RC 2

ALASKA DEPARTMENT OF FISH AND GAME

STAFF COMMENTS
FOR THE LOWER COOK INLET MANAGEMENT AREA

ALASKA BOARD OF FISHERIES MEETING
ANCHORAGE, ALASKA

December 8-11, 2013

Regional Information Report No. 2A13-03

The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Fisheries (board) meeting, December 8–11, 2013 in Anchorage, 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.

ABSTRACT

This document contains Alaska Department of Fish and Game staff comments on finfish regulatory proposals for the Lower Cook Inlet Management Area. These comments were prepared by the department for use at the Alaska Board of Fisheries meeting, December 8–11, 2013 in Anchorage, 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, Lower Cook Inlet (LCI), finfish, 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).

This document should be cited as:

ADF&G (Alaska Department of Fish and Game). 2013. Alaska Department of Fish and Game staff comments on for the Lower Cook Inlet Management Area, Alaska Board of Fisheries meeting Anchorage, Alaska December 8-11, 2013. Alaska Department of Fish and Game, Regional Information Report No. 2A13-03, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau AK 99811-5526
U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203
Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230 Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G, Division of Commercial Fisheries, PO Box 11526 Juneau, AK 99811 (907) 465-4210.

TABLE OF CONTENTS

Proposal No. & Subject **Page**

Summary of Department Positions iv

COMMITTEE A: COOK INLET SPORT FISH AND PERSONAL USE SALMON (18 PROPOSALS).....1

Fresh Water – Salmon (5)
58 - Close Anchor River to sport fishing on Wednesdays. 1
59 - Delay reopening Anchor River, Deep Creek, and Stariski Creek to sport fishing by two weeks. 6
60 - Modify sport fishing season to allow fishing during November and December on Lower Cook Inlet streams. 10
61 - Reduce king salmon bag and possession limit to one fish on the Ninilchik River.....14
62 - Change the Clearwater Creek drainage closed-waters boundary description for sport fishing. 17

Salt Water – Salmon and Lingcod (13)
63 - Allow use of sport-caught pink and chum salmon for bait in the salt waters of Cook Inlet.19
64 - Allow use of sport-caught pink salmon for bait in the salt waters of Cook Inlet.....22
65 - Allow use of sport-caught spiny dogfish shark for bait in the salt waters of Cook Inlet. ...24
66 - Allow use of archery gear for sport fishing in Cook Inlet salt waters. 26
67 - Relocate the Bluff Point marker north to the southern Anchor River marker for management of Upper Cook Inlet saltwater early-run king salmon sport fishery. 27
68 - Relocate the Bluff Point marker north to the southern Anchor River marker for management of Cook Inlet king salmon sport fishery. 33
69 - Modify the Upper Cook Inlet saltwater early-run king salmon season to end on June 24 instead of June 30.....39
70 - Modify the date king salmon apply to the annual limit in the Lower Cook Inlet winter saltwater king salmon fishery from April 1 to May 1.....43
71 - Decrease the Lower Cook Inlet winter saltwater king salmon bag and possession limit to one fish, and establish an annual limit of two king salmon 48
72 - Eliminate the third Saturday in August (late-run coho) from the youth-only fishery in the Nick Dudiak Fishing Lagoon. 53
73 - Require personal use-caught salmon in the China Poot dip net fishery to be marked. 55
74 - Decrease lingcod bag and possession limit in Cook Inlet from two to one.....57
75 - Change the lingcod sport fishing season to begin on June 1 instead of July 1.....62

COMMITTEE B: LOWER COOK INLET SUBSISTENCE AND COMMERCIAL FISHING (9 PROPOSALS) 66

Cook Inlet Subsistence Fishery (1)
76 - Clarify open periods for subsistence salmon fishing in August in Seldovia Bay.....66

TABLE OF CONTENTS (Continued)

Salmon Fishing Districts, Subdistricts, and Sections (2)
77 - Change line and descriptions separating the Port Dick North and South sections in the Outer District. 68
78 - Remove the "300 yards offshore" reference, and remove references to regulatory markers and replace with latitude and longitude coordinates for certain waters. 70
Closed Waters - Salmon (1)
80 - Amend waters closed to commercial fishing in Lower Cook Inlet. 71
Cook Inlet Groundfish Pot Storage and Landing Requirements (2)
86 - Modify Cook Inlet groundfish pot storage requirements. 73
87 - Modify offloading requirements for groundfish. 74
Groundfish Trawl, Pollock Management Plans, and Observer Coverage (3)
43 - Create management plans for state-managed fisheries for all Gulf of Alaska groundfish for vessels less than 58 feet using trawl gear. 76
44 - Adopt a state-waters pollock fishery management plan, including provisions for seasons, gear, quotas, landing requirements, and observer coverage. 81
45 - Require 100% observer coverage on vessels fishing for groundfish with trawl gear in state-waters management areas. 87

COMMITTEE OF THE WHOLE: COOK INLET SPORT FISHING, COMMERCIAL FISHING, AND HATCHERY MANAGEMENT PLANS (18 PROPOSALS) 90

Sport Fish (12)
46 - Allow party fishing in Cook Inlet saltwater sport fisheries. 90
47 - Prohibit use of barbed hooks while sport fishing for salmon in Cook Inlet fresh waters. ..92
48 - Designate all waters where catch-and-release fishing occurs on salmon as single, unbaited, barbless-hook waters. 94
49 - Establish criteria to designate waters in Cook Inlet as single, unbaited, barbless hooks waters. 97
50 - Prohibit catch-and-release fishing for coho salmon in all Cook Inlet fresh waters. 100
51 - Prohibit catch-and-release fishing for coho salmon in the Cook Inlet-Resurrection Bay Saltwater Area. 102
52 - Prohibit catch-and-release fishing for salmon in all Cook Inlet fresh waters. 104
53 - Prohibit anglers who are releasing a fish from removing the head of a fish out of the water. 106
54 - Prohibit sport fishing in major spawning areas where spawning fish are present in Cook Inlet salmon waters. 107
55 - Decrease Cook Inlet king salmon annual limit to two king salmon 20 inches or greater in length, of which only one can be from the Kenai River. 108
56 - Decrease the Cook Inlet saltwater king salmon bag and possession limit to one king salmon and reduce the annual limit to two king salmon 110
57 - Limit amount of sport-caught fish that may be exported to 100 pounds of fillets. 112

TABLE OF CONTENTS (Continued)

Commercial Fisheries (2)

79 - Close waters to commercial fishing within one statute mile of the terminus of any anadromous fish stream in Cook Inlet as measured from mean lower low tide, not mean high tide. 113

81 - Establish various management measures to address decline in returning king salmon to Cook Inlet, including requiring net gear be certified as avoiding king salmon interception and closing commercial herring fisheries. 117

Salmon Hatchery Management Plans and Special Harvest Areas (4)

82 - Create a management plan for Tutka Bay Lagoon Salmon Hatchery to determine harvest priorities within the special harvest area (SHA) and describe the location of the Tutka Bay Lagoon, Paint River, and Halibut Cove Lagoon SHAs. 119

83 - Modify management plan for Port Graham Salmon Hatchery to determine harvest priorities within the special harvest area (SHA) and describe the location of the SHA. .121

84 - Create a management plan for Trail Lakes Salmon Hatchery to determine harvest priorities within the special harvest area (SHA); describe the location of the Bear Lake, China Poot and Hazel Lake, Tutka Bay Lagoon, and Kirchner Lake SHAs; and define fishing seasons within the SHAs. 123

85 - Prohibit sport fishing in Resurrection River until the Bear Lake sockeye salmon broodstock goal is met. 127

Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2013

Proposal No.	Dept. Position	Issue	Page No.
43	**O**	Create management plans for state-managed fisheries for all Gulf of Alaska groundfish for vessels less than 58 feet using trawl gear.	76
44	**N / O**	Adopt a state-waters pollock fishery management plan, including provisions for seasons, gear, quotas, landing requirements, and observer coverage.	81
45	**N**	Require 100% observer coverage on vessels fishing for groundfish with trawl gear in state-waters management areas.	87
46	**O**	Allow party fishing in Cook Inlet saltwater sport fisheries.	90
47	**O / N**	Prohibit use of barbed hooks while sport fishing for salmon in Cook Inlet fresh waters.	92
48	**O / N**	Designate all waters where catch-and-release fishing occurs on salmon as single, unbaited, barbless-hook waters.	94
49	**O / N**	Establish criteria to designate waters in Cook Inlet as single, unbaited, barbless hooks waters.	97
50	**O**	Prohibit catch-and-release fishing for coho salmon in all Cook Inlet fresh waters.	100
51	**O**	Prohibit catch-and-release fishing for coho salmon in the Cook Inlet-Resurrection Bay Saltwater Area.	102
52	**O**	Prohibit catch-and-release fishing for salmon in all Cook Inlet fresh waters.	104
53	**O**	Prohibit anglers who are releasing a fish from removing the head of a fish out of the water.	106
54	**O**	Prohibit sport fishing in major spawning areas where spawning fish are present in Cook Inlet salmon waters.	107
55	**O / N**	Decrease Cook Inlet king salmon annual limit to two king salmon 20 inches or greater in length, of which only one can be from the Kenai River.	108
56	**O / N**	Decrease the Cook Inlet saltwater king salmon bag and possession limit to one king salmon and reduce the annual limit to two king salmon.	110
57	**O**	Limit amount of sport-caught fish that may be exported to 100 pounds of fillets.	112
58	**O / N**	Close Anchor River to sport fishing on Wednesdays.	1
59	**S**	Delay reopening Anchor River, Deep Creek, and Stariski Creek to sport fishing by two weeks.	6
60	**S**	Modify sport fishing season to allow fishing during November and December on Lower Cook Inlet streams.	10
61	**S**	Reduce king salmon bag and possession limit to one fish on the Ninilchik River.	14
62	**S**	Change the Clearwater Creek drainage closed-waters boundary description for sport fishing.	17
63	**S / N**	Allow use of sport-caught pink and chum salmon for bait in the salt waters of Cook Inlet.	19
64	**S / N**	Allow use of sport-caught pink salmon for bait in the salt waters of Cook Inlet.	22
65	**O**	Allow use of sport-caught spiny dogfish shark for bait in the salt waters of Cook Inlet.	24
66	**O**	Allow use of archery gear for sport fishing in Cook Inlet salt waters.	26
67	**S**	Relocate the Bluff Point marker north to the southern Anchor River marker for management of Upper Cook Inlet saltwater early-run king salmon sport fishery.	27
68	**N**	Relocate the Bluff Point marker north to the southern Anchor River marker for management of Cook Inlet king salmon sport fishery.	33
N = Neutral; S= Support; O = Oppose; NA = No Action			

Summary of Department Positions, Upper Cook Inlet Board of Fish Meeting, 2013 (Page 2 of 2)			
69	**O / N**	Modify the Upper Cook Inlet saltwater early-run king salmon season to end on June 24 instead of June 30.	39
70	**N**	Modify the date king salmon apply to the annual limit in the Lower Cook Inlet winter saltwater king salmon fishery from April 1 to May 1.	43
71	**O**	Decrease the Lower Cook Inlet winter saltwater king salmon bag and possession limit to one fish, and establish an annual limit of two king salmon.	48
72	**S**	Eliminate the third Saturday in August (late-run coho) from the youth-only fishery in the Nick Dudiak Fishing Lagoon.	53
73	**S**	Require personal use-caught salmon in the China Poot dip net fishery to be marked.	55
74	**O**	Decrease lingcod bag and possession limit in Cook Inlet from two to one.	57
75	**O**	Change the lingcod sport fishing season to begin on June 1 instead of July 1.	62
76	**S**	Clarify open periods for subsistence salmon fishing in August in Seldovia Bay.	66
77	**S**	Change line and descriptions separating the Port Dick North and South sections in the Outer District.	68
78	**S**	Remove the "300 yards offshore" reference, and remove references to regulatory markers and replace with latitude and longitude coordinates for certain waters.	70
79	**O / N**	Close waters to commercial fishing within one statute mile of the terminus of any anadromous fish stream in Cook Inlet as measured from mean lower low tide, not mean high tide.	113
80	**S**	Amend waters closed to commercial fishing in Lower Cook Inlet.	71
81	**O / N**	Establish various management measures to address decline in returning king salmon to Cook Inlet, including requiring net gear be certified as avoiding king salmon interception and closing commercial herring fisheries.	117
82	**S / N**	Create a management plan for Tutka Bay Lagoon Salmon Hatchery to determine harvest priorities within the special harvest area (SHA) and describe the location of the Tutka Bay Lagoon, Paint River, and Halibut Cove Lagoon SHAs.	119
83	**S / N**	Modify management plan for Port Graham Salmon Hatchery to determine harvest priorities within the special harvest area (SHA) and describe the location of the SHA.	121
84	**S / N**	Create a management plan for Trail Lakes Salmon Hatchery to determine harvest priorities within the special harvest area (SHA); describe the location of the Bear Lake, China Poot and Hazel Lake, Tutka Bay Lagoon, and Kirchner Lake SHAs; and define fishing seasons within the SHAs.	123
85	**N**	Prohibit sport fishing in Resurrection River until the Bear Lake sockeye salmon broodstock goal is met.	127
86	**S**	Modify Cook Inlet groundfish pot storage requirements.	73
87	**S**	Modify offloading requirements for groundfish.	74
N = Neutral; S= Support; O = Oppose; NA = No Action			

COMMITTEE A: COOK INLET SPORT FISH AND PERSONAL USE SALMON (18 PROPOSALS)
FRESH WATER – SALMON: 58–61
SALT WATER – SALMON AND LINGCOD: 63–75

PROPOSAL 58 – 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would close the Anchor River to sport fishing on Wednesdays in May and June.

WHAT ARE THE CURRENT REGULATIONS? The Anchor River, from its mouth to a department regulatory marker located approximately two miles upstream, is open to sport fishing four days per week over a period of five weeks. It first opens the weekend before Memorial Day weekend. Each week, it is open the weekend, and the Monday and Wednesday following that weekend.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce sport fishing opportunity for king salmon in the Anchor River from 20 days to 15 days per year and likely decrease king salmon harvest by 410–2,128 fish. In years of poor production, this may result in fewer restrictive emergency orders. In years of average to above average production, this may result in foregone opportunities.

BACKGROUND: Anchor River sport fishing regulations have undergone a series of changes since 2001, as Anchor River king salmon escapement assessment methodology has improved (Table 58-1). King salmon escapement, from 1976–2003, was indexed using a single annual aerial survey flown during peak spawning activity. In 2003, a dual frequency identification sonar (DIDSON) was first used to monitor king salmon escapement over most of the run to test its utility for estimating escapement (Table 58-2). Beginning in 2004, field operations were extended to monitor king salmon over the entire run using a combination of DIDSON and a weir.

The sustainable escapement goal (SEG) for Anchor River king salmon has been refined as annual escapement assessments were improved. In the fall of 2007, the department conducted a spawner-recruit analysis using all available data and established a lower-bound SEG of 5,000 for Anchor River king salmon. A lower bound rather than a range was selected because the small amount of total escapement data resulted in uncertainty about what a goal range should be. In 2010, the department updated the spawner-recruit model with escapement and harvest data, and modified the goal to an SEG of 3,800–10,000 fish. The lower end of the SEG is the point estimate for maximum sustained yield and the upper bound is the estimated carrying capacity. The range minimizes the risk of overfishing and allows for liberalization of harvest when escapements are large.

Anchor River sport fishing regulations have undergone a series of changes since the early 2000's as escapement assessment improved. In 2004, the sport fishery was liberalized by an emergency order (EO) that added a fifth 3-day opening based on the low exploitation rate in 2003 and the estimated low midseason exploitation rate in 2004. In the fall of 2004, the Alaska Board of Fisheries (board) incrementally liberalized the fishery by adding a fifth 3-weekend opening prior to Memorial Day weekend, when fishing conditions are typically poor and king salmon are just beginning to enter the Anchor River.

In 2007, in response to a series of high annual escapements and low exploitation, the board adopted a suite of regulations that further liberalized the sport fishery. The new regulations included adding Wednesdays following each of the five 3-day weekend openings, for a total of 20 opening days, and increasing the annual limit from two to five king salmon 20" or longer for the Anchor River. Wednesday openings proved popular fishing days.

Beginning in 2009, in response to low Anchor River king salmon escapements, the department issued EOs annually, restricting the inriver and nearby marine fisheries. The number of days the king salmon fishery has remained open from 2009–2013 has varied from nine (2012) to 15 (2011) days (Table 58-3). In 2010, the board maintained the king salmon season, but reduced the annual limit back down to two fish. The Anchor River king salmon escapement was below the SEG in 2009–2011 despite these inseason management and regulatory restrictions.

In 2012 and 2013, management strategies for the Anchor River king salmon fishery shifted towards restricting the fishery preseason by closing all Wednesday openings. Additional restrictions were subsequently utilized inseason to reduce king salmon harvest in the Anchor River and nearby marine fisheries. As a result of these restrictions, the SEG was achieved in both 2012 and 2013.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because it unnecessarily restricts the Anchor River king salmon fishery during years of average to above average run strengths. During low runs, the Anchor River sport fishing regulations can be, and have been, adjusted by EO preseason and, if needed, inseason to respond to anticipated shortfalls in king salmon escapement. The current regulations will result in sustainable harvests during years of average to above average runs. The department is **NEUTRAL** on the allocative aspects of this proposal between the marine and inriver sport fisheries.

