BACKGROUND: Prior to 1983, although relatively small compared to the Sitka Sound herring stock, the Lynn Canal stock supported commercial fisheries including sac roe and bait pound. Annual harvests for the bait pound fishery averaged 175 tons from 1970 to 1981, with peak harvest in 1971 of 650 tons, diminishing to a harvest of two tons in 1981. Set gillnet sac roe fisheries occurred from 1974 to 1978 and averaged 141 tons. Purse seine sac roe fisheries occurred from 1972 to 1982 and averaged 581 tons. This stock declined in 1982 and has remained at low levels since that time. If the long-term decline was solely the result of overfishing, it is expected that this stock should have recovered during the 35-year period since commercial exploitation ceased.

The Lynn Canal herring biomass threshold was originally 4,000 tons based on acoustic estimates and linear miles of shoreline receiving spawn. In 1984, the threshold was increased to 5,000 tons based on a reevaluation of historical herring spawning population levels and the failure of the Lynn Canal stock to increase in size under the previous threshold limit.

The department conducts aerial, skiff, and dive surveys to monitor the Lynn Canal spawning stock. Aerial and skiff surveys have been conducted since 1970 to identify the dates and extent of herring spawn (nautical miles of shoreline receiving spawn). Since 2004, egg deposition dive surveys have been conducted most years to provide estimates of spawning biomass.

The location of Sections 11-A, 15-B, and 15-C open to sac roe fisheries are shown in Figure 95-1.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these proposals.

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.

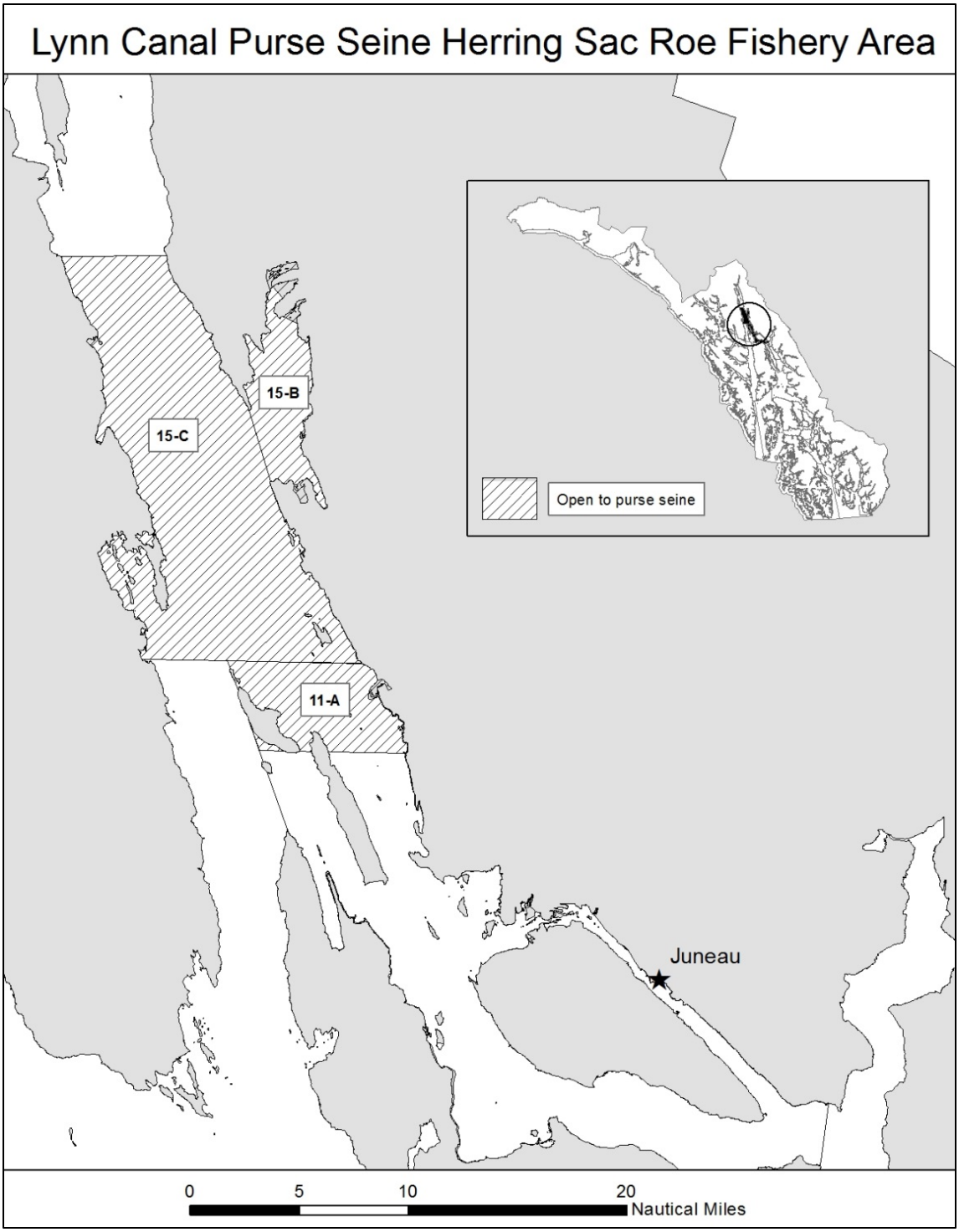

Figure 95-1.–Sections 11-A, 15-B and 15-C and area open to commercial purse seine herring sac roe fisheries.

PROPOSAL 97 – 5 AAC 27.110. Fishing seasons for Southeastern Alaska Area.

PROPOSED BY: Larry Demmert.

WHAT WOULD THE PROPOSAL DO? This would change the season starting date for the winter food and bait herring fishery in Southeast Alaska from October 1 to December 1.

WHAT ARE THE CURRENT REGULATIONS? The Southeast Alaska winter food and bait herring fishery season is October 1 through February 28.

WHAT WOULD BE THE EFFECT IF THE PROPOSALS WERE ADOPTED? This would move the start date of the winter food and bait herring fishery to December 1, thus shortening the season from five months to three months. Truncating the season by two months in years of a large quota, bad weather, and/or different markets may lead to forgone harvest for participants in the winter food and bait herring fishery.

BACKGROUND: There are presently four areas where herring may be commercially harvested for food and bait: Craig, Ernest Sound, Hobart Bay/Port Houghton, and Tenakee Inlet. Portions of GHLs not harvested in winter food and bait fisheries are then allocated to spawn-on-kelp fisheries in Craig, Ernest Sound, and Tenakee Inlet, and to the set gillnet sac roe fishery in Hobart Bay/Port Houghton. The winter food and bait season was established in 1974 as October 1 through February 28. Season start dates for the winter food and bait fishery have varied from October 1 to as late as January 27 depending on when quotas were finalized, harvest interest, allowable harvest, and market conditions.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The department can use time and area authority to delay the start of the season if needed for management or stock conservation purposes.

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.

PROPOSAL 98 and 99 – 5 AAC 27.190. Herring Management Plan for Southeastern Alaska Area.

PROPOSED BY: Andrew Thoms (98) and Sitka Tribe of Alaska (99).

WHAT WOULD THE PROPOSALS DO? These would reduce the maximum allowable harvest rates for all herring fisheries in Southeast Alaska from 10 to 20% to 0–10% (Proposal 98) or from a maximum of 20% to 10% in Sections 13-A and 13-B (Proposal 99), and would also require the department to either identify and consider sources of mortality in setting harvest guidelines or reduce commercial fishery guideline harvest levels (GHL) by at least an additional 25% as an unharvested allocation for the good of the ecosystem (Proposal 98 only).

WHAT ARE THE CURRENT REGULATIONS? Sitka Sound is the only herring fishery area that has a sliding harvest rate formula in regulation. The guideline harvest level shall be established by the department and will be a harvest rate of not less than 12% or more than 20% of the forecast mature biomass, and within that range shall be determined by the following formula:

$$\text{Harvest Rate Percentage} = 2 + 8\left(\frac{\text{Spawning Biomass (in tons)}}{20{,}000}\right).$$

The fishery will not be conducted if the spawning biomass is less than 25,000 tons.

For all other herring fisheries in Southeast Alaska, regulations provide that the department shall establish minimum spawning biomass thresholds below which fishing will not be allowed and may allow a harvest of herring at an exploitation rate between 10% and 20% of the estimated spawning biomass when that biomass is above the minimum threshold level.

WHAT WOULD BE THE EFFECT IF THE PROPOSALS WERE ADOPTED? This would directly reduce commercial harvest opportunity for herring fisheries to a varying degree depending on the fishing area (tables 98-1, 2). Because in recent years, GHLs in Sitka Sound have been based on harvest rates at or near 20%, GHLs may be reduced in this area by at least 63% (i.e. GHL based on 10% harvest rate, minus an additional 25%). For other areas, harvest rates have been closer to 10% in recent years and so may be reduced by at least 25%.

It is difficult to determine what effect a reduced harvest in the Sitka Sound fishery would have on the economics of the fishery. While it is straightforward to show the reduction in revenue by year, this fails to account for the effect of reducing supply in the market. Markets for sac roe herring are volatile and generally sensitive to overall supply. Given the multitude of economic variables as well as unpredictable changes in supply of sac roe herring from the various fisheries along the west coast of North America, the effect of reduced harvest is not easily predictable.

The effect of the commercial sac roe harvest on subsistence herring egg opportunity is also not known; however, it may be assumed that a significantly larger escapement of spawning biomass has potential to benefit subsistence opportunity. Other factors that may impact the success of subsistence herring egg harvest include fluctuations of the total herring population size, natural variability in spawn timing, wind and weather during the herring spawn, the number of participants, and commercial fishery operations (e.g., stirring up sediment near subsistence sets

and possibly altering fish behavior). Additionally, since much of the subsistence effort is focused in a limited area, natural changes in spawn distribution may affect harvesting success.

Decreasing the harvest of herring may benefit herring predators, but the overall ecosystem impact that would result from adopting the proposal is unknown. While reduced harvest would immediately result in more herring available in the ecosystem (approximately 12,000 tons per year on average over the last ten years; tables 98-1, 2), whether long-term reduction in harvest would result in benefits to the ecosystem would depend on environmental conditions and population productivity of herring, predators, competitors, and prey. Current harvest rates were designed to be sustainable and conservative based on historical data. However, changing ocean conditions may affect the productivity of herring and the sustainability of current harvest rates. Changing ocean conditions may also affect the productivity of other species so the overall effects would be complex and are unknown.

BACKGROUND: The current harvest rate strategy (i.e. combination of sliding scale harvest rate and threshold), which was first implemented in 1983, and the specific harvest rate and threshold values, established in 1998 and updated in 2009, have been considered to be conservative for the Sitka Sound herring population. The maximum harvest rate allowed under the harvest rate strategy used for Sitka Sound and all other Southeast Alaska herring stocks is consistent with most other herring fisheries in Alaska and along the west coast of North America (Table 98-3). It has been considered conservative because, although analysis determined that a fixed 20% harvest rate was sustainable at any stock level that is above a threshold based on 25% of pristine biomass, the inclusion of a sliding scale reduces the harvest rate to 10% as stocks near the threshold. However, the threshold in Sitka Sound has not been updated with new data in 20 years and recent research in British Columbia (BC) and elsewhere suggests that the method to determine harvest rates and threshold levels may need to be reevaluated to better avoid states of low biomass and low productivity and to allow populations to recover from such states. This is because harvest rates were determined based on a narrow range of conditions and should be reevaluated to account for natural changes in growth and survival.

Herring populations in Southeast Alaska have experienced periods of stability, increase, and decrease under the current harvest rate strategy. For instance, the spawning biomass in Sitka Sound was stable from 1980 to 1994 under an average realized (not target) harvest rate of 15%; was increasing from 1995 to 2009 under an average realized harvest rate of 14%; and was decreasing from 2010 to 2017 under an average realized harvest rate of 17%. The realized harvest rate in the latter time period would have been about 21% if the GHL had been achieved for all years. The harvest rate in the latter two time periods was based on a target harvest rate of 20%. The difference between the target and the realized harvest rates are due to model performance. The model underforecasts when the population is increasing and overforecasts when the population is declining because the most recent period of natural mortality rate is used in the forecast to produce the GHL. Given the similarity of realized average harvest rates among these time periods, it is likely that changing environmental conditions impacted population growth over these time periods, possibly in concert with commercial harvest. In general, herring can sustain higher harvest rates than longer lived, slower maturing species like sablefish or lingcod because their more frequent recruitment and short lifespans allow populations to rebound more quickly when stocks are at low levels. However, precaution is necessary because environmental influences can force populations to lower stock size equilibria prematurely and more frequently when there is harvest pressure, and also because the consequences of population

decreases of herring are high due to their key role in the ecosystem and importance to users of the resource.

Current allowable harvest levels account for predation of herring by fish, marine mammals, and birds, because they were based on models that included average natural mortality of herring over time. They do not factor in changes to herring mortality that are caused by phenomena in the forecast year that are outside of historical patterns such as a sudden large influx of new predators or a large reduction in prey items due to extreme ocean temperature.

Most fishery scientists agree that herring and forage fish in general are important links in marine food webs, serving as prey for many species. However, among recent studies reviewing herring harvest rate strategies as they pertain to the entire ecosystem there is disagreement on what target harvest rates are adequately conservative for both herring and the ecosystem. It remains unclear how reducing harvest rates for herring would impact other species.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these proposals. The current harvest rate strategy is based on the best scientific information available for Alaska and contains conservation provisions that are beneficial to herring and the ecosystem.

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

Table 98-1.–Established GHLs compared to proposed GHLs, with estimated exvessel values, 2008–2017, for Sitka Sound only.

Year	Actual GHL (tons)	Actual Harvest (tons)	Approximate Exvessel Value Based on Actual Harvest ($US)	GHL at Proposed 10% HR (tons)	Exvessel Value at Proposed 10% HR (tons)	Difference in Exvessel Value ($US)
2008	14,723	14,386	10,746,342	8,772	6,552,311	-4,194,032
2009	14,508	14,776	12,586,152	7,252	6,178,789	-6,410,363
2010	18,293	17,624	12,689,280	9,147	6,585,624	-6,103,656
2011	19,490	19,429	3,963,516	9,745	1,987,960	-1,975,556
2012	28,829	13,231	8,864,770	14,414	8,864,770	0
2013	11,549	5,688	4,436,640	7,699	4,436,640	0
2014	16,333	16,957	3,154,002	8,166	1,518,932	-1,635,070
2015	8,712	8,756	2,189,001	4,424	1,105,925	-1,083,075
2016	14,941	9,833	1,537,280	7,471	1,195,312	-377,968
2017	14,649	13,923	4,288,284	7,325	2,255,946	-2,032,338
Avg.	15,812	13,289	6,381,706	8,215	3,965,136	-2,416,570
Total	173,931	146,174	70,198,770	90,365	43,616,495	-26,582,275

Table 98-2.–Established GHLs compared to proposed GHLs, with estimated exvessel values, 2008–2017 for all Southeast areas combined, except Sitka Sound.

Year	Actual GHL (tons)	Actual Harvest (tons)	Approximate Exvessel Value Based on Actual Harvest ($US)	GHL at Proposed 10% HR (tons)	Exvessel Value at Proposed 10% HR (tons)	Difference in Exvessel Value ($US)
2008	7,232	6,937	6,802,213	4,960	4,863,821	-1,938,393
2009	7,434	7,493	4,895,100	1,789	1,168,808	-3,726,292
2010	7,138	6,819	2,933,835	5,129	2,206,450	-727,385
2011	8,591	4,326	1,655,188	5,685	1,655,188	0
2012	11,387	4,111	3,061,044	6,526	3,061,044	0
2013	5,583	3,723	4,400,794	3,887	4,400,794	0
2014	7,633	5,230	3,054,367	5,102	2,979,840	-74,527
2015	2,263	3,150	1,825,643	2,340	1,356,125	-469,518
2016	1,590	2,740	1,612,177	2,090	1,229,278	-382,900
2017	872	1,400	823,597	660	388,208	-435,389
Avg.	5,778	4,570	3,309,286	3,750	2,463,104	-846,182
Total	63,556	50,274	36,402,146	41,247	27,094,141	-9,308,005

Table 98-3.–Harvest rates for Pacific herring fisheries in Alaska and other regions.

Area	Allowable harvest rate of estimated spawning biomass	Minimum threshold as % of pristine spawning biomass	Comments
Sitka Sound	12–20%	37%	Harvest rate sliding scale, when stock above threshold
Southeast Alaska, remainder	10–20%	unknown for most, but two areas range from 25–40%	Harvest rate sliding scale, when stocks above threshold
Prince William Sound	0–20%	25%	Harvest rate sliding scale, when stock above threshold
Lower Cook Inlet (Kamishak Bay)	0–15%	25%	Harvest rate stepwise scale
Togiak	20%	17%	Fixed harvest rate, when above treshold
Northern Bering Sea (Norton Sound to Security Cove)	10%, 15% or 20%	unknown	Fixed harvest rate, depending on stock, when above threshold; Nelson Island subtracts 200 tons specifically for subsistence
British Columbia	20%	25%	Fixed harvest rate, when above treshold; although reconsidering harvest rate and thresholdbased on stock productivity
Washington (Puget Sound)	10%	25%	Fixed harvest rate, when above threshold
California	5%	none	Fixed harvest rate assumed conservative enough to forego threshold

[a] Togiak is based on 25% of average annual aerial survey biomass estimates from 1978 to 1985, excluding three years when abundance estimates were unreliable. This threshold is approximately 17% of pristine spawning biomass.