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 58-1.–Regulation changes to the Anchor River king salmon fishery and the marine waters between Bluff Point and the Ninilchik River mouth, 2001–2013.

Year	King salmon Escapement Goals	King Salmon Regulation Changes (2001-2013)		
		Management Action Source	Anchor River Regulations	Marine Waters between Bluff Point and Ninilchik River Mouth Regulations
2001	SEG based on aerial index counts	Post season BOF	Listed Anchor River king salmon a management concern. Reduced from 5 to 4 weekend openings.	
2002				
2003				
2004	Recinded SEG	Inseason EO Post season BOF	Increased weekends from 4 to 5. Recinded stock of management concern.	
2005	No SEG			
2006	No SEG			
2007	No SEG SEG set in fall based on all available data including 5 years of escapement data. Lower Bound SEG =5,000.	Post season BOF	Added 5 Wednesday openings, increased annual limit from 2 to 5, and separated annual limit from Deep Creek.	Decreased the Anchor River conservation zone from 4 to 2 miles from April 1-June 30.
2008				
2009		Inseason EO	Closed June 6-30.	Increased Anchor River conservation zone from 2 to 4 miles from June 6-30.
2010		Inseason EO	Prohibited bait June 5-30 (Deep Creek & Ninilchik River included) Prohibited retention June 12-30.	Increased Anchor River conservation zone from 2 to 4 miles from June 5-30. Maintained Anchor River conservation zone from 2 to 4 miles from July 1-13.
	SEG set in fall based on all available data including 7 years of escapement data. SEG (3,800-10,000).	Post season BOF	Reduced annual limit from 5 to 2. Combined annual limit to Deep Creek.	Decreased the Anchor River conservation zone from 4 to 2 miles from April 1-June 30.
2011		Inseason EO	Prohibited bait June 11. (Deep Creek & Ninilchik River included) Closed June 11-30. Restricted to one unbaited, single-hook, artificial lure July 1-31.	Maintained the Anchor River conservation zone 4 miles arround the mouth from July 1-31.
2012		Preseason EO	Closed Wednesdays through June 30. Extended closed area downstream of weir 1,000 ft. May 19-July 31. Restricted to one unbaited, single-hook, artificial lure June 2-30. (Deep Creek & Ninilchik River included)	
		Inseason EO	Closed June 9-July 15. Restricted to one unbaited, single-hook, artificial lure July 1-31. (Ninilchik River included)	Closed one mile of shore from Bluff Point to Ninilchik River mouth June 15-30. Prohibited retention of king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth July 1-15. Prohibited retention of king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth July 16-30. Prohibited fishing for king salmon from the north of the latitude of Bluff Point July 19-31.
2013		Preseason EO	Set a combined annual limit of 2 king salmon in the Anchor River, Deep Creek, Ninilchik River and marine waters from May 1-June 30. Closed Wednesdays through June 30. Extended closed area downstream of weir 1,000 ft. May-June 30. Restricted to one unbaited, single-hook, artificial lure May 1–June 30. Stop fishing after harvesting a king salmon in the Anchor, Deep or Ninilchik River. (All) Restricted to one unbaited, single-hook, artificial lure May 1-June 30. (Deep Creek & Ninilchik River included). Restricted to one unbaited, single-hook, artificial lure July 1-31. (Deep Creek & Ninilchik River included)	
		Inseason EO	Closed June 15-July 15. (Deep Creek & Ninilchik River included)	Prohibited fishing for king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth June 15-July15.

Table 58-2.–Anchor River king salmon escapement, inriver harvest and exploitation, 2003–2013.

			King salmon			
					Total inriver run	
Year	Escapement Goal	Project dates	Escapement	Inriver harvest	Estimate	Exploitation Rate (%)
2003	750–1,500[a]	May 30–Jul 09	9,238	1,011	10,249	9.9
2004	No Goal	May 15–Sep 15	12,016	1,561	13,577	11.5
2005	No Goal	May 13–Sep 09	11,156	1,432	12,588	11.4
2006	No Goal	May 15–Aug 24	8,945	1,394	10,339	13.5
2007	5000[b]	May 14–Sep 12	9,622	2,081	11,703	17.8
2008	5000[b]	May 13–Sep 12	5,806	1,612	7,418	21.7
2009	5000[b]	May 12–Sep 11	3,455	737	4,192	17.6
2010	3,800–10,000[c]	May 13–Sep 29	4,449	364	4,813	7.6
2011	3,800–10,000[c]	May 13–Sep 21	3,545	573	4,118	13.9
2012	3,800–10,000[c]	May 14–Aug 3	4,509	38	4,547	0.8
2013[d]	3,800–10,000[c]	May 15–Aug 3	4,393	Not Available		
Averages						
2003–2007			10,195	1,496	11,691	12.8
2009–2012			3,990	428	4,418	10.0

[a] Sustainable Escapement Goal based upon aerial survey data.

[b] Lower bound Sustainable Escapement Goal using sonar/weir data.

[c] Sustainable Escapement Goal using sonar/weir data.

[d] Preliminary data.

Table 58-3.–Statewide Harvest Survey estimates of the Anchor River king salmon harvest compared to the number of days open to harvest, 1977–2013.

		Number Days Open to King Salmon Harvest				
		Weekend days (Sat., Sun., and/or Mon.)		Wednesday		
Year	King Salmon Harvest	Before Memorial Day Weekend	Memorial Day Weekend and After		Number of Days	Number of Kings Harvested Per Day
1977	1,077	0	8	0	8	135
1978	2,109	0	12	0	12	176
1979	1,913	0	12	0	12	159
1980	605	0	12	0	12	50
1981	1,069	0	12	0	12	89
1982	718	0	12	0	12	60
1983	1,269	0	12	0	12	106
1984	998	0	12	0	12	83
1985	672	0	12	0	12	56
1986	1,098	0	12	0	12	92
1987	761	0	12	0	12	63
1988	976	0	14	0	14	70
1989	578	0	15	0	15	39
1990	1,479	0	15	0	15	99
1991	1,047	0	15	0	15	70
1992	1,685	0	15	0	15	112
1993	2,787	0	15	0	15	186
1994	2,478	0	15	0	15	165
1995	1,475	0	15	0	15	98
1996	1,483	0	15	0	15	99
1997	1,563	0	15	0	15	104
1998	783	0	15	0	15	52
1999	1,409	0	15	0	15	94
2000	1,730	0	15	0	15	115
2001	889	0	15	0	15	59
2002	1,047	0	12	0	12	87
2003	1,011	0	12	0	12	84
2004	1,561	0	15	0	15	104
2005	1,432	3	12	0	15	95
2006	1,394	3	12	0	15	93
2007	2,081	3	12	0	15	139
2008	1,486	3	12	5	20	74
2009	737	3	6	3	12	61
2010	364	3	6	3	12	30
2011	573	3	9	3	15	38
2012	38	3	6	0	9	4
2013	NA	3	9	0	12	NA

NA = Data not available

PROPOSAL 59 – 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would delay opening Anchor River, Deep Creek, and Stariski Creek to sport fishing by two weeks, opening on July 15 instead of July 1.

WHAT ARE THE CURRENT REGULATIONS? Sport fishing in the lower two miles of Anchor River, Deep Creek, and Stariski Creek is open to fishing for all species, except king salmon, from July 1 to October 31. Bait and multiple hooks are allowed from July 1 through August 31. From September 1 to October 31, only one unbaited, single-hook artificial lure is allowed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal will result in decreased sport fishing opportunity for Dolly Varden, rainbow/steelhead trout, and salmon species other than king salmon. Incidental catch and associated hooking mortality of maturing king salmon will be reduced.

BACKGROUND: The May and June open season for king salmon in the roadside streams was based on creel survey results from the early 1960s. Creel survey results reported that king salmon catch rates increased on Memorial Day weekend and the run was virtually over by the first of July.

During low water levels in early July, late-arriving king salmon tend to progress upstream slowly and build in the lower two miles. This makes king salmon vulnerable to release mortality by anglers fishing primarily for Dolly Varden, and by anglers targeting king salmon under the guise of fishing for other species. Once water levels rise, generally by mid-July, most of the holding king salmon migrate upstream to their spawning areas.

Based on escapement counts through the Anchor River weir (located at approximately RM 2) from 2004–2013, king salmon continue to enter the roadside streams through mid-July and are the primary fish species present in early July. On average (2004–2013), 20% (1,172 fish) of the king salmon escapement was counted from July 1–31, of which 13% (796 fish) were counted from July 1–15, and 7% (377 fish) were counted from July 16–31 (Table 59-1). From 1987–1995, a weir was operated RM 1 on the Anchor River to enumerate Dolly Varden beginning the first week of July. Based on the 1987–1995 weir data, approximately 90% of the Dolly Varden run entered the river after July 15, just before the peak king salmon spawning period from late July and early August.

Beginning in 2009, emergency orders (EOs) have been issued annually restricting the inriver and nearby marine fisheries in response to low Anchor River king salmon escapements (Table 59-2). From 2011 to 2013, the fisheries were restricted in July, to achieve the escapement goal by preventing the incidental catch of king salmon. In 2011 the Anchor River was restricted during

July to one-unbaited single-hook artificial lure. In 2012, sport fishing was closed from July 1–15 and restricted from July 16-July 31 to one-unbaited single-hook artificial lure on the Anchor River, Deep Creek, Stariski Creek, and the Ninilchik River. In 2013, the sport fishery was closed July 1–15 on all four streams. The Anchor River king salmon escapement goal was achieved in 2012 and 2013, but was not met from 2009–2011.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The proposed date change will further protect king salmon holding and migrating through the area open to sport fishing, but closed to king salmon fishing. The additional protection would be implemented when and where there are few fish other than king salmon present.

The department considered proposing limiting gear to one unbaited, single-hook, artificial lure with a gap between the point and shank, 3/8-inch or less, to allow for continued opportunity for fish other than king salmon. However, this option was rejected because hooking mortality would likely continue from July 1–15 when king salmon are present in the area open to sport fishing, and such a gear restriction would increase regulatory complexity. The department also considered reducing the area open to sport fishing to approximately 1 mile from stream mouths, below the major fishing holes where king salmon tend to hold, but this would also increase regulatory complexity. The department also considered proposing that the rivers would remain closed for the month of July, then open by EO once the Anchor River king salmon escapement reaches the lower bound of the escapement goal. Of the listed alternatives, the proposed option is the most favored.

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 59-1.–Anchor River king salmon escapement and escapement counts from July 1–15 and July 1–31, 2004–2013.

Year	Total king salmon escapement	King salmon escapement counts in July					
		July 1–15		July 16–31		July 1–31	
		Escapement	%[a]	Escapement	%[a]	Escapement	%[a]
2004	12,016	643	5%	340	3%	983	8%
2005	11,156	463	4%	161	1%	624	6%
2006	8,945	793	9%	380	4%	1,173	13%
2007	9,622	1,982	21%	547	6%	2,529	26%
2008	5,806	721	12%	340	6%	1,061	18%
2009	3,455	728	21%	297	9%	1,025	30%
2010	4,449	564	13%	249	6%	813	18%
2011	3,545	565	16%	203	6%	768	22%
2012	4,509	476	11%	897	20%	1,373	30%
2013[b]	4,393	1,022	23%	353	8%	1,375	31%
Average	6,790	796	13%	377	7%	1,172	20%

[a] Percent of the total king salmon counted.

[b] Preliminary data.

Table 59-2. Regulation changes to the Anchor River king salmon fishery and the marine waters between Bluff Point and the Ninilchik River mouth, 2001–2013.

Year	King salmon Escapement Goals	King Salmon Regulation Changes (2001-2013)		
		Management Action Source	Anchor River Regulations	Marine Waters between Bluff Point and Ninilchik River Mouth Regulations
2001	SEG based on aerial index counts	Post season BOF	Listed Anchor River king salmon a management concern. Reduced from 5 to 4 weekend openings.	
2002				
2003				
2004	Recinded SEG	Inseason EO Post season BOF	Increased weekends from 4 to 5. Recinded stock of management concern.	
2005	No SEG			
2006	No SEG			
2007	No SEG SEG set in fall based on all available data including 5 years of escapement data. Lower Bound SEG =5,000.	Post season BOF	Added 5 Wednesday openings, increased annual limit from 2 to 5, and separated annual limit from Deep Creek.	Decreased the Anchor River conservation zone from 4 to 2 miles from April 1-June 30.
2008				
2009		Inseason EO	Closed June 6-30.	Increased Anchor River conservation zone from 2 to 4 miles from June 6-30.
2010		Inseason EO	Prohibited bait June 5-30 (Deep Creek & Ninilchik River included) Prohibited retention June 12-30.	Increased Anchor River conservation zone from 2 to 4 miles from June 5-30. Maintained Anchor River conservation zone from 2 to 4 miles from July 1-13.
	SEG set in fall based on all available data including 7 years of escapement data. SEG (3,800-10,000).	Post season BOF	Reduced annual limit from 5 to 2. Combined annual limit to Deep Creek.	Decreased the Anchor River conservation zone from 4 to 2 miles from April 1-June 30.
2011		Inseason EO	Prohibited bait June 11. (Deep Creek & Ninilchik River included) Closed June 11-30. Restricted to one unbaited, single-hook, artificial lure July 1-31.	Maintained the Anchor River conservation zone 4 miles arround the mouth from July 1-31.
2012		Preseason EO	Closed Wednesdays through June 30. Extended closed area downstream of weir 1,000 ft. May 19-July 31. Restricted to one unbaited, single-hook, artificial lure June 2-30. (Deep Creek & Ninilchik River included)	
		Inseason EO	Closed June 9-July 15. Restricted to one unbaited, single-hook, artificial lure July 1-31. (Ninilchik River included)	Closed one mile of shore from Bluff Point to Ninilchik River mouth June 15-30. Prohibited retention of king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth July 1-15. Prohibited retention of king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth July 16-30. Prohibited fishing for king salmon from the north of the latitude of Bluff Point July 19-31.
2013		Preseason EO	Set a combined annual limit of 2 king salmon in the Anchor River, Deep Creek, Ninilchik River and marine waters from May 1-June 30. Closed Wednesdays through June 30. Extended closed area downstream of weir 1,000 ft. May-June 30. Restricted to one unbaited, single-hook, artificial lure May 1–June 30. Stop fishing after harvesting a king salmon in the Anchor, Deep or Ninilchik River. (All) Restricted to one unbaited, single-hook, artificial lure May 1-June 30. (Deep Creek & Ninilchik River included). Restricted to one unbaited, single-hook, artificial lure July 1-31. (Deep Creek & Ninilchik River included)	
		Inseason EO	Closed June 15-July 15. (Deep Creek & Ninilchik River included)	Prohibited fishing for king salmon within 1 mile of shore from Bluff Point to Ninilchik River mouth June 15-July15.

PROPOSAL 60 – 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Timothy Ray Berg II.

WHAT WOULD THE PROPOSAL DO? This proposal would modify the sport fishing season to allow fishing during November and December in the Anchor River, Deep Creek, Ninilchik River, and Stariski Creek.

WHAT ARE THE CURRENT REGULATIONS? The Anchor River, Deep Creek, Ninilchik River, and Stariski Creek close to all sport fishing November 1.

From July 1 to October 31, sport fishing is allowed, except for king salmon, on the Anchor River, Deep Creek, Ninilchik River, and Stariski Creek.

Bait and multiple hooks are allowed from May through August 31. From September 1 to October 31, only one unbaited, single-hook artificial lure is allowed. Rainbow/steelhead trout may not be retained or possessed.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would provide additional angler opportunity, and may increase steelhead trout and Dolly Varden catches in these streams by an unknown, but likely small, amount.

BACKGROUND: The Anchor River, Deep Creek, Stariski Creek, and Ninilchik River (roadside streams) support a steelhead trout fishery, of which the Anchor River is the largest. These rivers support fall-run steelhead that enter fresh water from August to November, spawn from April to May, and then emigrate after spawning in May and June. Most of the steelhead trout fishery occurs in the fall and continues until the October 31 season closure or earlier if the river freezes up.

The regulatory framework for the roadside stream steelhead trout fishery evolved over a period of nearly two decades. Since 1989, retention has been prohibited and fish may not be removed from the water prior to release. Since 1991, only unbaited, single-hook, artificial lures have been allowed beginning September 1. From 1996–2010, each stream was opened to fishing August 1 to December 31. In 2010, the Alaska Board of Fisheries closed the roadside streams to fishing October 31 to eliminate potential release mortality of steelhead trout.

Creel surveys conducted from 1978–1985 on the Anchor River estimated that effort during November 1-15 comprised less than 3% of estimated effort expended in the fall (August 16-November 15; Table 60-1). Most effort during August through mid-September was assumed to be directed primarily towards coho salmon, Dolly Varden, and steelhead trout because of their run timing. Most effort from mid-September on was assumed to target Dolly Varden and steelhead trout.