PROPOSAL 100 – 5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area.

PROPOSED BY: Rollin Young.

WHAT WOULD THE PROPOSAL DO? This includes contradicting requests. There is a request to reduce the allowable harvest rate in the Lynn Canal area (Sections 11-A, 15-B, and 15-C) from 10 to 20% to 5–10%. It also requests that harvest rate percentage be determined by the formula "harvest rate percentage = 2+8 (Spawning Biomass (in tons) / 20,000)", which would produce a minimum harvest rate of 10% for those years in which the minimum spawning biomass threshold of 20,000 tons has been met. Additionally, it requests that the minimum spawning biomass threshold be increased from 5,000 tons to 20,000 tons and set into regulation. Finally, it requests that if successful fisheries are conducted in the Lynn Canal area without harming herring stocks for ten consecutive years, then allowable harvest rates would increase to 10–12% based on the above formula.

WHAT ARE THE CURRENT REGULATIONS? The department establishes minimum spawning biomass thresholds below which fishing will not be allowed and may allow a harvest of herring at an exploitation rate between 10% and 20% of the estimated spawning biomass when that biomass is above the minimum threshold level.

Regulations allow for herring to be taken in the sac roe fishery in Section 11-A, north of the Shrine of St. Therese (Figure 100-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would effectively close commercial herring fishing in the Lynn Canal area. Between 1980 to present, annual estimated biomass in the area has averaged about 1,800 tons with a maximum of about 8,000 tons. Based on historical biomass levels, it is unlikely this stock would ever reach 20,000 tons, thus never allowing a fishery under the proposal.

BACKGROUND: The Lynn Canal area supported commercial herring sac roe fisheries in the 1970s and early 1980s, with the last fishery taking place in 1982. Harvests during this period ranged from 396 tons to 975 tons. Although no commercial fisheries have occurred in decades, the department continued to monitor herring in the area during most years through 2016. The population has remained at a low level during most of this time, far below its spawning biomass threshold of 5,000 tons. However, within the last ten years the population has shown signs of increasing and has even met or exceeded threshold twice, although there has been great variation in estimated spawning biomass among years. Despite meeting threshold in certain years, fisheries were not opened due to department wanting to see the stock achieve threshold in consecutive years to minimize concerns about commercial fisheries preventing rebuilding.

During years when the fishery was active, herring spawn was routinely documented from Auke Bay to Berners Bay, including along the shoreline within the boundaries of the fishing area. However, since the mid-1980s very little spawning has been observed in the open area of Section 11-A; most spawning now occurs from Bridget Cove northward and into Berners Bay.

Beginning in 2017, the department reduced its herring stock assessment program for several stocks in Southeast Alaska due to budget cuts. The Lynn Canal area was one of several areas where the surveys and sampling that are needed to forecast biomass have been suspended. Although some monitoring of the area may continue, primarily through aerial surveys to map spawning events, the department does not intend to continue at the level necessary to forecast

whether the population is above or below threshold. Without this information the department does not plan to open a fishery.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. The proposal would increase and complicate regulations when there is not likely to be a fishery and the department does not currently have a monitoring program in the area.

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.

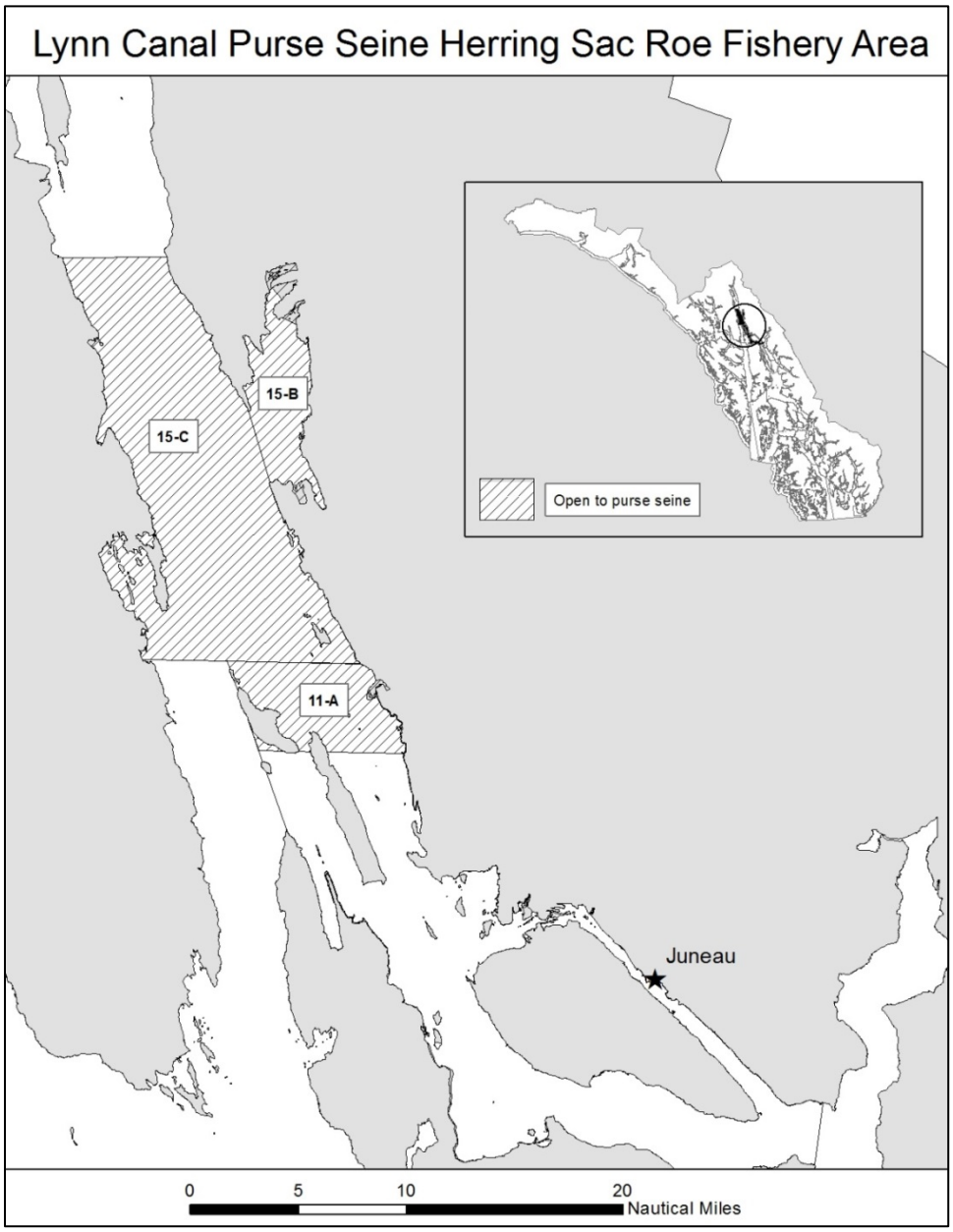

Figure 100-1.–Section 11-A (Lynn Canal area) herring purse seine sac roe fishery area.

PROPOSALS 101, 102, and 103 – 5 AAC 27.185. Management plan for herring spawn on kelp in pound fisheries in Sections 3-B, 12-A, and 13-C, and District 7.

PROPOSED BY: Larry Demmert (Proposal 101), Archie and Roseann Demmert (Proposal 102), and Lance Watkins (Proposal 103).

WHAT WOULD THE PROPOSALS DO? These would change herring allocations between the Craig/Klawock winter food and bait and the herring spawn-on-kelp (SOK) pound fishery. Proposals 101 and 102 would allocate 30% of the guideline harvest level (GHL) to the winter food and bait fishery and Proposal 103 would allocate 35% of the GHL to the winter food and bait fishery.

WHAT ARE THE CURRENT REGULATIONS? Current regulations allocate 60% of the GHL of the Craig/Klawock herring stock to the winter food and bait fishery and 40% of the GHL for the SOK pound fishery. Any portion of the harvest limit not taken by the bait fishery during a season is re-allocated to the SOK pound fishery during that season.

WHAT WOULD BE THE EFFECT IF THE PROPOSALS WERE ADOPTED? This could severely limit the ability to open the winter food and bait fishery in years of low abundance. An increase in the herring SOK pound fishery allocation would allow increased allotment of kelp blades and increased harvest of final product to permit holders.

BACKGROUND: The winter food and bait fishery season is from October 1 through February 28 but often has a delayed start due to the time needed to complete the forecast and calculate the available GHL. In addition, for many years the department had requests from industry to delay the fishery. The Craig/Klawock herring stock has supported a winter food and bait fishery since 1973. The board established the Craig/Klawock SOK pound fishery in 1992. Initially, 85% of the GHL was allocated to the winter food and bait fishery and 15% to the herring SOK pound fishery. In 1997, the board modified the allocation to 60% for winter food and bait and 40% for the herring SOK pound fishery. In addition, during the 1997 meeting, the board established the regulation that any unharvested GHL in the bait fishery would be re-allocated to the SOK pound fishery.

There was a period of time that the winter food and bait fishery was not fully harvesting the GHL available to that fishery due to poor market conditions and low effort. However, in recent years, the market conditions have changed and the winter food and bait GHL has been fully utilized. The winter food and bait fishery fully harvested its GHL until the 1992 season. From 1992 to 2014, the average harvest was 344 tons with an average GHL of 1,193 tons. The GHLs of 954 tons in 2015 and 523 tons in 2016 were fully harvested in the winter food and bait fishery. The average exvessel value in the Craig/Klawock winter food and bait fishery since 1987 is $220,106 with an average effort level of seven permits. The recent 5-year average exvessel value is $244,000, with an average effort level of three permits.

The average exvessel value in the Craig/Klawock SOK pound fishery since its inception in 1992 is $984,519. The recent 5-year average exvessel value is $2.1 million dollars, with an average effort level of 130 permits.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on these allocative proposals.

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.

Sitka Sound (3 Proposals)

PROPOSAL 104 – 5 AAC 27.150. Waters closed to herring fishing in Southeastern Alaska Area.

PROPOSED BY: Southeast Herring Conservation Alliance.

WHAT WOULD THE PROPOSAL DO? This would eliminate state closed waters for the commercial sac roe herring fishery in Sitka Sound.

WHAT ARE THE CURRENT REGULATIONS? Closed waters for District 13 encompass roughly ten square miles of near shore waters in north Sitka Sound. Additionally, two square miles of Sitka Sound are closed to commercial herring fishing under federal regulation; a portion of this closure is also closed in state closed waters regulations (Figure 104-1).

The department is also directed in the *Sitka Sound commercial sac roe herring fishery* (5 AAC 27.195) to distribute the commercial harvest, by time and area, if the department determines that it is necessary to ensure a reasonable opportunity to harvest the amount of herring spawn necessary for subsistence uses specified in *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The full effects of the proposal on the commercial fishery are not clear. Removing state closed waters may increase the probability the commercial fishery will harvest higher quality sac roe herring and achieve the established guideline harvest level. Removal of the closed waters from regulation may also decrease the duration of the commercial sac roe fishery resulting in cost savings to permit holders, vessel owners, tenders, and processors.

Subsistence harvests may decrease. However, the full effects of the proposal on the subsistence fishery for herring spawn are not clear since a number of factors unrelated to the commercial harvest may affect the success of the subsistence harvest. These factors include natural variability in spawn distribution and timing, weather patterns, and the number of individuals attempting to harvest for subsistence purposes (Table 104-1). Since much of the subsistence effort is currently focused in specific areas, natural changes in spawn distribution would also be expected to affect harvesting success (Figure 104-1).

BACKGROUND: In 2012, the board established the current closed waters for the Sitka Sound commercial herring sac roe fishery for the purpose of reducing conflict between commercial and subsistence users. The area closed is considered a key staging area for prespawning herring with a significant portion of the biomass often staging in this area prior to dispersing to the beaches to spawn. Because of this, the area is a high use subsistence harvest area, and had also been important for providing commercial harvest opportunity. Between the years 1986 and 2012, commercial sac roe openings occurred within the existing closure area in 13 of those years. In 2013, a large portion of the biomass staged within the closed waters and partly contributed to the sac roe harvest falling short of the guideline harvest level (GHL).

Since 2002, the department has conducted an annual household survey designed to estimate the subsistence harvest of herring spawn in Sitka Sound. The survey results show that harvest effort is currently concentrated in an area centered around Middle Island and the Kasiana Island group (Figure 104-1). Following the implementation of the current closed waters, the success rate,

which is defined as the percentage of households attempting to harvest herring spawn that did so successfully, remained nearly constant. Additionally, the total number of households participating and the total harvest decreased and the harvest per household increased slightly (Table 104-1).

In 2009, the board modified the amount reasonably necessary for subsistence (ANS) for herring spawn in Sitka Sound to a range of 136,000–227,000 lb of herring spawn. From 2002 to 2011 harvests were within or above the ANS range six times and were below three times; from 2012 to 2016, harvests were within the ANS range once and were below five times (Figure 104-2).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The board should consider whether adoption of the proposal continues to provide an opportunity for a normally diligent participant with a reasonable expectation of success of taking herring.

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 104-1.–Harvest and effort in the Sitka Sound subsistence herring roe fishery 2002–2016.

Year	Number of households attempting to harvest (expanded)	Number of households harvesting (expanded)	Success rate	Subsistence roe harvest all strata (lb)	Harvest per household (lb)
2002		77		151,717	1,970
2003	117	116	99%	278,799	2,403
2004	120	118	98%	381,226	3,231
2005	111	95	86%	79,064	832
2006	93	88	95%	219,356	2,493
2007	92	81	88%	87,211	1,077
2008	59	54	92%	71,936	1,332
2009	91	91	100%	213,712	2,348
2010	40	40	100%	154,620	3,866
2011	57	53	93%	83,443	1,574
2012	50	47	94%	115,799	2,464
2013	52	50	96%	78,090	1,562
2014	68	68	100%	154,412	2,271
2015	52	51	98%	106,998	2,098
2016	38	35	92%	84,554	2,416
2003–2011 Avg	87	82	94%	174,374	2,128
2012–2016 Avg	52	50	96%	107,971	2,162

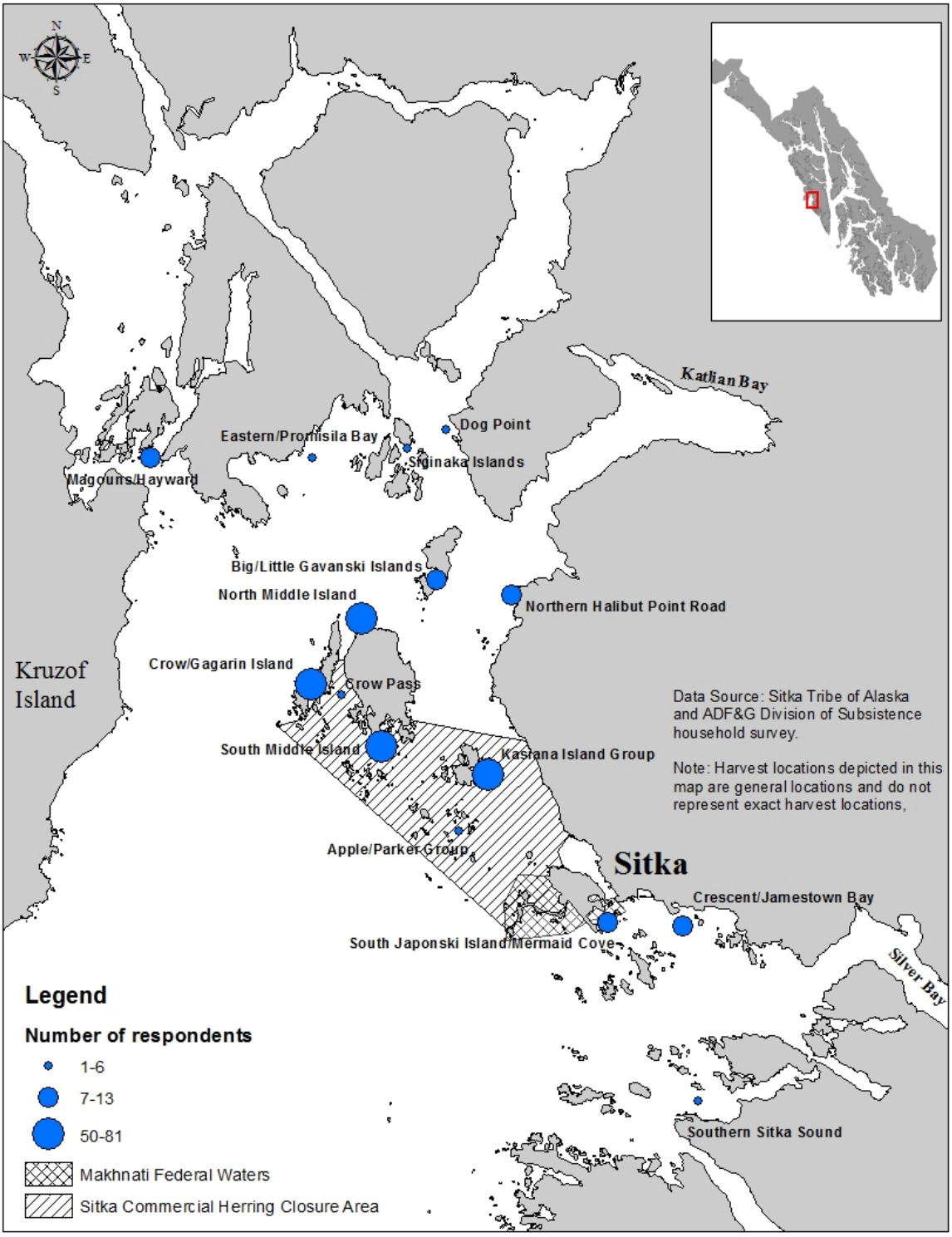

Figure 104-1.–Actual number of respondents harvesting subsistence herring spawn by general location, 2011–2016 and waters closed to commercial herring fishing in Sitka Sound [5 AAC 27.150(a)(7)], including federal closed waters.