Run assessment of steelhead trout has been evaluated on the Anchor River, and data indicate run sizes are variable and typically small (Table 60-2). The immigration, enumerated during three years of weir operation (1988, 1989, and 1992) at river mile (RM) 1, ranged from 769 to 1,261 fish. The midpoint of these runs ranged from September 15–25 and the immigration was 90% complete by October 2. Steelhead trout were enumerated in 2010 at RM 2 through most of the immigration and 586 steelhead trout were counted. In 2009, with the early weir installation of the weir on May 13, the first steelhead/rainbow trout were enumerated as they migrated downstream by direct observation and video. A total of 605 outmigrating steelhead trout were counted. The current abundance of Anchor River steelhead trout is thought to be within the historical range of abundances.

From 1989–2012, the steelhead trout catch in Anchor River and Deep Creek was variable, but generally stable. The annual variation in catch estimates is influenced by run size, number of days the stream conditions are conducive to fishing, shifts in effort between streams, and overall variation in angler effort. In recent years (2010–2012), annual steelhead trout catch estimates for the Anchor River have averaged 1,417 fish, less than half of the 1989–2009 average of roughly 4,221 (Table 60-3). In 2011 and 2012 (years with the October 31 closure date), catches of steelhead trout were below average, but they may have been influenced by the other factors influencing catch rates, such as differences in abundance, river conditions, and effort shifting to other fisheries.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. The proposed date change provides additional opportunity for fall steelhead fishing without likely increasing risk to the sustainability of steelhead trout in Anchor River. Fishing effort is low, the river typically freezes prior to December 31, and most fishing ceases around November 1. Existing steelhead trout sport fishing regulations are conservative and catch assessment indicates the stock is within its historical range.

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 60-1.–Total estimated angler hours and average hours spent sport fishing on the Anchor River from August 16 to November 15, based on 1978–1985 creel surveys.

Date	Total Angler Hours for All Years Surveyed	%	Average Angler Hours	%
Aug. 16–31	144,879	46.1	10,349	50.8
Sept. 1–15	63,529	20.2	3,737	18.3
Sept. 16–30	41,380	13.2	2,299	11.3
Oct. 1–15	38,593	12.3	2,270	11.1
Oct. 16–31	21,475	6.8	1,193	5.9
Nov. 1–15	4,250	1.4	531	2.6
Total	314,106		20,379	

Table 60-2.–Anchor River steelhead trout counts, 1987–1992 and 2004–2013.

Year	Weir Project dates	Weir Location (River Mile)	Total steelhead count from July 1
1987	July 4–Sep 10	1	136
1988	July 3–Oct 5	1	878
1989	July 6–Nov 5	1	769
1990	July 4–Aug 15	1	3
1991	July 4–Aug 15	1	5
1992	July 4–Oct 1	1	1,261
1993	July 3–Aug 16	1	1
1994	July 3–Aug 16	1	1
1995	July 4–Aug 12	1	10
2004	May 15–Sep 13	2	20
2005	May 13–Sep 9	2	107
2006	May 15–Aug 24	2	4
2007	May 14–Sep 12	2	325
2008	May 13– Sep 11	2	258
2009	May 12–Sep 11	2	54
2010	May 13–Sep 29	2	586
2011	May 13–Sep 21	2	132
2012	May 13–Aug 3	2	1
2013	May 15–Aug 3	2	1

Table 60-3.–Sport catch of steelhead trout in Lower Kenai Peninsula roadside streams, 1989–2012.

	Anchor River	Stariski Creek	Deep Creek	Ninilchik River	All streams
Year	Catch[a]	Catch[a]	Catch[a]	Catch[a]	Catch
1989	2,066	10	409	505	2,990
1990	1,978	104	1,291	177	3,550
1991	2,349	12	425	512	3,298
1992	2,720	70	740	1,008	4,538
1993	4,156	31	1,448	442	6,077
1994	4,035	75	1,156	804	6,070
1995	2,232		520	178	2,930
1996	7,570	47	1,079	522	9,218
1997	3,103		384	380	3,867
1998	3,878	71	1,350	576	5,875
1999	3,920	305	689	694	5,608
2000	8,693	329	1,805	760	11,587
2001	3,045	51	627	283	4,006
2002	3,501	203	954	468	5,126
2003	3,409	46	2,456	952	6,863
2004	3,710	39	4,365	400	8,514
2005	2,524	106	1,355	934	4,919
2006	4,525	13	1,234	563	6,335
2007	8,365	23	2,668	725	11,781
2008	8,733	195	3,672	1,465	14,065
2009	4,119	113	1,463	1,181	6,876
2010	2,018	21	1,043	360	3,442
2011	401	19	122	53	595
2012	1,833	34	681	169	2,717
Average	3,870	87	1,331	588	5,869

Source: Statewide Harvest Survey Mills 1979-1980, 1981a-b, 1982-1994, Howe et al. 1995, 1996, 2001 a-d, Walker et al. 2003, Jennings et al. 2004, 2006a-b, 2007, 2009 a-b, 2010 a-b and In prep).

[a] Catch first estimated by SWHS during 1989. 1989 catch estimates from unpublished Statewide Harvest Survey data.

PROPOSAL 61 – 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would reduce the king salmon bag limit in the Ninilchik River from two fish per day, only one of which may be a wild fish, to one fish per day.

WHAT ARE THE CURRENT REGULATIONS? The bag and possession limit is two king salmon 20 inches or greater in length, of which only one fish may be a wild king salmon, during the three-day weekend openings in May and June. From July 1 through October 31, the Ninilchik River is closed to the harvest of wild king salmon and the hatchery-reared king salmon bag and possession limit is two king salmon 20 inches or greater in length. An annual limit of five king salmon can be harvested from the Ninilchik River.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Opportunity to harvest hatchery-reared king salmon from the Ninilchik River would decrease. Bag limits for the Ninilchik River would be consistent with bag limits for Deep Creek and Anchor River, and would remain standard throughout the season. Fewer inseason restrictions may be needed to achieve the escapement and egg-take goals during years of below average runs.

BACKGROUND: King salmon have been stocked in the Ninilchik River since 1988 to provide additional harvest opportunity for sport anglers. Wild and hatchery-reared Ninilchik River king salmon escapement has been monitored at a weir operated during part of the run in July and early August. The Ninilchik River king salmon sustainable escapement goal (SEG) of 550–1,300 fish is an index of spawning escapement based upon counts of wild fish passed upstream of the weir during July 3–31. The SEG was met in 2008 and 2010–2013 and was not met in 2007 and 2009. The 2007 wild king salmon escapement was 545 fish (five fish below the goal) and the 2009 escapement was 528 fish (22 fish below the goal).

The Ninilchik River weir is also utilized to collect king salmon for broodstock for stocking back into the Ninilchik River and at three terminal fishery locations in Kachemak Bay. The egg-take goal has been approximately 115 king salmon pairs, with a minimum of 60 wild pairs. Only wild king salmon are stocked into the Ninilchik River, while a combination of wild and hatchery-reared king salmon are stocked at the three terminal fishery locations. From July 3–31, hatchery-reared king salmon weir counts averaged approximately 450 fish from 1999–2006. From 2007–2013, the hatchery-reared king salmon weir count averaged 89 fish. The egg-take goal was not reached from 2007–2009 and 2012–2013. Weir operation has been extended annually into early August to maximize broodstock collection.

The 1999–2008 average annual harvest of king salmon from the Ninilchik River was approximately 1,400 fish. Periodic assessments of wild and hatchery-reared contributions to the sport harvest were conducted from 1991–2006. In 2000 and 2001, approximately 50% of the

king salmon harvest was estimated to be hatchery-reared fish. In 2006, the hatchery-reared contribution was at least 39%.

Starting in 2007, beach seine surveys in the area open to sport fishing have been used to assess the composition of king salmon available for harvest. In 2007, weekly surveys were conducted from mid-May through mid-July; hatchery-reared king salmon comprised 15% of the survey and ranged from 0% to 28% for all surveys. From 2011–2013, one beach seine survey was conducted in late June or early July in the area open to sport fishing; hatchery-reared king salmon ranged from 12% in 2011 to 33% in 2013. The increase observed in 2013 was attributed to a substantial increase in the number of hatchery-reared "jack" (ocean age-1) king salmon. Approximately 85% of the hatchery-reared fish in the 2013 beach seine survey were jacks.

The Ninilchik River sport fishing regulations were liberalized annually from 2001 through 2007 to increase harvest of hatchery-reared king salmon. In 2001–2004 and 2006–2007, the fishery was extended by emergency order (EO) for harvest of hatchery-reared king salmon. In 2005, the Alaska Board of Fisheries (board) increased the bag limit to two king salmon, of which only one could be wild. In 2007, the board created a hatchery-reared king salmon sport fishery season from July 1 through December 31.

From 2010–2013, the department has restricted the Ninilchik River king salmon sport fishery by EO to in an effort to achieve the king salmon escapement goal and hatchery broodstock goal. The restrictions were generally paired with restrictions to the Anchor River and nearby marine fisheries. Angler effort and king salmon harvest in the Ninilchik River have declined since 2008 (Table 61-1). The 2008–2012 average Statewide Harvest Survey estimate of days fished was approximately 50% of the 1999–2007 (low stocking years) average days fished. The 2008–2012 average king salmon harvest was approximately 27% of the 1999–2007 average harvest.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. The hatchery-reared king salmon runs to the Ninilchik River have been poor and provide little opportunity for anglers to harvest more than one king salmon in a day. The proposed bag limit reduction may reduce king salmon harvest by an unknown, but assumed low, amount. Any reduction in hatchery-reared king salmon harvest would improve broodstock collection at the weir. This proposal will also make the bag limit consistent for other Lower Cook Inlet area streams open to king salmon sport fishing. The department would maintain EO authority to liberalize the fishery during periods of above average 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.

Table 61-1.–Harvest of king salmon in the Ninilchik River and angler participation in all Ninilchik River sport fisheries, 1978–2012.

Year	King Salmon Harvest	Days Fished
1978	1,168	11,350
1978	1,445	14,173
1979	1,493	18,282
1980	723	19,706
1981	1,523	14,184
1982	1,240	11,806
1983	871	9,458
1984	648	10,122
1985	983	10,213
1986	420	9,250
1987	1,112	13,329
1988	795	12,533
1989	744	9,977
1990	693	8,323
1991	3,123	19,640
1992	5,316	27,816
1993	4,235	20,466
1994	3,108	21,827
1995	2,451	16,160
1996	2,401	11,445
1997	3,263	11,064
1998	1,453	10,994
1999	1,945	15,344
2000	1,782	12,432
2001	1,399	10,602
2002	830	9,572
2003	1,452	9,843
2004	1,240	10,500
2005	1,342	9,003
2006	1,329	9,620
2007	1,575	10,211
2008	976	8,158
2009	203	7,687
2010	358	5,296
2011	258	2,292
2012	16	2,995
Averages		
1978–2012	1,498	12,102
1999–2007	2,438	10,792
2008–2012	659	5,286

Source: Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994, Howe et al. 1995, 1996, 2001 a-d, Walker et al. 2003, Jennings et al. 2004, 2006a-b, 2007, 2009 a-b, 2010 a-b, 2011 a-b, and In prep).

PROPOSAL 62 – 5 AAC 62.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the West Cook Inlet Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would change the Clearwater Creek drainage closed-waters boundary description for sport fishing.

WHAT ARE THE CURRENT REGULATIONS? The Clearwater Creek drainage is closed to sport fishing upstream from an ADF&G regulatory marker located approximately one-half mile upstream of its confluence with the Chinitna River; Roscoe Creek is closed to sport fishing upstream from an ADF&G regulatory marker located approximately one-half mile upstream of its confluence with the Chinitna River.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would accurately describe waters closed to sport fishing by rewording the reference to Roscoe Creek; it would not change the existing boundary marker.

BACKGROUND: In 1998, the Alaska Board of Fisheries (board) addressed proposals for West Cook Inlet coho salmon fisheries and adopted a proposal which limited sport fishing to the lower one-mile section of Clearwater Creek. In 2000, a flood changed the stream by creating a new northern Clearwater Creek channel that flowed into Chinitna River At the 2001 board meeting, the department recommended redefining the closed area in large part to address the change in stream morphology (Figure 62-1).

The board adopted the proposed change and closed the northern Clearwater Creek channel to sport fishing upstream from an ADF&G marker located approximately one-half mile upstream of the confluence with the Chinitna River. The original southern Clearwater Creek channel was redefined as Roscoe Creek and the closed area was reduced from one mile to one-half mile upstream of its confluence with the Chinitna River. As a consequence, the regulation stated Roscoe Creek as closed to sport fishing upstream from an ADF&G regulatory marker located approximately one-half mile upstream of its confluence with the Chinitna River.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. The current closed waters description is confusing. Roscoe Creek does not flow directly into the Chinitna River; it flows into Clearwater Creek. The two Clearwater Creek channels flow into the Chinitna River.

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.

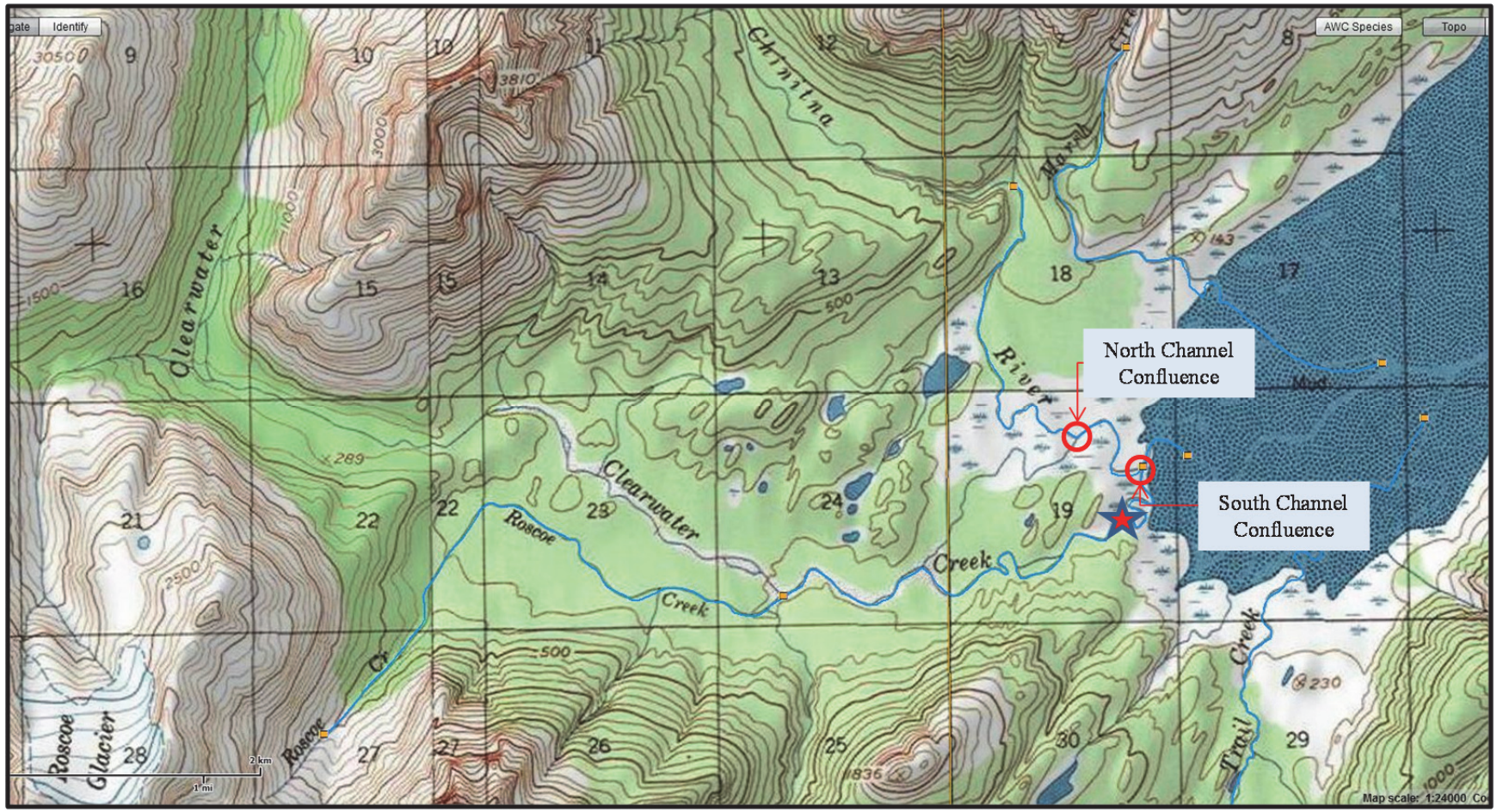

Figure 62-1.–Location of Roscoe Creek, Clearwater Creek, and Chinitna River in relation to the ADF&G regulatory marker (red star) posted in 1999.

PROPOSAL 63 – 5 AAC 58.0XX. New Section.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of sport-caught pink and chum salmon for bait in the Cook Inlet–Resurrection Bay Saltwater Area (Figure 63-1).