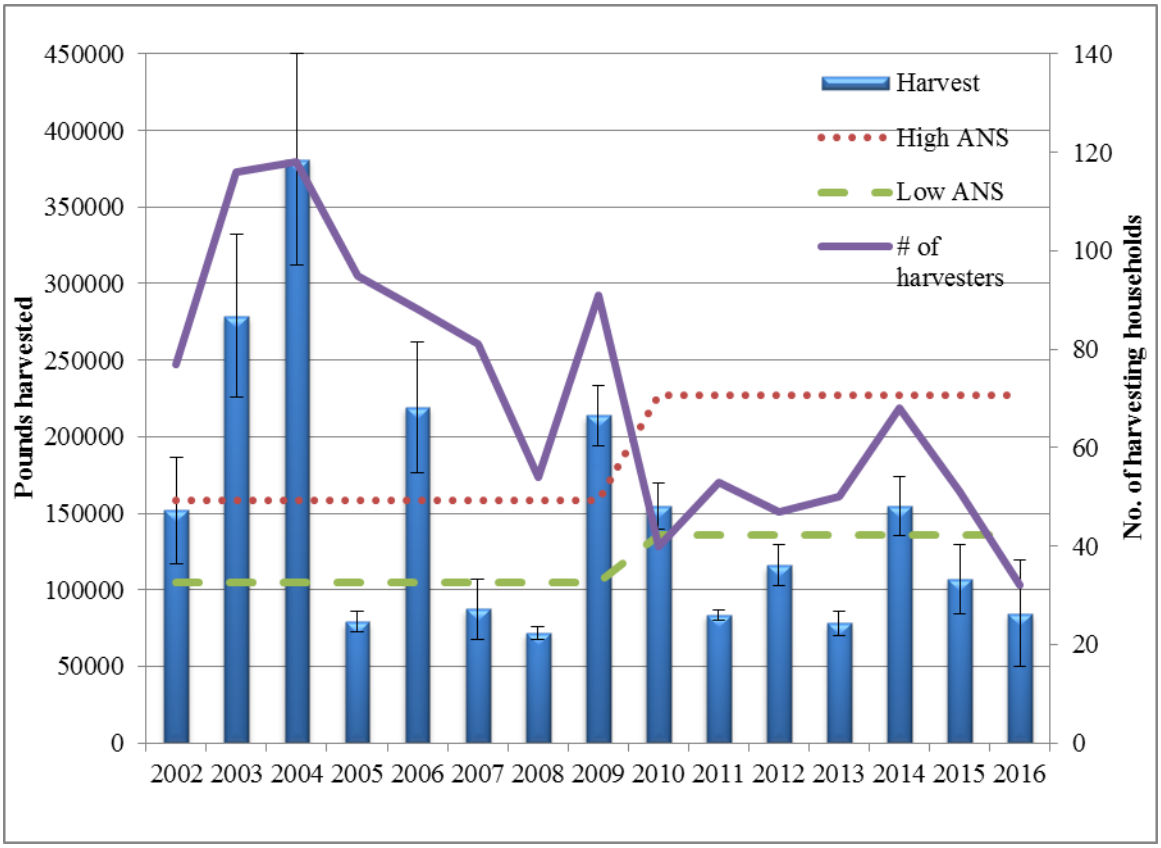

Figure 104-2.–Total pounds harvested, number of harvesting households, and amount reasonably necessary (ANS) for subsistence of herring spawn on all substrates in Sitka Sound, 2002–2016.

PROPOSAL 105 – 5 AAC 27.150 Waters closed to herring fishing in Southeastern Alaska Area.

PROPOSED BY: Sitka Tribe of Alaska.

WHAT WOULD THE PROPOSAL DO? This would expand the area closed to the commercial sac roe herring harvest in Sitka Sound by adding approximately 14 square miles to the existing 10 square miles of closed waters established in 2012 (Figure 105-1).

WHAT ARE THE CURRENT REGULATIONS? Closed waters for District 13 encompass roughly ten square miles of near shore waters in north Sitka Sound. Additionally, two square miles of Sitka Sound are closed to commercial herring fishing under federal regulation; a portion of this closure is also closed in state closed waters regulations (Figure 104-1).

The department is also directed in the *Sitka Sound commercial sac roe herring fishery* (5 AAC 27.195) to distribute the commercial harvest, by time and area, if the department determines that it is necessary to ensure a reasonable opportunity to harvest the amount of herring spawn necessary for subsistence uses specified in *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The full effects of the proposal on the commercial fishery are not clear. Expanding closed waters may result in not achieving the commercial sac roe guideline harvest level or lower quality sac roe herring being harvested in some years. A reduced fishing area may increase the duration of the fishery in some years.

Subsistence harvests may increase. However, the full effects of the proposal on the subsistence fishery for herring spawn are not clear since a number of factors unrelated to the commercial harvest may influence the success of the subsistence harvest. These factors include natural variability in spawn distribution and timing, weather patterns, and the number of individuals attempting to harvest for subsistence purposes (Table 104-1). Since much of the subsistence effort is currently focused on specific areas, natural changes in spawn distribution would also be expected to affect harvesting success. Additionally, there has been minimal documented subsistence harvest and effort in the proposed closed waters (Figure 105-1).

In the original proposal, the latitude in the line "in Nakwasina Sound from Allen Point to the Baranof Island shore at 57°25′20.66"." was incorrect. The department contacted a representative of the organization that submitted the proposal and corrected that error on the attached map (Figure 105-1).

BACKGROUND: In 2012, the board established the current closed waters for the Sitka Sound commercial herring sac roe fishery for the purpose of reducing conflict between commercial and subsistence users. The closed area is considered a key staging area for prespawning herring with a significant portion of the biomass often staging in this area prior to dispersing to the beaches to spawn. Because of this, the area is a high use subsistence harvest area and has also been important for providing commercial harvest opportunity. Between the years 1986 and 2017, commercial sac roe openings occurred within the proposed closure area in 17 of those years. In 2013, a large portion of the biomass staged within the closed waters and partly contributed to the sac roe harvest falling short of achieving the GHL.

Since 2002, the department has conducted an annual household survey designed to estimate the subsistence harvest of herring spawn in Sitka Sound. The survey results show that harvest and effort is currently concentrated on an area centered around Middle Island and the Kasiana Island group (Figure 105-1). Following the implementation of the current closed waters, the success rate, which is defined as the percentage of households attempting to harvest herring spawn that did so successfully, remained nearly constant. Additionally, the total number of households participating and the total harvest decreased and the harvest per household increased slightly (Table 104-1).

In 2009, the board modified the amount reasonably necessary for subsistence (ANS) for herring spawn in Sitka Sound to a range of 136,000–227,000 lb of herring spawn. From 2002 to 2011, harvests were within or above the ANS range six times and were below three times; from 2012 to 2016, harvests were within the ANS range once and were below five times (Figure 104-2).

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.

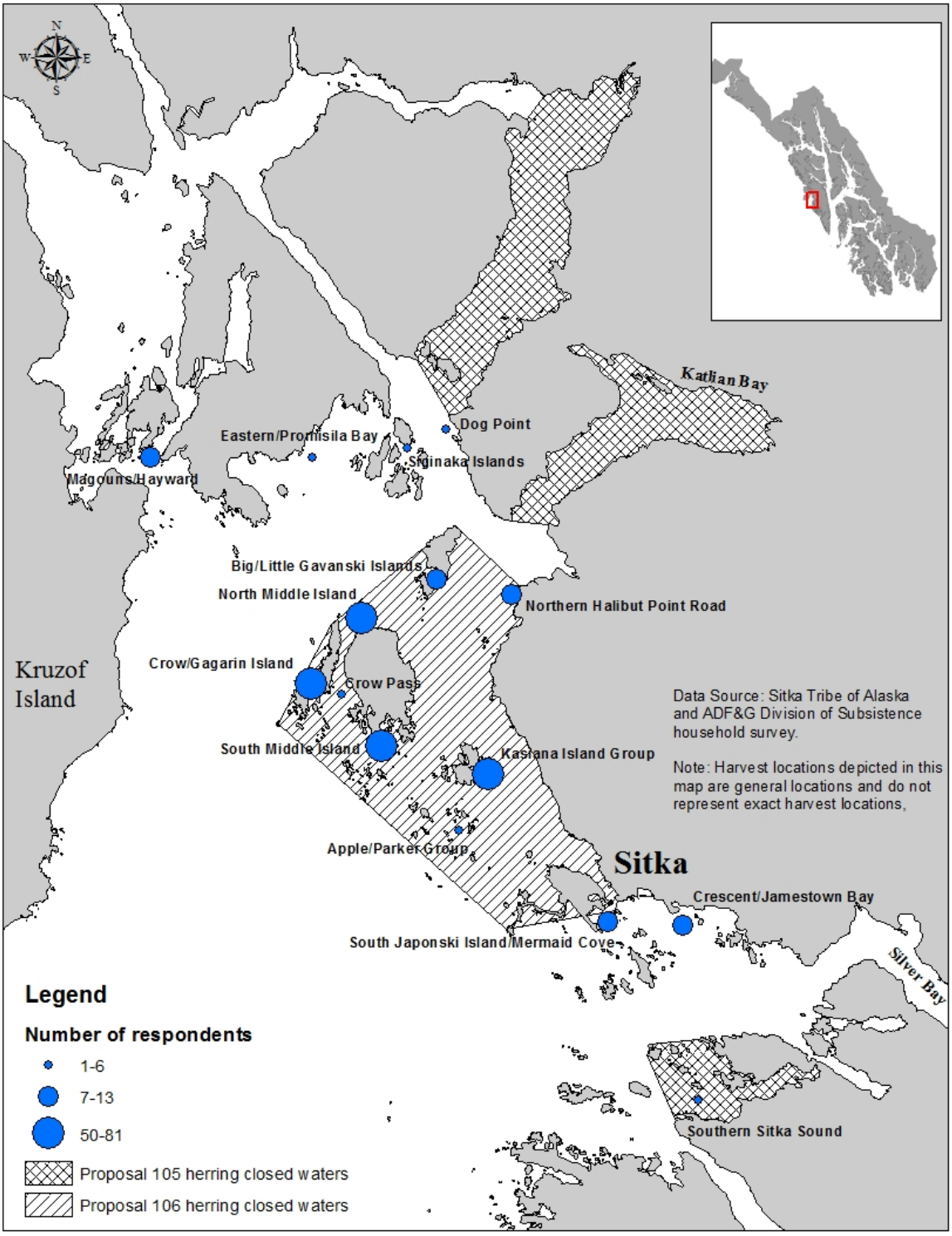

Figure 105-1.–Proposed closed waters to commercial sac roe herring fishing in Sitka Sound and actual number of respondents harvesting subsistence herring spawn by general location, 2011–2016.

PROPOSAL 106 – 5 AAC 27.150. Waters closed to herring fishing in Southeastern Alaska Area.

PROPOSED BY: Sitka Tribe of Alaska.

WHAT WOULD THE PROPOSAL DO? This would expand the area closed to the commercial sac roe herring harvest in Sitka Sound by adding approximately 4 square miles to the existing 10 square miles of closed waters established in 2012 (Figure 105-1).

WHAT ARE THE CURRENT REGULATIONS? Closed waters for District 13 encompass roughly ten square miles of near shore waters in north Sitka Sound. Additionally, two square miles of Sitka Sound are closed to commercial herring fishing under federal regulation; a portion of this closure is also closed in state closed waters regulations (Figure 104-1).

The department is also directed in the *Sitka Sound commercial sac roe herring fishery* (5 AAC 27.195) to distribute the commercial harvest, by time and area, if the department determines that it is necessary to ensure a reasonable opportunity to harvest the amount of herring spawn necessary for subsistence uses specified in *Customary and traditional subsistence uses of fish stocks and amounts necessary for subsistence uses* (5 AAC 01.716).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The full effects of the proposal on the commercial fishery are not clear. Expanding closed waters may result in not achieving the commercial sac roe guideline harvest level or harvesting lower quality sac roe herring in some years. A reduced fishing area may increase the duration of the fishery in some years.

Subsistence harvests may increase. However, the full effects of the proposal on the subsistence fishery for herring spawn are not clear since a number of factors unrelated to the location of the commercial harvest may affect the success of the subsistence harvest. These factors include natural variability in spawn distribution and timing, weather patterns, and the number of individuals attempting to harvest for subsistence purposes (Table 104-1). Since much of the subsistence effort is currently focused in specific areas, natural changes in spawn distribution would also be expected to substantially affect harvesting success. There has been moderate subsistence harvest and effort documented in most years in the proposed closed waters, especially around the northern end of Middle Island, Crow/Gagarin islands, and Big and Little Gavanski islands (Figure 105-1).

BACKGROUND: In 2012, the board established the current closed waters for the Sitka Sound commercial herring sac roe fishery for the purpose of reducing conflict between commercial and subsistence users. The closed area is considered a key staging area for prespawning herring with a significant portion of the biomass often staging in this area prior to dispersing to the beaches to spawn. Because of this, the area is a high use subsistence harvest area, and has also been important for providing commercial harvest opportunity (Figure 104-1). Since 1986, the commercial sac roe fishery had openings in the proposed closed waters in 27 of 32 years. In 2013, a large portion of the biomass staged within the current closed waters and partly contributed to the sac roe harvest falling short of achieving the GHL.

Since 2002, the department has conducted an annual household survey designed to estimate the subsistence harvest of herring spawn in Sitka Sound. The survey results show that harvest and effort is currently concentrated on an area centered around Middle Island and the Kasiana Island group (Figure 105-1). Following the implementation of the current closed waters the success

rate, which is defined as the percentage of households attempting to harvest herring spawn that did so successfully, remained nearly constant. Additionally, the total number of households participating and the total harvest decreased and the harvest per household increased slightly (Table 104-1).

In 2009, the board modified the amount reasonably necessary for subsistence (ANS) for herring spawn in Sitka Sound to a range of 136,000–227,000 lb of herring spawn. From 2002 to 2011, the harvests were within or above the ANS range six times and were below three times; from 2012 to 2016, harvests were within the ANS range once and were below four times (Figure 104-2).

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.

Spawn on kelp (6 Proposals)

PROPOSAL 107 – 5 AAC 27.185. Management plan for herring spawn on kelp in pounds fisheries in Sections 3-B, 12-A, and 13-C, and District 7.

PROPOSED BY: Mike Svenson.

WHAT WOULD THE PROPOSAL DO? This would establish a herring pound fishery for spawn-on-kelp (SOK), in Sitka Sound, if a minimum of 1,500 tons of GHL remains after the commercial herring sac roe fishery closes. This would also establish a minimum number of permit holders (2 people) per pound structure.

WHAT ARE THE CURRENT REGULATIONS? The purse seine fishery for sac roe herring occurs during seasons established by emergency order in Section 13-A, south of the latitude of Point Kakul and in Section 13-B, north of the latitude of Aspid Cape…except for Whale and Necker Bays (5 AAC 27.110). Herring SOK in pounds may be taken only during periods established by emergency order. The *Management plan for herring spawn on kelp in Southeastern Alaska* (5 AAC 27.185) establishes the regulatory framework for the Southeast Alaska SOK fisheries and provides for fisheries in Sections 3-B (Craig/Klawock), 12-A (Tenakee Inlet), 13-C (Hoonah Sound), and in District 7 (Ernest Sound).

Waters closed to herring fishing in Southeastern Alaska Area (5 AAC 27.150) establishes waters closed to the commercial herring fisheries, in Sitka Sound, for the purpose of reducing conflict between commercial and subsistence users.

The department may distribute the Sitka Sound sac roe harvest by time and area if the department determines that it is necessary to ensure subsistence herring spawn harvest opportunity.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The reduction of sac roe harvest may have a positive effect on sac roe prices, however, an increase of spawn on kelp production may have a negative effect on SOK prices and overall economic return for the existing spawn on kelp fisheries both in and outside of Alaska. The increased demand for *Macrocystis* kelp would not be expected to cause a biological concern with the overall health of kelp populations in Southeast Alaska but could affect the availability of acceptable quality kelp for the existing SOK fisheries. Management of a new SOK fishery will result in a significant increase in costs to the department.