WHAT ARE THE CURRENT REGULATIONS? The Cook Inlet–Resurrection Bay Saltwater Area, excluding freshwater drainages, bag and possession limits for salmon, other than king salmon, are six salmon per day, of which only three per day may be coho salmon.

For sport-caught fish with a seasonal or bag limit, only the head, tail fins, and viscera can be used as bait. For sport-caught fish without a seasonal or bag limit, any part of the fish can be used as bait.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Pink and chum salmon harvest may increase by some unknown amount. The regulation would align these areas with Prince William Sound (PWS) and Southeast Alaska (SEAK), where the use of sport-caught pink and chum salmon as bait is legal. This proposal would not change sport fishing bag or possession limits for these species already established by the Alaska Board of Fisheries (board).

BACKGROUND: During the January 2006 SEAK board meeting, and the December 2008 PWS meeting, the board approved regulations allowing sport-caught pink and chum salmon to be used as bait for sport fishing and in personal use shellfish pots.

Cook Inlet–Resurrection Bay supports both wild and enhanced pink salmon runs. Cook Inlet has not contained enhanced chum salmon fisheries since the 1990s. In general, more Cook Inlet streams support pink salmon runs than support chum salmon runs. In Lower Cook Inlet, the largest pink salmon runs are produced in West Cook Inlet and Port Dick on the outer Kenai Peninsula coast, but Humpy Creek, located in Kachemak Bay also supports a large run of pink salmon. Most of the larger chum salmon runs are concentrated on the western side of Cook Inlet, with McNeil River supporting the largest run, while small runs occur within Kachemak Bay (e.g., Humpy Creek and the Seldovia River) and along the outer coast of the Kenai Peninsula. The department monitors pink salmon escapement in 21 index streams, and 12 index streams for chum salmon in Lower Cook Inlet and one index stream in Upper Cook Inlet. Pink and chum salmon escapements for most of the streams have been sufficient to provide a harvestable surplus.

Pink salmon account for most of the Lower Cook Inlet commercial salmon harvest in terms of numbers of fish. On average (2001–2011), pink salmon accounted for 76% of the Lower Cook Inlet commercial harvest for all gear types combined, while chum salmon accounted for 8% of the commercial harvest. The subsistence fishery at Port Graham and English Bay has reported a small pink salmon harvest (range 20–3,093 fish) and no reported chum salmon harvest. Pink and chum salmon are caught in salt water by sport anglers trolling from boats and casting from shore near stream mouths. The average sport harvest (1996–2012) for Cook Inlet–Resurrection Bay

Saltwater Area marine waters was 7,702 pink salmon and 1,042 chum salmon (Table 63-1). Of the pink and chum salmon caught, approximately 30% and 27% were harvested.

DEPARTMENT COMMENTS: The department **SUPPORTS** the concept of the proposal as it relates to pink salmon because it would not result in any issues concerning sustainability of pink salmon in the Cook Inlet–Resurrection Bay Saltwater Area, and is **NEUTRAL** on any allocative aspects. The department does not recommend allowing chum salmon to be used as bait. Cook Inlet does not contain enhanced chum salmon fisheries; instead, chum salmon harvests in Cook Inlet are supported by relatively small wild runs.

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.

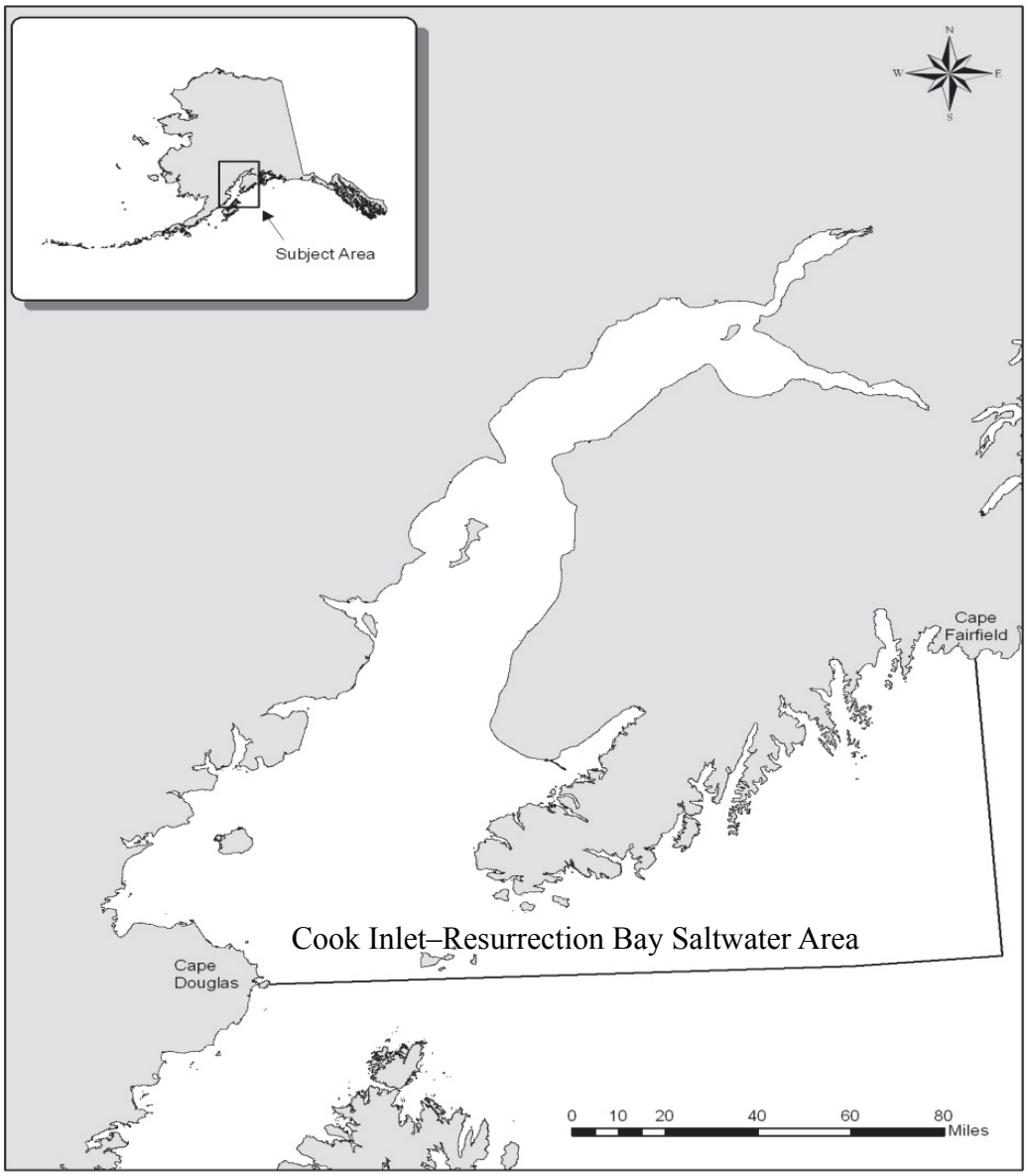

Figure 63-1.–Map of Cook Inlet–Resurrection Bay Saltwater Area.

Table 63-1.–Statewide Harvest Survey estimates of pink and chum salmon sport harvest (numbers of fish) from the Cook Inlet–Resurrection Bay Saltwater Area (CI-Res), 1996–2012.

	Cook Inlet–Resurrection Bay			
	Pink salmon		Chum salmon	
Year	Harvest	Catch	Harvest	Catch
1996	7,534	18,355	2,159	5,999
1997	5,306	18,520	1,022	4,607
1998	8,648	25,509	796	2,262
1999	9,806	25,108	1,042	4,441
2000	7,443	26,949	1,552	7,000
2001	6,655	17,791	1,132	5,341
2002	7,969	26,735	685	4,267
2003	8,816	26,858	710	4,181
2004	9,146	29,081	1,197	3,163
2005	13,033	46,168	1,533	4,431
2006	5,809	22,991	1,113	4,069
2007	8,072	35,781	437	2,025
2008	8,515	28,290	1,449	5,180
2009	6,588	21,958	842	2,252
2010	5,774	18,278	395	1,497
2011	4,373	15,032	917	3,359
2012	7,455	28,752	733	2,255
Average 1996–2012	7,702	25,421	1,042	3,902

PROPOSAL 64 – 5 AAC 58.0XX. New Section.

PROPOSED BY: Kenai-Soldotna Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of sport-caught pink salmon for bait in the Cook Inlet–Resurrection Bay Saltwater Area.

WHAT ARE THE CURRENT REGULATIONS? The Cook Inlet–Resurrection Bay saltwater area bag and possession limits for salmon, other than king salmon, are six per day, of which only three per day may be coho salmon.

For sport-caught fish with a seasonal or bag limit, only the head, tail fins, and viscera can be used as bait. For sport-caught fish without a seasonal or bag limit, any part of the fish can be used as bait.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Pink salmon harvest may increase by some unknown amount. The regulation would align these areas with Prince William Sound (PWS) and Southeast Alaska (SEAK), where the use of sport-caught pink salmon as bait is legal. This proposal would not change sport fishing bag or possession limits for these species already established by the Alaska Board of Fisheries (board).

BACKGROUND: During the January 2006 SEAK board meeting, and the December 2008 PWS meeting, the board approved regulations allowing sport-caught pink and chum salmon be used as bait for sport fishing and in personal use shellfish pots.

Cook Inlet–Resurrection Bay supports both wild and enhanced pink salmon runs. Pink salmon return to freshwater drainages from late June through mid-September and are found in most stream drainages. In Lower Cook Inlet, the largest pink salmon runs are produced in West Cook Inlet and Port Dick on the outer Kenai Peninsula coast, but Humpy Creek, located in Kachemak Bay also supports a large run of pink salmon. The department monitors pink salmon escapement in 21 index streams for Lower Cook Inlet. There are no pink salmon index streams in upper Cook Inlet. Pink salmon escapements for most of the streams have been sufficient to provide a harvestable surplus.

Pink salmon account for most of the Lower Cook Inlet commercial salmon harvest in terms of numbers of fish. On average (2001–2011), pink salmon accounted for 76% of the Lower Cook Inlet commercial harvest for all gear types combined. The subsistence fishery at Port Graham and English Bay has reported a small pink salmon harvest (range 20–3,093 fish). Pink salmon are caught in salt water by sport anglers trolling from boats and casting from shore near stream mouths. The average sport harvest (1996–2012) for Cook Inlet–Resurrection Bay Saltwater Area marine waters was 7,702 pink salmon. Of the pink salmon caught, approximately 30% were harvested (Table 64-1).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal and is **NEUTRAL** on any allocative aspects. This proposal would not result in any issues concerning sustainability of pink salmon in the Cook Inlet–Resurrection Bay Saltwater Area, and it would align

regulations adopted by the board for the use of sport-caught pink salmon as bait in PWS and SEAK.

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 64-1.–Statewide Harvest Survey estimate of the pink salmon sport harvest (numbers of fish) from the Cook Inlet–Resurrection Bay Saltwater Area, 1996–2012.

	Cook Inlet–Resurrection Bay Pink salmon	
Year	Harvest	Catch
1996	7,534	18,355
1997	5,306	18,520
1998	8,648	25,509
1999	9,806	25,108
2000	7,443	26,949
2001	6,655	17,791
2002	7,969	26,735
2003	8,816	26,858
2004	9,146	29,081
2005	13,033	46,168
2006	5,809	22,991
2007	8,072	35,781
2008	8,515	28,290
2009	6,588	21,958
2010	5,774	18,278
2011	4,373	15,032
2012	7,455	28,752
Average 1996–2012	7,702	25,421

PROPOSAL 65 – 5 AAC 58.0XX. New Section.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would allow use of sport-caught spiny dogfish as bait in the Cook Inlet–Resurrection Bay Saltwater Area.

WHAT ARE THE CURRENT REGULATIONS? The *Sport Shark Fishery Management Plan* (5 AAC 75.012) allows sport fishing for spiny dogfish year-round, and a daily bag and possession limit of five spiny dogfish. There is no annual limit or recording requirement. For sport-caught fish with a seasonal or daily bag limit, only the head, tail fins, and viscera can be used as bait. Any part of a fish without seasonal or daily limits can be used for bait.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Harvest of spiny dogfish may increase by some unknown amount. A regulation allowing the use of spiny dogfish as bait would be inconsistent with regulations for this species in all other areas of Alaska.

BACKGROUND: Spiny dogfish are highly migratory, often travel in large schools, and tend to aggregate according to size and sex. Spiny dogfish are opportunistic feeders that mainly eat pelagic fish, small invertebrates, and squid. In turn, they are preyed upon by larger sharks, including larger spiny dogfish, large fish, seals, and killer whales. Large and abrupt changes in spiny dogfish populations are unlikely because of their low reproductive rate. Spiny dogfish can live in excess of 80 years. Females become mature at around 36 years of age and give birth to only 2–12 pups every two years. Long recovery times are needed to rebuild overexploited stocks.

In 1998, the Alaska Board of Fisheries (board) adopted the statewide *Sport Shark Fishery Management Plan* for all species of sharks. The plan allowed a bag limit of one per day and an annual limit of two sharks of any species. In 2010, the board increased the spiny dogfish bag limit from one to five and removed the annual limit and reporting requirement for this species.

Spiny dogfish are typically caught incidentally by anglers targeting other species, such as halibut or salmon. There are no estimates of sport harvest or catch of spiny dogfish specifically. The Statewide Harvest Survey provides estimates of catch and harvest of all shark species combined. Dockside creel surveys provide information on the frequency of dogfish catch and harvest. These data show that the vast majority of the shark catch is composed of spiny dogfish, but that few spiny dogfish are harvested. Incidental catch of spiny dogfish is variable from year to year. In recent years, the majority of guided and unguided boat-trips caught no spiny dogfish (Table 65-1).

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Spiny dogfish are a long-lived species with a low reproductive rate and the board increased the harvest potential in 2010. Additionally, Cook Inlet would be the only area in the state to allow this practice, thereby increasing regulatory complexity.

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 65-1.–Frequency of sampled sport fishing trips in Central Cook Inlet (Deep Creek and Anchor Point) and Homer on which zero, 1–20, or more than 20 spiny dogfish were caught by per vessel trip, 2008–2012.

		Number of spiny dogfish caught per boat trip by guided and unguided anglers							
		Guided				Unguided			
Port	Year	0	1-20	Over 20	Total Trips	0	1-20	Over 20	Total Trips
Central CI	2008	292	68	2	362	169	42	1	212
	2009	333	107	6	446	287	43	1	331
	2010	233	78	7	318	243	38	1	282
	2011	306	88	1	395	379	35	0	414
	2012	261	77	2	340	238	59	1	298
Homer	2008	122	28	1	151	230	15	0	245
	2009	183	36	2	221	373	53	0	426
	2010	199	32	2	233	355	29	0	384
	2011	150	13	0	163	274	5	0	279
	2012	106	6	0	112	209	6	0	215

Source: ADF&G dockside interview data for trips that targeted any bottomfish or caught any bottomfish while targeting salmon.

PROPOSAL 66 – 5 AAC 58.030. Methods, means, and general provisions – Finfish.

PROPOSED BY: Dave Lyon.

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of bow and arrow to take salmon in Cook Inlet marine waters that are open to snagging, except in the Nick Dudiak Fishing Lagoon.

WHAT ARE THE CURRENT REGULATIONS? Unless otherwise provided in specific area regulations, sport fishing in Alaska may only be conducted by the use of a single line attached to not more than one plug, spoon, spinner, series of spinners, or two flies, or two hooks attached to a pole or rod.

Snagging is allowed year-round in Cook Inlet salt waters south of the latitude of Anchor Point, except for Kachemak Bay east of a line from Anchor Point to Point Pogibshi. East of the line from Anchor Point to Point Pogibshi, snagging is allowed from June 24 through December 31, except in the Nick Dudiak Fishing Lagoon on the Homer Spit. Snagging is not allowed in Cook Inlet north of the latitude of Anchor Point.

There is no open season for rainbow/steelhead trout in Cook Inlet marine waters. All rainbow/steelhead trout caught may not be removed from the water and must be released immediately.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal could create a safety concern in areas where anglers are concentrated and would likely increase harvest of salmon. Halibut Cove Lagoon, Tutka Bay Lagoon, China Poot, and Seldovia Harbor are popular saltwater areas to fish for salmon. It would also raise the possibility for mortality of misidentified rainbow/steelhead trout, which may not be retained or possessed.

BACKGROUND: The use of archery equipment in Alaska is allowed only for species with no bag limits or with liberal harvest limits (i.e., whitefish, suckers, burbot), or northern pike. Anglers use archery equipment or "bowfishing" equipment in other states to target "rough" fish that generally are not targeted by sport anglers. The use of archery equipment for salmon has not been allowed in Alaska.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The department has concerns that the use of archery gear for salmon will lead to safety issues in Cook Inlet saltwater locations where salmon schools attract a number of people in relatively small or confined 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 67 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet-Resurrection Bay Saltwater Area and 5 AAC 58.055. Upper Cook Inlet Salt Water Early-run King Salmon Management Plan.