The SOK fishery would result in removal of potential egg deposition; however, this removal would not be any greater than the removal of potential egg deposition in the sac roe fishery.

An SOK fishery may elevate the incidence of communicable disease by concentrating herring in pounds and then releasing them into the remainder of the population. Additionally, total fishery-related mortality for the stock would be less certain, as the amount of herring used by SOK fisheries is not precisely known.

The presence of pound structures on the grounds could compete for the same area and shoreline as the subsistence herring egg on branch fishery, causing conflict between the two user groups.

BACKGROUND: The proposed regulations would have allowed for a SOK fishery in 3 of the last 20 years. Shortfalls in the Sitka Sound sac roe fishery occur rarely and are typically the result

of postspawn herring mixing back into schools of prespawn herring, decreasing the quality below market standards. If the entire GHL has not been harvested, the decision to close the Sitka sac roe fishery, for the season, takes place well into the major spawning event. Planning and preparation for a SOK fishery takes a significant amount of time for industry, and it is unlikely that SOK fishermen and the department can react in time to take advantage of any underage in the sac roe fishery.

Proposals to establish a SOK fishery in Sitka Sound have been deliberated by the board during several cycles. In 1997, there were several outstanding issues including possible conflicts with subsistence and purse seine fishing operations, accounting for herring use in the fishery, availability of sufficient quantities of *Macrocystis* kelp to support the fishery, and possible impacts to existing SOK fisheries due to limited market demand. The board tabled the proposal and asked the department to conduct a test fishery to gather information on these issues. The results of the test fishery (Regional Information Report No. 1J00-01) and kelp research (Regional Information Report No. 1J99-24) were presented in staff reports to the board during the December 1999 meeting in Juneau. During the committee process it was apparent that many of the allocative issues remained unresolved and the board established a task force to meet and resolve differences among the stakeholders. Stakeholders included representatives of permit holders favoring the proposed change, permit holders opposing the proposed change, STA Tribal citizens representing the subsistence fishery, and representatives of the closed pound SOK fisheries. The board again tabled the proposal until the January 2000 meeting in Sitka to allow the task force time to meet and work out issues. The task force reported back to the board in January in Sitka and issues still had not been resolved. It was apparent that there were still significant differences among the stakeholders even after lengthy deliberations and the board rejected the proposal. In a statement after the final vote, the board made it clear that it did not want to reconsider this issue again unless all parties have come to an agreement on a management plan for a SOK fishery in Sitka Sound.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. Should the board choose to adopt this proposal, the department recommends that a permit system be utilized to manage the fishery during the development stage. The board would need to review current kelp harvesting practices and provide guidelines to the department on permitting kelp harvests to avoid conflicts among users.

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.

PROPOSAL 108 – 5 AAC 27.185. Management plan for herring spawn on kelp in pound fisheries in Sections 3-B, 12-A, and 13-C, and District 7.

PROPOSED BY: Larry Demmert.

WHAT WOULD THE PROPOSAL DO? This would expand the open area in Section 3-B for the Craig/Klawock spawn-on-kelp (SOK) pound fishery (Figure 108-1).

WHAT ARE THE CURRENT REGULATIONS? Current regulations allow the harvest of herring for placement in pounds in waters of Section 3-B in San Alberto Bay, Shinaku Inlet, and San Christoval Channel north of a line from Entrance Point to the southernmost tip of Clam Island to the southernmost tip of Fern Point and east of 133°20′ W. longitude. There is a closure in San Christoval Channel and around Fish Egg Island.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would increase the open area by approximately 50%. In most years, it would have no effect on the fishery. In years when herring spawn outside the more traditional areas that are currently open, fisherman could immediately stage their pounds in the area where the herring were actively spawning.

BACKGROUND: Commercial herring fisheries have occurred on the Craig/Klawock stock for many years. From 1959 through 1967, a wild roe-on-kelp fishery harvested product along the shorelines in the Craig/Klawock area. The winter food and bait fishery grew rapidly in the 1970s and has documented landings from 1973 to present. In the 1980s, with the stock at historical high levels, local residents petitioned the department to develop a SOK pound fishery. The Klawock-Heenya Corporation worked closely with the department to develop a SOK pound fishery which was adopted by the board in 1992.

Since the inception of the Craig/Klawock SOK pound fishery in 1992 there have been four years when herring have not been available in the current open area. This occurred in 1993, 1997, 2000, and 2017. In 1993, a majority of the herring spawned around Fish Egg Island. In 1997, the spawn was concentrated around Fish Egg Island, but there was also significant spawn in the St. Phillips Island area. The department expanded the open pounding area to include the St. Phillips area to maximize opportunities for the fishery. In 2000, no herring were introduced into closed pounds and no product was landed. Several factors contributed to this, including lack of herring in the open area and vessels not ready to fish when herring moved through the open area.

In 2017, with an expected low spawning biomass, herring were once again scarce in the open area. Coupled with the night-time closure that was enacted, it was difficult to capture herring in the traditional area. After spawn was observed for two days in the St. Phillips area, along with spawn on Fish Egg Island, there was adequate biomass present to justify expanding the open area in the vicinity of St. Phillips and Blanquizal Point for harvest of herring for placement into pounds. Thirteen pound structures were moved into the recently opened area and all of these successfully introduced herring into their pounds.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. In 23 of the 27 seasons that the SOK pound fishery has been in existence, the fishery has been successful in the current open area. In years with adequate biomass when herring were not readily available in the traditional pounding area, the department has expanded the open area by emergency order.

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.

Figure 108-1.–Map of the current open area and the proposed boundary expansion for the Craig/Klawock spawn on kelp fishery. This area is open to the seining of herring for the purpose of placement into herring pounds for producing spawn-on-kelp.

PROPOSAL 109 – 5 AAC 27.185. Management plan for herring spawn on kelp in pound fisheries in Sections 3-B, 12-A, and 13-C, and District 7.

PROPOSED BY: Houston Vaughan.

WHAT WOULD THE PROPOSAL DO? This would allow no more than four permit holders to be stacked in a herring impoundment structure for the purpose of producing herring spawn-on-kelp (SOK) product.

WHAT ARE THE CURRENT REGULATIONS? Current regulations provide for a sliding scale kelp allocation based on the GHL. It provides kelp allocations for single, double, triple, and quadruple or more permits in a pound structure.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would remove the option to have more than four permits in a single pound structure, forcing the department to close the SOK fishery in years of very low abundance.

BACKGROUND: Southeast Alaska herring SOK pound fisheries were managed under the terms of a commissioner's permit from 1990 to 2000. The initial management intent was to evenly allocate herring and kelp blades among permit holders. This proved to be unworkable from a legal and management standpoint. In 1997, the department managed the fishery by allocating the number of kelp blades a permit holder may use and by standardizing the size of the pound. During the 2000 board meeting, the sliding scale kelp allocation was adopted into regulation including single and multiple allocations for pounds.

In 2017, due to a low GHL in the Craig/Klawock spawn-on-kelp pound fishery, the department required a minimum of 6 permit holders in a herring pound structure to achieve a goal of no more than 20 pound structures on the grounds.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. In years of low abundance, the department can either limit the number of structures on the grounds or close the fishery and forego the harvest and economic benefit of a fishery. The department submitted proposal 110 requesting regulatory language that would allow the closure of certain pound types.

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.

PROPOSAL 110 – 5 AAC 27.185. Management plan for herring spawn on kelp in pound fisheries in Sections 3-B, 12-A, and 13-C, and District 7.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This would allow the department to close fishing to certain pound types in the spawn-on-kelp (SOK) pound fishery.

WHAT ARE THE CURRENT REGULATIONS? Current regulations provide for a sliding scale kelp allocation based on the GHL. It provides kelp allocations for single, double, triple, and quadruple or more permits in a pound structure.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? In years when the guideline harvest level (GHL) is low, the department would have clear regulatory authority to close certain pound types to fishing. Closing the use of single and some multiple-permit closed pounds for a herring SOK pound fishery will decrease the amount of herring utilized in the fishery.

BACKGROUND: Southeast Alaska herring SOK fisheries were managed under the terms of a commissioner's permit from 1990 to 2000. The initial management intent was to evenly allocate herring and kelp blades among permit holders. This proved to be unworkable from a legal and management standpoint. In 1997, the department managed the fishery by allocating the number of kelp blades a permit holder may use and by standardizing the size of the pound. During the 2000 board meeting, the sliding scale kelp allocation that included single and multiple allocations for pounds was adopted into regulation. The kelp allocations were loosely based on the premise that fishermen would utilize 7–10 tons of herring per pound. Permit holders were allowed a kelp allocation based on the number of permit holders in a herring pound. The sliding scale kelp allocations were designed to provide incentive for fishermen to combine into multiple pounds at lower GHLs, thereby reducing the number of pounds on the grounds and the amount of herring utilized.

Kelp allocation tables were again modified during the 2003 meeting to include allocations for double and triple closed pounds in sections 3-B and 13-C. A third set of kelp allocations were adopted for two new SOK pound fisheries, Ernest Sound in District 7, and Tenakee Inlet in section 12-A.

In 2015, the kelp allocations were once again modified to encourage additional permits into one pound structure. The northern Southeast Alaska SOK pound fisheries, Hoonah Soundand Tenakee, were aligned under one kelp allocation table and the southern SOK pound fisheries, Craig/Klawock and Ernest Sound, under another allocation table. This was done due to the difference in number of active permits available in the northern versus southern SOK pound fisheries. Open pounding is allowed in all four fisheries but attempts to use open pounds in these fisheries have not been successful, with the exception of some limited success during the 2017 Craig/Klawock SOK pound fishery.

There has been a sharp decline in the Craig/Klawock spawning biomass beginning in 2013 and continuing until 2017 when an increase in biomass was observed. The modifications to the kelp allocation in 2015 by the board were initially effective as the number of structures decreased from 76 in 2015 to 46 in 2016.

The kelp allocation did not provide the incentives needed for 2017 due to the continued decline in GHL coupled with the expected effort levels. In order to remain within the GHL of 349 tons,

the department determined that 20 pound structures could be allowed. This number was based on a GHL of 349 tons, the assumption that 20 tons of herring per pound is utilized, and approximately 125 permits would be participating in the fishery. The recent 4-year average was 134 permits. The department closed the fishery to herring pounds with fewer than six permit holders by invoking 5 AAC 27.185 (q) which allows the department to restrict the transfer of herring into pounds. The department estimated that this action would limit the fishery to 20 pound structures.

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.

PROPOSAL 111 – 5 AAC 27.130. Lawful gear for Southeastern Alaska Area.

PROPOSED BY: Mike Svenson.

WHAT WOULD THE PROPOSAL DO? This would result in no change to the spawn-on-kelp (SOK) pound fishery as current regulations allow fishing with a smaller half pound structure.

WHAT ARE THE CURRENT REGULATIONS? Current regulations describe the maximum size of a herring pound. Using a "half pound", which is not currently defined, would be allowed under current regulations.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? There would be no effect on the SOK pound fishery.

BACKGROUND: Since the inception of the SOK pound fishery, the department has been challenged to accurately measure the amount of herring used in a closed pound. Due to these uncertainties, the department has been using pound size and kelp allocation to manage the fishery. The department standardized the size of herring pounds to a surface area of no more than 400 square feet and a depth of no more than 30 feet in 1995. In 2003, the board considered a proposal to change the basic unit of gear in the herring pound fisheries. Rather than adopt that proposal without knowing the effects of the change on the fishery, the department was allowed to issue experimental permits and collect information on the effects of changing pound configurations. Between 2003 and 2006, the department issued experimental permits that allowed different configurations of gear that maintained a constant volume consistent with the legal size of gear. This research indicated that configurations with less depth and more surface area had an increased amount of eggs deposited on kelp. There was also no indication of an increase in the amount of herring used in these experimental pounds. This resulted in a regulation change in 2006 that allowed new configurations of gear to be used in the fishery that had greater surface area and shallower depth while maintaining the same volume as traditional gear. In 2017, due to a low GHL for the Craig Klawock spawn-on-kelp pound fishery, the department required a minimum of 6 permit holders in a single herring pound structure to achieve the goal of having 20 pound structures on the grounds.

DEPARTMENT COMMENTS: The department is **OPPOSED** to any regulation change that would increase the number of structures on the grounds in years of low abundance.

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.

PROPOSAL 112 – 5AAC 27.185. Management plan for herring spawn on kelp in pound fisheries in Sections 3-B, 12-A, and 13-C, and District 9.

PROPOSED BY: Darrell Kapp.

WHAT WOULD THE PROPOSAL DO? This would require a conversion factor of 0.273 be used to convert tons of spawn-on-kelp (SOK) to tons of herring to account for herring used in open pounds. This also requests that the SOK fishery using closed pound structures be closed until a conversion factor can be determined and dead loss estimated.

WHAT ARE THE CURRENT REGULATIONS? Spawn-on-kelp fisheries are managed by allocating kelp blades to permit holders to control the amount of herring that are used. The regulations contain three different kelp allocation tables for Southeast Alaska. Tenakee Inlet (Section 12-A) and Ernest Sound (District 7) have the same kelp allocation table, Hoonah Sound (Section 13-C) has a second allocation table, and Craig (Section 3-B) has a third allocation table. Kelp allocation tables list the amount of blades a permit holder can use based on the herring GHL. In general, as the GHL increases, a permit holder is allocated additional kelp blades. Kelp allocations are also designed to give incentives for permit holders to combine blades in double, triple, and open pounds. Current kelp allocations exceed 1,000 blades in all three allocation tables.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This would significantly reduce effort in all SOK fisheries in Southeast Alaska since closed pounds comprise a very large percentage of gear used.

BACKGROUND: The initial management intent for the SOK fishery was to evenly allocate herring and limit kelp blades among the permit holders. This proved to be unworkable from legal and management standpoints. In 1997, the department stopped allocating herring and began managing the fishery by allocating the number of kelp blades a permit holder may use and by standardizing the size of the pound. In 2000, the sliding scale kelp allocation was adopted in regulation and included allocations for defined structures with either a single permit holder or multiple permit holders per pound. Depending on the GHL, permit holders would receive a kelp allocation based on their choice of single or multiple permit pounds. Kelp allocations were designed to provide incentive for multiple permit holders to combine their kelp into single pound structures at lower GHLs, thereby reducing the number of pounds on the grounds and the amount of herring utilized.

The kelp allocation tables were modified during the 2003 board meeting to remove the multiple permit group and create separate allocations for double and triple closed pounds (i.e. two or three permit holders sharing one pound) in Sections 3-B and 13-C. In addition, two new SOK fisheries were adopted into regulation: Ernest Sound in District 7 and Tenakee Inlet in Section 12-A. A third set of kelp allocations was adopted for these fisheries. During the 2015 board meeting, the kelp allocation tables were refined further, increasing incentives for multiple-permit pounds, and by reducing the number of tables from three to two that combined fisheries in Sections 12-A and 13-C, and those in Section 3-B and District 7. Open pounding, which does not enclose herring in nets, is allowed in all four areas but attempts to use open pounds in these fisheries have been largely unsuccessful.

For open pounds there is assumed to be no mortality of spawning herring since herring are never confined. In 1998 and 1999, the department conducted a study in Sitka Sound to evaluate

feasibility of open pound fisheries. One result of that study was a conversion value of 0.273, whereby if the tons of SOK were divided by the value, it would estimate the tons of herring required to produce that amount of SOK. The primary purpose of the conversion factor was to provide a means to re-allocate a portion of the purse seine GHL to permit holders wishing to instead use SOK open pounds. However, the conversion factor did not account for the consideration that removing spawning herring has a greater impact on the population greater than removing herring eggs alone. For existing SOK fisheries, there is no biological need to estimate herring used by open pounds because herring are not handled or impacted by this fishing approach and mortality is expected to be the same as other naturally spawning herring.

The department estimates herring usage for closed pounds, although accurately estimating herring usage in this fishery is very difficult. Although the allocation of kelp is an indirect method of controlling the amount of herring used, it is a practical way to avoid handling and damaging herring. To ensure successful fisheries, herring must be healthy and cannot be handled or weighed prior to entry into closed pounds. The department estimates the total amount of herring used during the fishery by assuming an average of 20 tons of herring per actively fished closed pound structure. This value is based on an average of estimates from several studies from Prince William Sound, British Columbia, and observations from Southeast Alaska. While these were the only studies available, because these studies were not specific to Southeast Alaska closed SOK fisheries, they may not accurately depict the amount of herring usage. Further complicating estimates of herring usage are changes in fishing methods over time as fishermen refine pounding techniques and alter the amount of herring that are introduced to closed pounds.

The department estimates dead loss, but because herring are released from closed pounds after spawning it is assumed that some herring survive. The department estimates 15 tons of dead loss per closed pound by assuming a mortality rate of 75% of the estimated 20 tons of herring that are placed into each closed pound. This mortality is accounted for when conducting stock assessments the following year.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. There is no biological need to account for herring used by open pounds. For closed pounds, fishery estimates of herring usage and dead loss already exist and the department has the authority to modify these estimates as new information becomes available.

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.