PROPOSED BY: Thomas H. Hagberg.

WHAT WOULD THE PROPOSAL DO? This proposal would relocate the Anchor River south marker (59° 45.92 N. latitude) to the Anchor Point Light (59° 46.14 N. latitude) (Figure 67-1) for purposes of the *Upper Cook Inlet Salt Water Early-run King Salmon Management Plan*.

WHAT ARE THE CURRENT REGULATIONS? There are two regulations that reference either the Anchor River south marker or the Anchor Point Light. The *Upper Cook Inlet Salt Water Early-run King Salmon Management Plan* (5 AAC 58.055; early-run plan) references the Anchor River south marker at 59° 45.92 N. latitude. The early-run plan applies from April 1 through June 30 and designates marine waters from Bluff Point north to the mouth of the Ninilchik River and within one statute mile of shore as the Early-run King Salmon Special Harvest Area (SHA; Figure 67-2). In the SHA, guides may not fish while accompanying paid clients (except to provide assistance to a disabled client), and anglers may not continue to fish for any species on the same day after taking a king salmon 20 inches or more in length. The plan also creates three closed areas within the SHA where no sport fishing is allowed: 1) one statute mile north of the Ninilchik River to two statute miles south of Deep Creek, 2) one statute mile north and south from Stariski Creek and, 3) two statute miles north and south of the Anchor River. The closed-water boundary located south of the Anchor River is commonly referred to as the Anchor South Marker.

The *Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan* (5 AAC 58.060; winter fishery plan) stipulations apply October 1 through March 31 in salt waters south of latitude of the Anchor Point Light, including all of Kachemak Bay to the latitude of Cape Douglas and east to the longitude of Gore Point. In these waters during this time period, the bag and possession limit of king salmon is two with no minimum size limit. King salmon harvested do not need to be entered on a harvest record and do not count against the Cook Inlet annual king salmon harvest limit. The management plan includes a sport guideline harvest level of 3,000 king salmon for the marine waters south of Bluff Point.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would simplify sport fishing regulations by designating one permanent marker for the northern boundary for the winter king salmon fishery and the southern boundary of the closed area near Anchor River for the salt water early-run king salmon fishery. It would decrease the closed waters around the Anchor River by one-quarter statute mile south of the river mouth, thereby increasing the area open to harvest within the early-run plan SHA. The king salmon harvest in the SHA may increase by an unknown amount, but the difference in harvest is expected to be small.

BACKGROUND: The salt waters of Cook Inlet support sport troll fisheries on Cook Inlet king salmon stocks in the spring and summer and on "feeder" king salmon year-round. The feeder king salmon fishery that occurs from October 1 to March 31 south of the Anchor Point Light is

referred to as the winter king salmon sport fishery. Once the early-run plan goes into effect on April 1, the department posts painted sheets of plywood to mark boundaries between the SHAs and the closed water areas (Figure 67-3).

In 2010, the Alaska Board of Fisheries moved the northern boundary of the winter king salmon fishery from Bluff Point approximately 9.25 statute miles north along the shore to the Anchor Point Light. The Anchor Point Light is a U.S. Coast Guard-maintained navigational aid. Since 2002, the king salmon harvest in the winter king salmon fishery has remained well below the sport guideline harvest level of 3,000 king salmon stipulated in the winter fishery plan (Table 67-1).

A department coded-wire tagging study during the spring and summer from 1996–2002 found that the marine fishery between Bluff Point and Deep Creek harvests a mixture of king salmon stocks from Cook Inlet and the western U.S. Cook Inlet stocks dominate the harvest, but nonlocal stocks make up a significant proportion of the harvest in some years. No single Cook Inlet stock dominates the harvest; rather, many Cook Inlet stocks contribute. Deep Creek wild and Ninilchik River hatchery-reared king salmon were the only local stocks with coded wire tags and were found to contribute fewer than 300 and 200 fish, respectively, to the annual marine harvest in the years that all year classes of the two stocks were tagged. The marine harvest of Anchor River king salmon is likely higher, but of a similar magnitude, compared to the harvest from Deep Creek. Cook Inlet stocks dominated the harvest taken within three-quarters of a mile from shore and nonlocal stocks comprise the largest component of the harvest beyond three-quarters of a mile from shore.

Since implementation of the early-run plan, sport harvest of early-run king salmon averaged (1996–2012) 3,649 fish. From 1996 to 2012, annual harvests were within the guideline harvest level of 8,000 king salmon and have ranged from a peak harvest of 5,783 fish in 1998 to 955 fish in 2012 (Table 67-1).

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. The Anchor Point Light is an easily identifiable navigational marker that can be used to permanently delineate the SHA from the closed water area south of the Anchor River and facilitate compliance. Additional harvest within the one-quarter statute mile will likely be small and regulations can be adjusted by emergency order inseason, if needed, to respond to anticipated shortfalls in king salmon escapement.

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.

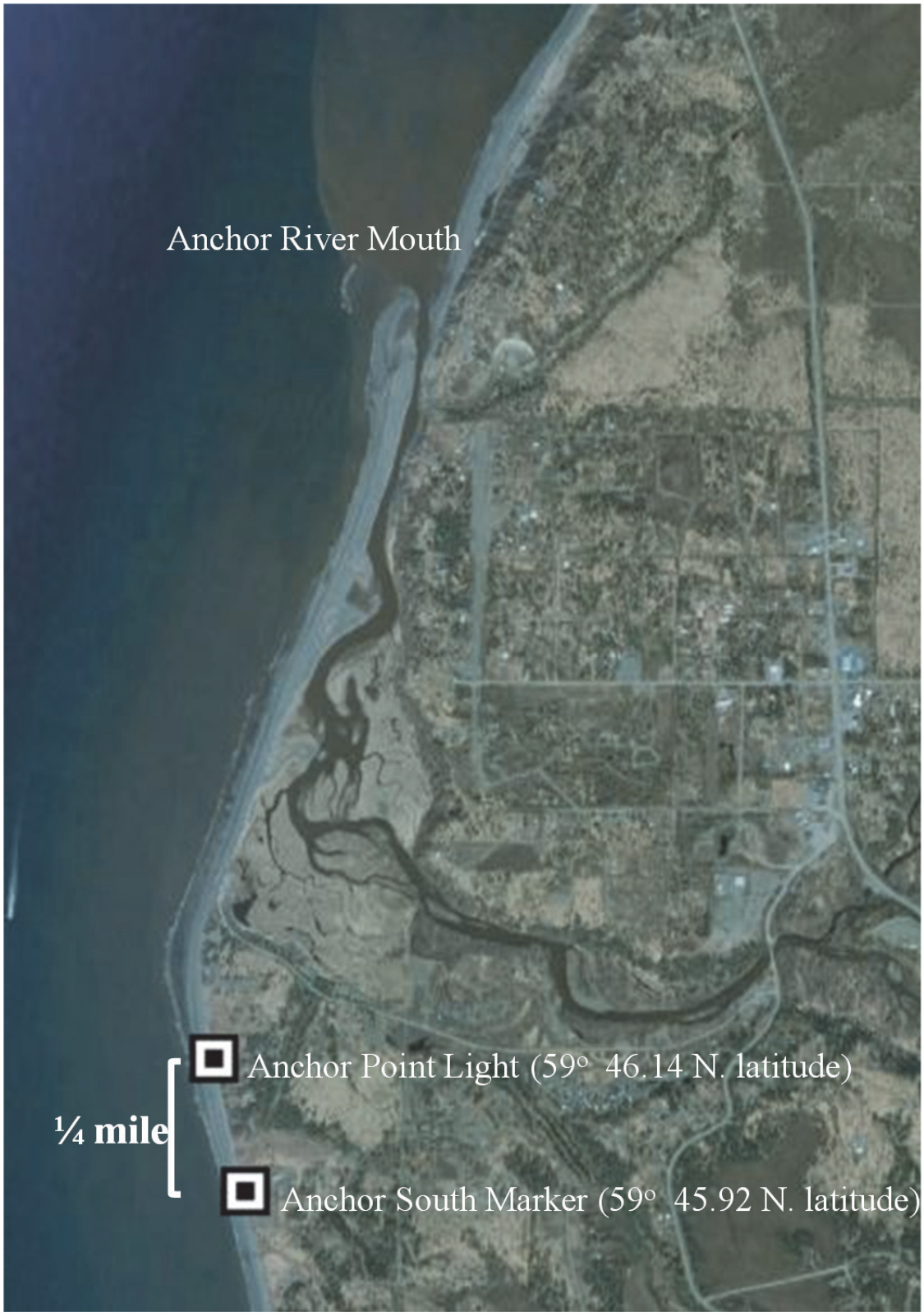

Figure 67-1.–Marker location between the southern Anchor River closed water boundary marker (Anchor South Marker) and winter fishery plan northern boundary (Anchor Point Light).

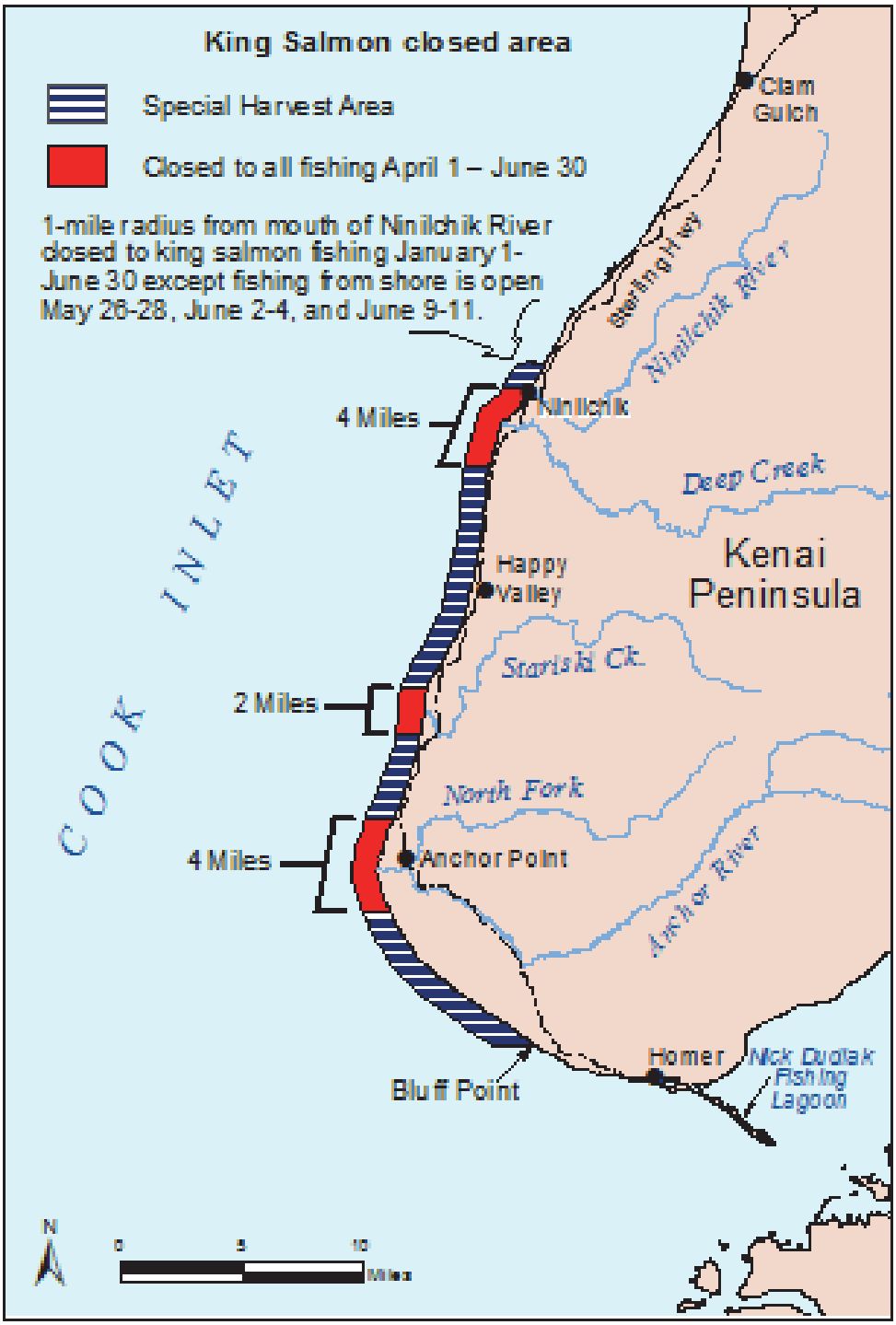

Figure 67-2.–Map of Cook Inlet early-run king salmon special harvest area and closed waters locations.

Figure 67-3.– Early-run plan boundary marker used to identify boundaries between the special harvest area and closed waters from April 1 through June 30.

Table 67-1.–King salmon saltwater sport harvest in Central Cook Inlet and in Lower Cook Inlet, including Kachemak Bay, 1972–2012.

	King salmon harvest					
	Central Cook Inlet [a]			Lower Cook Inlet and Kachemak Bay [b]		
Year	Early-run	Late-run	Total	Spring to Fall	Winter	Total
1972	1,000	1,250	2,250	ND	ND	ND
1973	519	491	1,010	ND	ND	ND
1974	500	100	600	ND	ND	ND
1975	540	345	885	ND	ND	ND
1976	5,495	1,382	6,877	ND	ND	ND
1977	4,617	366	4,983	ND	ND	970
1978	2,669	2,693	5,362	ND	ND	816
1979	3,088	1,164	4,252	ND	ND	1,034
1980	521	747	1,268	ND	ND	431
1981	2,363	170	2,533	ND	ND	1,145
1982	2,497	1,173	3,670	ND	ND	1,963
1983	1,000	1,707	2,707	ND	ND	2,664
1984	2,386	835	3,221	ND	ND	1,559
1985	5,087	1,731	6,818	ND	ND	883
1986	2,888	1,208	4,096	ND	ND	439
1987	3,613	1,512	5,125	ND	ND	452
1988	4,243	1,775	6,018	ND	ND	1,472
1989	3,863	1,616	5,479	ND	ND	899
1990	4,694	1,964	6,658	ND	ND	1,123
1991	4,824	2,019	6,843	ND	ND	775
1992	5,996	2,509	8,505	ND	ND	2,978
1993	8,136	3,404	11,540	ND	ND	4,400
1994	6,850	2,296	9,146	ND	ND	6,154
1995	8,230	2,673	10,903	ND	ND	3,642
1996	4,702	2,006	6,708	ND	ND	3,509
1997	5,646	2,850	8,496	ND	ND	3,591
1998	5,783	1,680	7,463	ND	ND	3,417
1999	4,907	997	5,904	ND	ND	3,605
2000	4,773	1,026	5,799	ND	ND	3,628
2001	3,671	860	4,531	ND	ND	3,715
2002	3,368	427	3,795	3,877	1,423	5,300
2003	4,042	200	4,242	4,590	1,804	6,394
2004	3,880	1,539	5,419	6,034	2,069	8,103
2005	3,746	1,040	4,786	8,170	2,958	11,128
2006	5,035	898	5,933	6,772	1,515	8,287
2007	4,015	797	4,829	3,959	2,011	5,970
2008	2,137	517	2,654	3,357	1,692	5,049
2009	1,415	256	1,671	2,444	1,696	4,140
2010	1,753	558	2,311	4,369	2,559	6,928
2011	2,201	853	3,054	3,711	2,000	5,711
2012	955	453	1,408	3,373	2,079	5,452
Average						
2002–2012	2,959	685	3,646	4,605	1,982	6,587
1996–2012	3,649	997	4,647			5,525

[a] Excludes shore-based harvest

[b] Excludes Homer Spit shore-based harvest

ND = No Data

PROPOSAL 68 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet - Resurrection Bay Saltwater Area, and 5 AAC 58.055. Upper Cook Inlet Salt Water Early-run King Salmon Management Plan.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would relocate the Bluff Point marker to the Anchor River South Marker for management of the Cook Inlet king salmon sport fishery (Figure 68-1).

WHAT ARE THE CURRENT REGULATIONS? There are ten regulations that reference the Anchor River South Marker or the Bluff Point marker. The *Upper Cook Inlet Salt Water Early-run King Salmon Management Plan* (5 AAC 58.055; early-run plan) references the Anchor River south marker at 59° 45.92 N. latitude. The early-run plan applies from April 1 through June 30 and designates marine waters from Bluff Point north to the mouth of the Ninilchik River and within one statute mile of shore as the Early-run King Salmon Special Harvest Area (SHA) (Figure 68-2). In the SHA, guides may not fish while accompanying paid clients (except to provide assistance to a disabled client), and anglers may not continue to fish for any species on the same day after taking a king salmon 20 inches or more in length. The plan also creates three closed areas within the SHA where no sport fishing is allowed: 1) one statute mile north of the Ninilchik River to two statute miles south of Deep Creek, 2) one statute mile north and south from Stariski Creek, and 3) two statute miles north and south of the Anchor River. The closed water boundary located south of the Anchor River is commonly referred to as the Anchor South Marker.

The *Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan* (5 AAC 58.060; winter fishery plan) stipulations apply October 1 through March 31 in salt waters south of latitude of the Anchor Point Light, including all of Kachemak Bay to the latitude of Cape Douglas and east to the longitude of Gore Point. In these waters during this time period, the bag and possession limit of king salmon is two with no minimum size limit. King salmon harvested do not need to be entered on a harvest record and do not count against the Cook Inlet annual king salmon harvest limit. The management plan includes a sport guideline harvest level of 3,000 king salmon for the marine waters south of Bluff Point.

From April 1 through September 30 in salt waters north of the latitude of Bluff Point (59° 40’ N), the king salmon bag and possession limit is one per day with no minimum size limit. In salt waters south of Bluff Point, the bag and possession limit is two per day with no size limit.

From October 1 through March 31 in salt waters north of the Anchor Point Light (59° 46.14’ N), the king salmon bag and possession limit is one per day with no minimum size. In salt waters south of the Anchor Point Light (59° 46.14’ N), the bag and possession limit is two per day, with no minimum size, and there is no recording requirement.

The *Kenai River Late-Run King Salmon Management Plan* (5 AAC 21.359; Kenai late-run plan) stipulates that if the projected inriver return of Kenai River late-run king salmon is less than

15,000 king salmon, the department shall prohibit sport fishing for king salmon in the salt waters of Cook Inlet north of the latitude of Bluff Point.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the king salmon bag and possession limit to two per day, with no size limit in a 6.8 statute mile area between the Anchor River South Marker and Bluff Point from April 1–September 30. It would also exempt those waters from restrictions implemented by emergency order (EO) as directed by the Kenai late-run plan, thereby reducing the harvest savings for Kenai River late-run king salmon realized by that action by an unknown, but likely small, amount. Resulting marine harvests would be expected to increase by an unknown amount, which could result in more restrictive actions placed on the inriver fisheries to meet escapement goals. Finally, this proposal would simplify marine king salmon regulations and fisheries by combining two regulatory boundaries into one, but the Anchor Point Light marker would still remain in place for the winter king salmon fishery.

BACKGROUND: In 1990, the Alaska Board of Fisheries (board) first used Bluff Point as boundary to divide the Cook Inlet areawide king salmon bag and possession limit. South of Bluff Point remained a limit of two king salmon of any size and north of Bluff Point was reduced to a limit of one king salmon limit of any size.

In 1996, when the board adopted the early run plan, it used Bluff Point to define the southern boundary. The early-run plan also defined three closed areas near the mouths of Lower Cook Inlet streams and included the location of the Anchor South Marker.

In 1999, when the board adopted the Kenai late-run plan, the latitude of Bluff Point was used to define the southern boundary of where marine waters would close if stipulations of the plan were enacted.

Since 1990, the board has redefined Bluff Point as a boundary maker for the king salmon fishery once. In 2010, the board moved the northern boundary of the winter king salmon fishery from Bluff Point approximately 9.25 statute miles north along the shore to the Anchor Point Light. The Anchor Point Light is a U.S. Coast Guard-maintained navigational aid.

From 1996–2002, a department study during the spring and summer found that the marine fishery between Bluff Point and Deep Creek harvests a mixture of king salmon stocks from Cook Inlet and the western U.S. Cook Inlet stocks dominate the harvest, but nonlocal stocks make up a significant proportion of the harvest in some years. No single Cook Inlet stock dominates the harvest; rather, many Cook Inlet stocks contribute. Cook Inlet stocks dominated the harvest taken within three-quarters of a mile from shore and nonlocal stocks comprise the largest component of the harvest beyond three-quarters of a mile from shore.

Since 2011, king salmon fisheries north of Bluff Point have generally been restricted in concert with inriver restrictions to conserve king salmon stocks returning to Cook Inlet streams. The 2012 restrictions included closing the SHA to sport fishing (June 15–30) and prohibiting harvest of king salmon within one mile of shore (July 1–18). Stipulations of the Kenai late-run plan were enacted from July 19–31 closing the king salmon sport fishery in all marine waters north of the

latitude of Bluff Point. In 2013, a preseason EO set a combined annual limit of two king salmon in the marine waters between Bluff Point to the mouth of the Ninilchik River and the fresh waters of Anchor River, Deep Creek, and Ninilchik River. Later during the 2013 season, sport fishing for king salmon within one statute mile of shore from Bluff Point to the mouth of the Ninilchik River was prohibited.

Since implementation of the early-run plan, the sport harvest of early-run king salmon averaged (1996–2012) 3,649 fish. From 1996 to 2012, annual harvests were within the guideline harvest level of 8,000 king salmon and have ranged from a peak harvest of 5,783 fish in 1998 to 955 fish in 2012. From 1996, the annual harvest of late-run king salmon averaged 997 fish and has ranged from 200 in 2003 to 1,539 fish in 2004 (Table 68-1).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The department would support combining boundaries where possible, but recognizes 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.

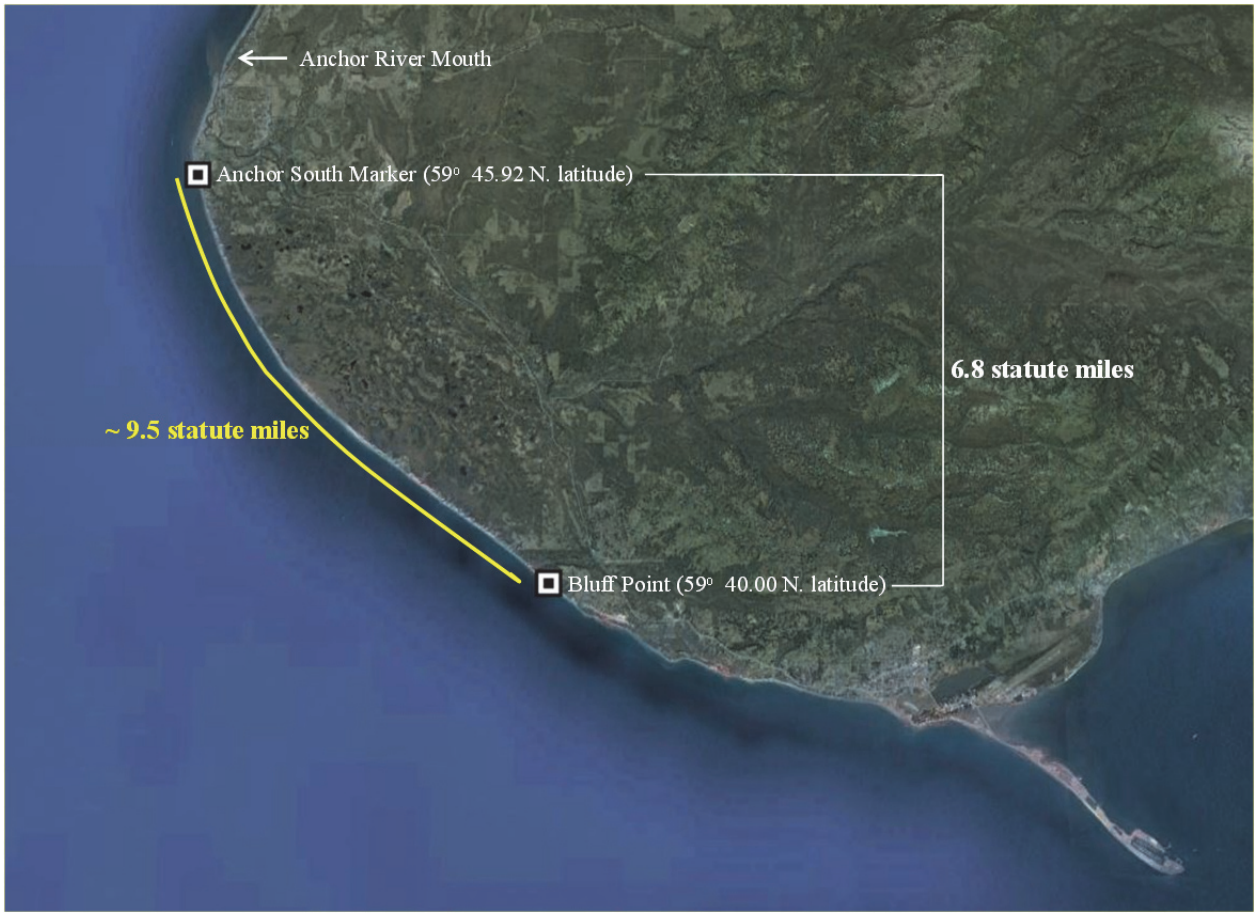

Figure 68-1.–Location of Bluff Point and the Anchor South Marker and distances between the locations.

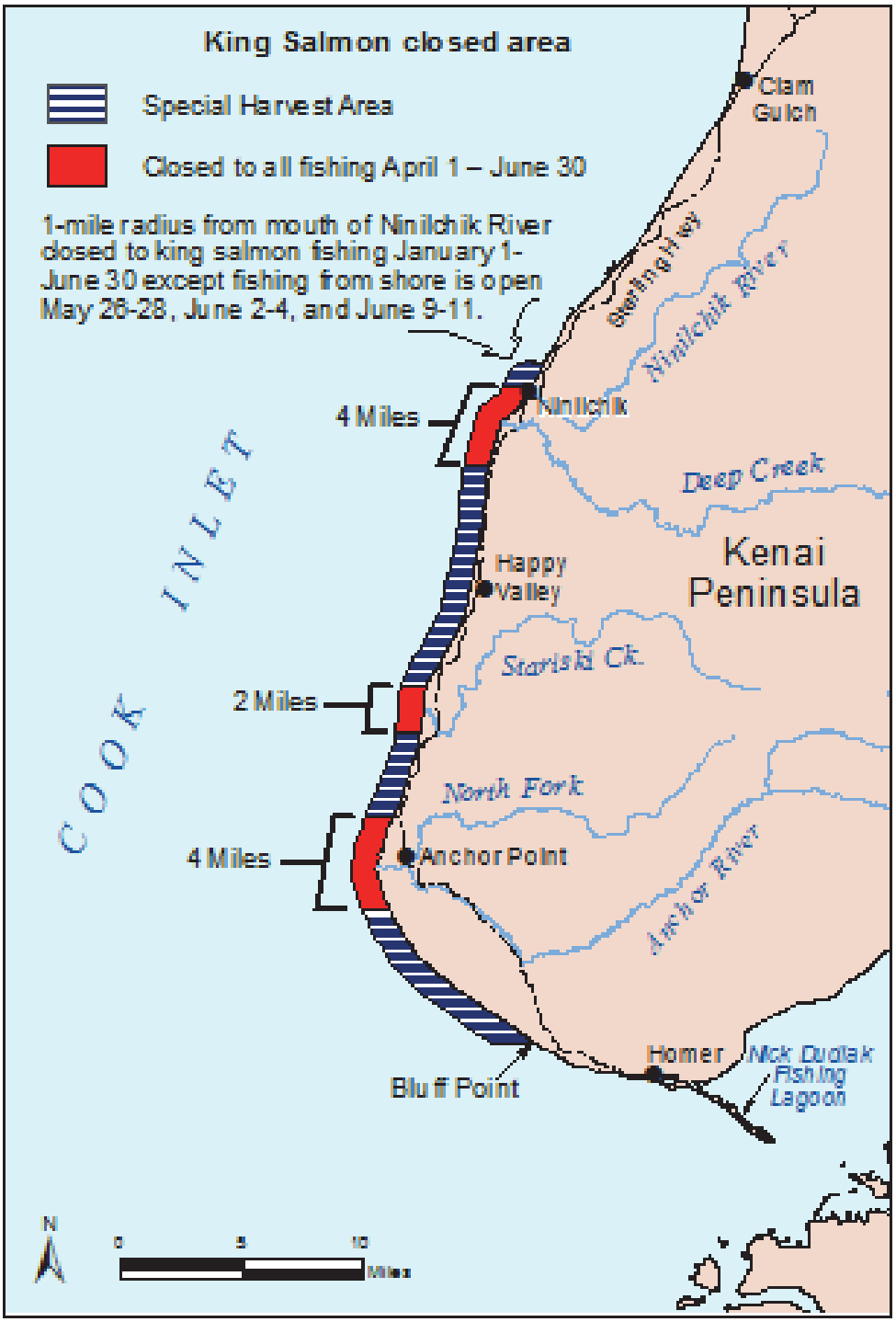

Figure 68-2.–Map of Cook Inlet early-run king salmon special harvest areas and closed waters locations.

Table 68-1.–King salmon saltwater sport harvest in Central Cook Inlet (north of Bluff Point) and in Lower Cook Inlet including Kachemak Bay (south of Bluff Point), 1972–2012.

	King salmon harvest					
	Central Cook Inlet [a]			Lower Cook Inlet and Kachemak Bay [b]		
Year	Early-run	Late-run	Total	Spring to Fall	Winter	Total
1972	1,000	1,250	2,250	ND	ND	ND
1973	519	491	1,010	ND	ND	ND
1974	500	100	600	ND	ND	ND
1975	540	345	885	ND	ND	ND
1976	5,495	1,382	6,877	ND	ND	ND
1977	4,617	366	4,983	ND	ND	970
1978	2,669	2,693	5,362	ND	ND	816
1979	3,088	1,164	4,252	ND	ND	1,034
1980	521	747	1,268	ND	ND	431
1981	2,363	170	2,533	ND	ND	1,145
1982	2,497	1,173	3,670	ND	ND	1,963
1983	1,000	1,707	2,707	ND	ND	2,664
1984	2,386	835	3,221	ND	ND	1,559
1985	5,087	1,731	6,818	ND	ND	883
1986	2,888	1,208	4,096	ND	ND	439
1987	3,613	1,512	5,125	ND	ND	452
1988	4,243	1,775	6,018	ND	ND	1,472
1989	3,863	1,616	5,479	ND	ND	899
1990	4,694	1,964	6,658	ND	ND	1,123
1991	4,824	2,019	6,843	ND	ND	775
1992	5,996	2,509	8,505	ND	ND	2,978
1993	8,136	3,404	11,540	ND	ND	4,400
1994	6,850	2,296	9,146	ND	ND	6,154
1995	8,230	2,673	10,903	ND	ND	3,642
1996	4,702	2,006	6,708	ND	ND	3,509
1997	5,646	2,850	8,496	ND	ND	3,591
1998	5,783	1,680	7,463	ND	ND	3,417
1999	4,907	997	5,904	ND	ND	3,605
2000	4,773	1,026	5,799	ND	ND	3,628
2001	3,671	860	4,531	ND	ND	3,715
2002	3,368	427	3,795	3,877	1,423	5,300
2003	4,042	200	4,242	4,590	1,804	6,394
2004	3,880	1,539	5,419	6,034	2,069	8,103
2005	3,746	1,040	4,786	8,170	2,958	11,128
2006	5,035	898	5,933	6,772	1,515	8,287
2007	4,015	797	4,829	3,959	2,011	5,970
2008	2,137	517	2,654	3,357	1,692	5,049
2009	1,415	256	1,671	2,444	1,696	4,140
2010	1,753	558	2,311	4,369	2,559	6,928
2011	2,201	853	3,054	3,711	2,000	5,711
2012	955	453	1,408	3,373	2,079	5,452
Average						
2002–2012	2,959	685	3,646	4,605	1,982	6,587
1996–2012	3,649	997	4,647			5,525

[a] Excludes shore-based harvest

[b] Excludes Homer Spit shore-based harvest

ND = No Data

PROPOSAL 69 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet - Resurrection Bay Saltwater Area and 5 AAC 58.055. Upper Cook Inlet Salt Water Early-run King Salmon Management Plan.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would open the closed areas surrounding the mouth of the Anchor River and Deep Creek to sport fishing on June 25 instead of June 30.

WHAT ARE THE CURRENT REGULATIONS? The *Upper Cook Inlet Salt Water Early-run King Salmon Management Plan* (5 AAC 58.055; early-run plan) applies from April 1 through June 30 and designates marine waters from Bluff Point north to the mouth of the Ninilchik River and within one statute mile of shore as the Early-run King Salmon Special Harvest Area (SHA) (Figure 69-1). In the SHA, guides may not fish while accompanying paid clients (except to provide assistance to a disabled client), and anglers may not continue to fish for any species on the same day after taking a king salmon 20 inches or more in length. The plan also creates three closed areas within the SHA where no sport fishing is allowed: 1) one statute mile north of the Ninilchik River to two statute miles south of Deep Creek, 2) one statute mile north and south from Stariski Creek, and 3) two statute miles north and south of the Anchor River.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase complexity in the sport fishing regulations from June 25 through June 30. Sport fishing would open adjacent to the mouth of the Anchor River and Deep Creek, but would remain closed adjacent to the mouth of Stariski Creek and Ninilchik River because their closed waters would remain in effect through June 30. The closed area for the Ninilchik River mouth would need to be redefined because it is shared with Deep Creek. It is likely effort will increase and harvest of king salmon bound for the Anchor River and Deep Creek will increase because anglers and guides will be allowed to fish adjacent to the mouth of the streams. This proposal may result in more restrictive action to the inriver fishery to meet escapement goals.

BACKGROUND: The Alaska Board of Fisheries (board) passed the early-run plan in 1996. The plan was intended to stabilize a growing king salmon fishery on fully utilized mixed stocks in the nearshore marine waters from Ninilchik south to Bluff Point, and to prevent overexploitation of king salmon stocks thought to be intercepted in the marine recreational fishery that were experiencing below average returns. These king salmon stocks included Deep Creek, Anchor River, Kenai River, and some Northern Cook Inlet tributaries. Record harvests were occurring in the Anchor River and Deep Creek concurrently with below average escapement. In addition to creating the management plan, the board restricted freshwater king salmon fisheries in Anchor River and Deep Creek as a further conservation measure. The plan also established a closed-water area that extended one mile seaward and encompassed the area from the mouth of the Ninilchik River to two miles south of Deep Creek.

From 1996–2002, a department study during the spring and summer found that the marine fishery between Bluff Point and Deep Creek harvests a mixture of king salmon stocks from Cook Inlet and the western U.S. Cook Inlet stocks dominate the harvest, but nonlocal stocks make up a

significant proportion of the harvest in some years. No single Cook Inlet stock dominates the harvest; rather, many Cook Inlet stocks contribute. Cook Inlet stocks dominated the harvest taken within three-quarters of a mile from shore and nonlocal stocks comprise the largest component of the harvest beyond three-quarters of a mile from shore.

Since 2007, liberalization or restrictions to the Anchor River king salmon sport fishery have generally been paired with liberalizations or restrictions to king salmon fisheries north of Bluff Point in response to escapement levels (Table 69-1). In 2007, the board liberalized the early-run plan by reducing the closed waters near the Anchor River from four miles to two miles. In 2010, the board reversed this action and returned the closed waters area back to four miles.

Since 2011, the fisheries north of Bluff Point were again generally restricted, in concert with inriver restrictions, to conserve king salmon stocks returning to Cook Inlet streams. The 2012 restrictions included closing the SHA to sport fishing. In 2013, a preseason emergency order (EO) set a combined annual limit of two king salmon in the marine waters between Bluff Point to the mouth of the Ninilchik River and the freshwaters of Anchor River, Deep Creek, and Ninilchik River. Later during the 2013 season, sport fishing for king salmon within one statute mile of shore from Bluff Point to the mouth of the Ninilchik River was prohibited.

King salmon continue to enter the Anchor River from June 25 through July 31 based on the percentage of chrome-bright fish counted through the Anchor River weir located approximately two river miles upstream of the mouth. From June 25–30, 62% of the total number of king salmon counted through the weir in 2012 and 2013 were chrome bright. Through mid-July, 38% of the king salmon counted were chrome bright (Table 69-2).

DEPARTMENT COMMENTS: The department **OPPOSES** changing the season date because it would liberalize the saltwater fishery when mature king salmon are returning to Cook Inlet streams, increase harvest potential for Lower Cook Inlet streams, and increase the likelihood that restrictive EOs would be needed inseason to inriver and/or marine fisheries to conserve stocks when runs are low. 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.

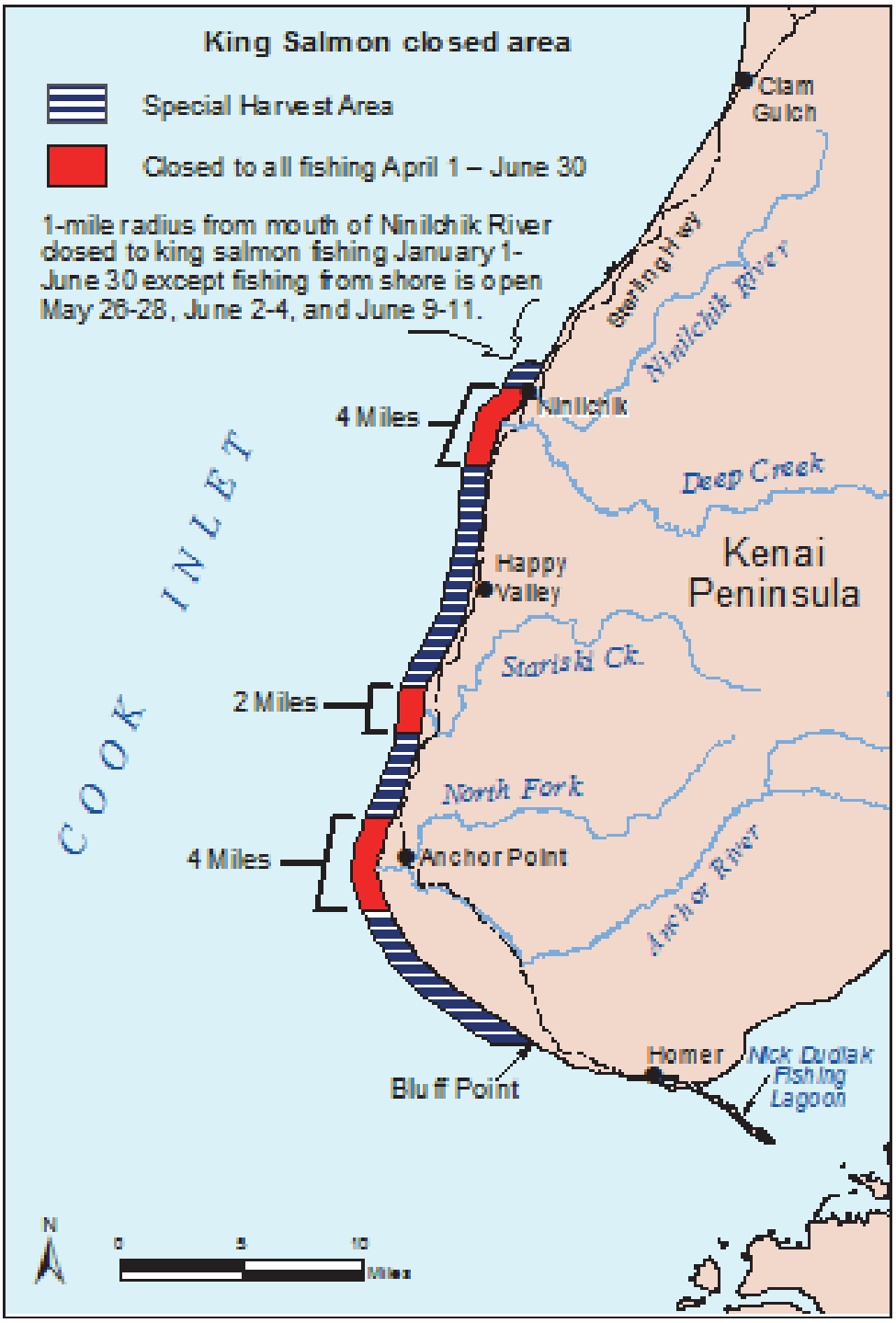

Figure 69-1.–Map of Cook Inlet early-run king salmon special harvest areas.

Table 69-1.–Anchor River king salmon escapement, inriver harvest and exploitation, 2003–2013.

			King salmon			
					Total inriver run	
Year	Escapement Goal	Project dates	Escapement	Inriver harvest	Estimate	Exploitation Rate (%)
2003	750–1,500[a]	May 30–Jul 09	9,238	1,011	10,249	9.9
2004	No Goal	May 15–Sep 15	12,016	1,561	13,577	11.5
2005	No Goal	May 13–Sep 09	11,156	1,432	12,588	11.4
2006	No Goal	May 15–Aug 24	8,945	1,394	10,339	13.5
2007	5000[b]	May 14–Sep 12	9,622	2,081	11,703	17.8
2008	5000[b]	May 13–Sep 12	5,806	1,612	7,418	21.7
2009	5000[b]	May 12–Sep 11	3,455	737	4,192	17.6
2010	3,800–10,000[c]	May 13–Sep 29	4,449	364	4,813	7.6
2011	3,800–10,000[c]	May 13–Sep 21	3,545	573	4,118	13.9
2012	3,800–10,000[c]	May 14–Aug 3	4,509	38	4,547	0.8
2013[d]	3,800–10,000[c]	May 15–Aug 3	4,393	Not Available		
Averages						
2003–2007			10,195	1,496	11,691	12.8
2009–2012			3,990	428	4,418	10.0

[a] Sustainable Escapement Goal based upon aerial survey data.

[b] Lower bound Sustainable Escapement Goal using sonar/weir data.

[c] Sustainable Escapement Goal using sonar/weir data.

[d] Preliminary data.

Table 69-2.–Percent color composition of king salmon counted through the Anchor River weir in 2012 and 2013 combined, and binned by date.

	Percent Color			
Date	Bright	Blush	Red	Total
June 25–30	62	25	13	100
July 1–15	38	20	42	100
July 16–31	12	9	79	100
Aug. 1–3	0	10	90	100

PROPOSAL 70 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet-Resurrection Bay Saltwater Area and 5 AAC 58.060. Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan.

PROPOSED BY: Joe Hanes.

WHAT WOULD THE PROPOSAL DO? This proposal would delay the date king salmon apply to the annual limit in the Lower Cook Inlet winter saltwater king salmon fishery from April 1 to May 1.

WHAT ARE THE CURRENT REGULATIONS? The *Upper Cook Inlet Salt Water Early-run King Salmon Management Plan* (5 AAC 58.055; early-run plan) plan applies from April 1 through June 30 and designates marine waters from Bluff Point north to the mouth of the Ninilchik River and within one statute mile of shore as the Early-run King Salmon Special Harvest Area (SHA). In the SHA, guides may not fish while accompanying paid clients (except to provide assistance to a disabled client), and anglers may not continue to fish for any species on the same day after taking a king salmon 20 inches or more in length. The plan also creates three closed areas within the SHA where no sport fishing is allowed: 1) one statute mile north of the Ninilchik River to two statute miles south of Deep Creek, 2) one statute mile north and south from Stariski Creek, and 3) two statute miles north and south of the Anchor River.

The *Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan* (5 AAC 58.060; winter fishery plan) stipulations apply October 1 through March 31 in salt waters south of latitude of the Anchor Point Light, including all of Kachemak Bay to the latitude of Cape Douglas and east to the longitude of Gore Point, the bag and possession limit of king salmon is two with no minimum size limit. King salmon harvested during this time period do not need to be entered on a harvest record and do not count against the Cook Inlet annual king salmon harvest limit. The management plan includes a sport guideline harvest level of 3,000 king salmon for the marine waters south of Bluff Point.

The Cook Inlet annual limit is five king salmon 20 inches or longer from fresh waters of Cook Inlet north of the latitude of Point Adam, and from Cook Inlet salt waters, except for king salmon harvested in Cook Inlet salt waters south of the Anchor Point Light from October 1 to March 31 (Figure 70-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Delaying the recording requirement for king salmon south of the Anchor Point Light, including the SHA, may result in effort and harvest shifting from north of the Anchor Point Light to south of the light in April. Overall harvest within the Cook Inlet Area may increase by an unknown amount. This regulation would increase regulatory complexity because the bag and possession limit of one king salmon would begin on April 1, while the recording requirement would begin a month later.

BACKGROUND: The salt waters of Cook Inlet support sport troll fisheries on Cook Inlet king salmon stocks in the spring and summer and on "feeder" king salmon year-round. The feeder king salmon fishery that occurs from October 1 to March 31 south of the Anchor Point Light is

referred to as the winter king salmon sport fishery. Most of the winter king fishing effort occurs near Bluff Point, along the south side of Kachemak Bay, and from Point Pogibshi east to the Chugachik Islands. Anglers fishing north of the Homer Spit commonly troll the waters around Bluff Point. Access to the fisheries north of Bluff Point during the spring and summer improves once the tractor boat launches open at Anchor Point and Deep Creek, allowing easy access for large boats to launch at most tide stages. Access also improves for smaller boats launching at the mouth of the Anchor River and Deep Creek once the rivers are free of ice.

In 1988, the Alaska Board of Fisheries (board) revised the king salmon annual limit for the Cook Inlet–Resurrection Bay saltwater area and the fresh waters of Cook Inlet by limiting the area and season in which it applies to only Cook Inlet waters north of the line from Cape Douglas to Point Adam from April 1 through September 30. In 1990, the board reduced the bag and possession limit year-round north of Bluff Point to one king salmon of any size, but maintained the limit south of Bluff Point at two king salmon of any size.

The board passed the early-run plan in 1996. The plan was intended to stabilize a growing king salmon fishery on fully utilized mixed stocks in the nearshore marine waters from Ninilchik south to Bluff Point and to prevent overexploitation of king salmon stocks thought to be intercepted in the marine recreational fishery that were experiencing below average returns. These king salmon stocks included Deep Creek, Anchor River, Kenai River, and some Northern Cook Inlet tributaries. Record harvests were occurring in the Anchor River and Deep Creek concurrently with below average escapement. In addition to creating the management plan, the board restricted freshwater king salmon fisheries in Anchor River and Deep Creek as a further conservation measure.

In November 2001, the board adopted a regulation creating an annual limit of five king salmon for all Cook Inlet waters. The regulation became effective on March 18, 2002. The board cited increasing fishing effort and harvest, and the unknown stock of origin of king salmon in the harvest as reasons for the regulatory change, and an intent to slow future growth of the winter king salmon fishery. Public opposition to the regulation prompted the board to form a Local Area Management Plan (LAMP) committee charged to develop a regulatory alternative to slow the growth in winter king salmon harvest during the spring of 2002. In 2002, the board established the winter fishery plan based upon a proposed plan submitted by the LAMP committee.

In 2010, the board moved the northern boundary of the winter king salmon fishery from Bluff Point approximately 9.25 statute miles north along the shore to the Anchor Point light. The Anchor Point Light is a U.S. Coast Guard-maintained navigational aid. Since 2010, king salmon harvest in the winter king salmon fishery, from October 1 through March 31, has remained well below the sport guideline harvest, averaging 1,982 from 2002–2012 (Table 70-1).

The early-run marine king salmon harvest north of Bluff Point peaked at 8,230 in 1995. Since implementation of the early-run plan the marine sport harvest of early-run king salmon averaged (1996–2012) 3,649 fish. From 1996 to 2012, annual harvests of early-run king salmon have been within the guideline harvest level of 8,000 king salmon and have ranged from a peak harvest of 5,783 fish in 1998 to 955 fish in 2012 (Table 70-1).

From 1996–2002, a department study during the spring and summer found that the marine fishery between Bluff Point and Deep Creek harvests a mixture of king salmon stocks from Cook Inlet and the western U.S. Cook Inlet stocks dominate the harvest, but nonlocal stocks make up a significant proportion of the harvest in some years. No single Cook Inlet stock dominates the harvest; rather, many Cook Inlet stocks contribute. Cook Inlet stocks dominated the harvest taken within three-quarters of a mile from shore and nonlocal stocks comprise the largest component of the harvest beyond three-quarters of a mile from shore.

The Anchor River supports the largest run of king salmon within the Lower Cook Inlet Management Area. Since 2007, liberalization or restrictions to the Anchor River king salmon sport fishery have generally been paired with liberalizations or restrictions to king salmon fisheries north of Bluff Point in response to escapement levels. In 2007, the board liberalized the early-run plan by reducing the closed waters near the Anchor River from four miles to two miles. In 2010, the board reversed this action and returned the closed waters area back to four miles.

Since 2011, the fisheries north of Bluff Point were again generally restricted in concert with inriver restrictions to conserve king salmon stocks returning to Cook Inlet streams. The 2012 restrictions included closing the SHA to sport fishing. In 2013, a preseason emergency order set a combined annual limit of two king salmon in the marine waters between Bluff Point to the mouth of the Ninilchik River and the fresh waters of Anchor River, Deep Creek, and Ninilchik River. Later during the 2013 season, sport fishing for king salmon within one statute mile of shore from Bluff Point to the mouth of the Ninilchik River was prohibited.

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.

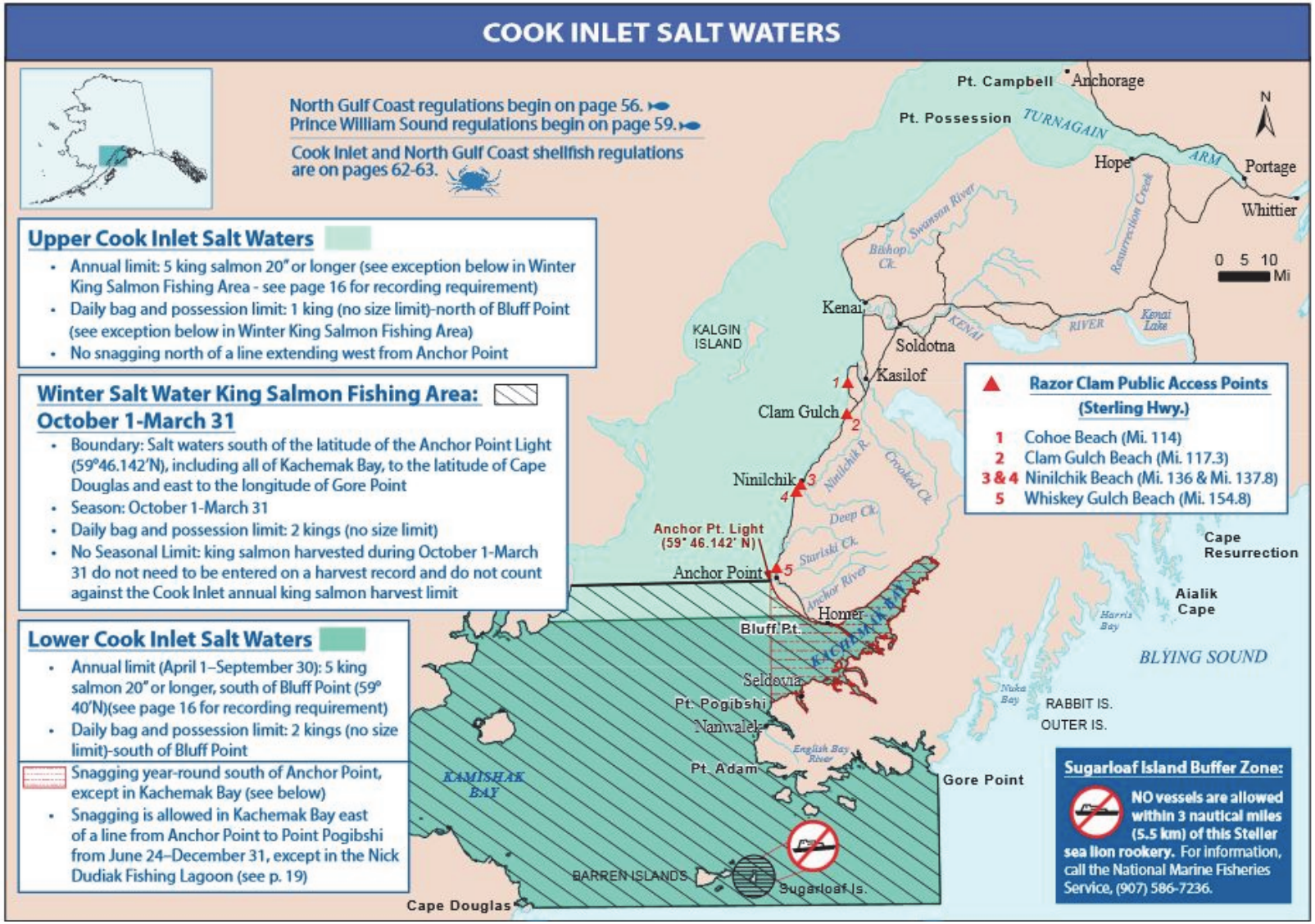

Figure 70-1.–Cook Inlet marine sport fishery regulation summary for king salmon, 2013 Alaska Sport Fishing Regulations Summary, Southcentral Alaska, page 18 .

Table 70-1.–King salmon saltwater sport harvest in Central Cook Inlet (north of Bluff Point) and in Lower Cook Inlet, including Kachemak Bay (south of Bluff Point), 1972–2012.

	King salmon harvest					
	Central Cook Inlet [a]			Lower Cook Inlet and Kachemak Bay [b]		
Year	Early-run	Late-run	Total	Spring to Fall	Winter	Total
1972	1,000	1,250	2,250	ND	ND	ND
1973	519	491	1,010	ND	ND	ND
1974	500	100	600	ND	ND	ND
1975	540	345	885	ND	ND	ND
1976	5,495	1,382	6,877	ND	ND	ND
1977	4,617	366	4,983	ND	ND	970
1978	2,669	2,693	5,362	ND	ND	816
1979	3,088	1,164	4,252	ND	ND	1,034
1980	521	747	1,268	ND	ND	431
1981	2,363	170	2,533	ND	ND	1,145
1982	2,497	1,173	3,670	ND	ND	1,963
1983	1,000	1,707	2,707	ND	ND	2,664
1984	2,386	835	3,221	ND	ND	1,559
1985	5,087	1,731	6,818	ND	ND	883
1986	2,888	1,208	4,096	ND	ND	439
1987	3,613	1,512	5,125	ND	ND	452
1988	4,243	1,775	6,018	ND	ND	1,472
1989	3,863	1,616	5,479	ND	ND	899
1990	4,694	1,964	6,658	ND	ND	1,123
1991	4,824	2,019	6,843	ND	ND	775
1992	5,996	2,509	8,505	ND	ND	2,978
1993	8,136	3,404	11,540	ND	ND	4,400
1994	6,850	2,296	9,146	ND	ND	6,154
1995	8,230	2,673	10,903	ND	ND	3,642
1996	4,702	2,006	6,708	ND	ND	3,509
1997	5,646	2,850	8,496	ND	ND	3,591
1998	5,783	1,680	7,463	ND	ND	3,417
1999	4,907	997	5,904	ND	ND	3,605
2000	4,773	1,026	5,799	ND	ND	3,628
2001	3,671	860	4,531	ND	ND	3,715
2002	3,368	427	3,795	3,877	1,423	5,300
2003	4,042	200	4,242	4,590	1,804	6,394
2004	3,880	1,539	5,419	6,034	2,069	8,103
2005	3,746	1,040	4,786	8,170	2,958	11,128
2006	5,035	898	5,933	6,772	1,515	8,287
2007	4,015	797	4,829	3,959	2,011	5,970
2008	2,137	517	2,654	3,357	1,692	5,049
2009	1,415	256	1,671	2,444	1,696	4,140
2010	1,753	558	2,311	4,369	2,559	6,928
2011	2,201	853	3,054	3,711	2,000	5,711
2012	955	453	1,408	3,373	2,079	5,452
Average						
2002–2012	2,959	685	3,646	4,605	1,982	6,587
1996–2012	3,649	997	4,647			5,525

[a] Excludes shore-based harvest

[b] Excludes Homer Spit shore-based harvest

ND = No Data

PROPOSAL 71 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet-Resurrection Bay Saltwater Area and 5 AAC 58.060. Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan.

PROPOSED BY: Mary J. Adami.

WHAT WOULD THE PROPOSAL DO? This proposal would decrease the Lower Cook Inlet winter saltwater king salmon bag and possession limit to one fish, and establish an annual limit of two king salmon.

WHAT ARE THE CURRENT REGULATIONS? The *Lower Cook Inlet Winter Salt Water King Salmon Sport Fishery Management Plan* (5 AAC 58.060; winter fishery plan) stipulations apply October 1 through March 31 in salt waters south of latitude of the Anchor Point Light at 59° 46.14 N. latitude, including all of Kachemak Bay, to the latitude of Cape Douglas and east to the longitude of Gore Point. In these waters at this time, the bag and possession limit of king salmon is two with no minimum size limit (Figure 71-1). King salmon harvested during this time period do not need to be entered on a harvest record and do not count against the Cook Inlet annual king salmon harvest limit. The management plan includes a sport guideline harvest level (GHL) of 3,000 king salmon for the marine waters south of Bluff Point.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce harvest and fishing opportunity for "feeder" king salmon during the fall and winter, and may result in effort shifting to the spring and summer as a result of the reduced opportunity.

BACKGROUND: Anglers have trolled for immature feeder king salmon in Kachemak Bay throughout the year since the 1960s or earlier. The feeder king salmon sport fishery that occurs from October 1 to March 31 is referred to as the winter king salmon sport fishery. This fishery provides opportunity both as a primary activity and as an alternative when other fisheries are poor. The stock composition of the immature king salmon is largely unknown, but is likely comprised of nonlocal wild and hatchery fish. The winter king salmon fishery is dependent on weather conditions and size of boat. Most fishing effort occurs near Bluff Point, and the south side of Kachemak Bay, from Point Pogibshi east to Chugachik Island.

In 1988, the Alaska Board of Fisheries (board) revised the king salmon annual limit for the Cook Inlet–Resurrection Bay saltwater area and the fresh waters of Cook Inlet by limiting the area and season in which it applies to only Cook Inlet waters north of the line from Cape Douglas to Point Adam from April 1 through September 30. In 1990, the board reduced the bag and possession limit year-round north of Bluff Point to one king salmon of any size, but maintained the limit south of Bluff Point at two king salmon of any size.

In November 2001, the board adopted a regulation creating an annual limit of five king salmon for all Cook Inlet waters. The regulation became effective on March 18, 2002. The board cited increasing fishing effort and harvest, and unknown stock of origin of king salmon in the harvest as reasons for the regulatory change, and an intent to slow future growth of the winter king salmon fishery. Public opposition to the regulation prompted the board to form a Local Area

Management Plan (LAMP) committee charged to develop a regulatory alternative to slow growth in the winter king salmon harvest during the spring of 2002. In 2002, the board established the winter fishery plan based upon a proposed plan submitted by the LAMP committee.

In 2010, the board moved the northern boundary of the winter king salmon fishery from Bluff Point approximately 6.8 statute miles to the Anchor Point light. Reasons cited for moving the boundary include harvests below the GHL, that increasing the area would not result in harvest exceeding the GHL, and that the Bluff Point land marker was difficult to distinguish. In addition, the board considered that, since access is limited north of the Anchor Point Light during the fall and winter months, most of the effort occurred south of the Anchor Point Light.

Since 2002, unguided harvest has accounted for approximately 81% of the 2002–2012 average. Annual harvest has been below the GHL, ranging from 1,423 in 2002 to 2,958 in 2005 (Table 71-1).

Information about the origin of fish missing their adipose fin (indicating that the fish might be tagged with a coded-wire tag) has been collected during department sampling programs, from salmon derbies, and from samples voluntarily turned in by sport anglers. Sport-harvested king salmon caught by boat anglers were sampled by department personnel during the offseason (prior to May and after July) from 1994 through 1996, from both the early-run (May through June 24) and late-run (June 25 through mid-July) summer harvests in 1997 and 1998, and from early-run harvests during 1998 through 2002.

Winter feeder kings are thought to be largely nonlocal wild and hatchery king salmon from Oregon, Washington, British Columbia, and Southeast Alaska because no coded-wire-tagged Cook Inlet king salmon have been recovered from the fishery from any source October 1 to March 31 (Table 71-2). However, relatively few king salmon stocks of Cook Inlet origin have been tagged and relatively few individual Cook Inlet fish received tags compared to the diversity of stocks outside of Cook Inlet that are the focus of extensive tagging programs.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The winter king salmon fishery has never exceeded the GHL and targets nonlocal king salmon stocks while providing a unique fishing opportunity for anglers. This proposal may shift effort and harvest to fully utilized Cook Inlet stocks in the spring and 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.

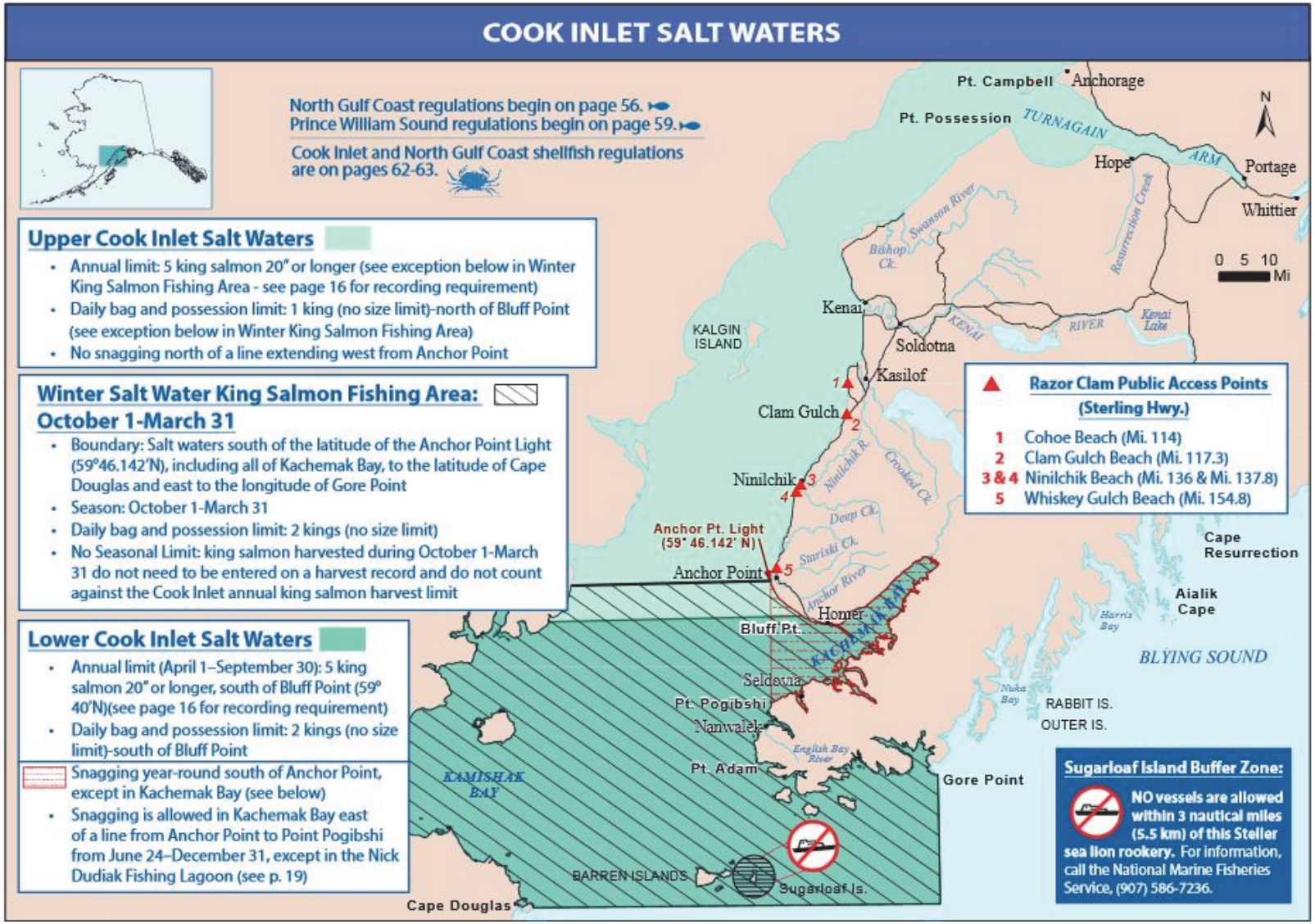

Figure 71-1.–Cook Inlet marine sport fishery regulation summary for king salmon, 2013 Alaska Sport Fishing Regulations Summary, Southcentral Alaska, page 18 .

Table 71-1.–King salmon harvest in Lower Cook Inlet and Kachemak Bay from October 1 to March 31, 2002–2012.

	King Salmon Harvest [a]		Total
Year	Guided	Unguided	Harvest
2002	204	1,219	1,423
2003	289	1,515	1,804
2004	419	1,650	2,069
2005	412	2,546	2,958
2006	169	1,346	1,515
2007	404	1,607	2,011
2008	336	1,356	1,692
2009	310	1,386	1,696
2010	789	1,770	2,559
2011	441	1,559	2,000
2012	330	1,749	2,079
Average	373	1,609	1,982

Source: Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994, Howe et al. 1995, 1996, 2001 a-d, Walker et al. 2003, Jennings et al. 2004, 2006a-b, 2007, 2009 a-b, 2010 a-b, 2011 a-b, and In prep).

[a] Excludes shoreline harvest.

Table 71-2.–King salmon coded-wire-tag recoveries from volunteer sport samples within Kachemak Bay and Lower Cook Inlet from October 1 to March 31, 1978–2013.

	Number of coded-wire tagged king salmon					Total
Year	British Columbia	Oregon	Washington	Southeast Alaska	No tag	number samples
1978						0
1979		1	1	1	1	4
1981	1					1
1992	8					8
1993	3					3
1994	13	1	1		1	16
1995	11					11
1996	4					4
1997	1					1
1998	4					4
2000	3	1	1		1	6
2001	2			1		3
2002	4	1	1	1	1	8
2003	8	2	2		2	14
2004	7			1		8
2005	5			3		8
2006	5			1		6
2007				1		1
2008	2			1		3
2009	3	2	2		2	9
2010	4	3	3	3	3	16
2011	4					4
2012	4	1	1	2	1	9
2013	3	1	1	2	1	8
Total	99	13	13	17	13	155

PROPOSAL 72 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet-Resurrection Bay Saltwater Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would eliminate the third Saturday in August from the youth-only fishery (late-run coho salmon) zone in the Nick Dudiak Fishing Lagoon (NDFL).

WHAT ARE THE CURRENT REGULATIONS? A person 16 years of age or older may not sport fish in the Homer Spit youth-fishery zone, identified by ADF&G regulatory markers within the Nick Dudiak Fishing Lagoon (NDFL), during designated youth-only fisheries, which occur on the first Saturday in June and the first and third Saturdays in August.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? All anglers, regardless of age, will be provided the opportunity to fish the third Saturday in August in this area. Regulations will better match fishing opportunity and will provide families planning recreational activities with more appropriate expectations.

BACKGROUND: The NDFL is a terminal harvest fishery that has been stocked with early-run king salmon since 1984, early-run coho salmon since 2001, and late-run coho salmon since 1988. The primary purpose of this terminal fishery is to provide fishing opportunities in Kachemak Bay. In addition, it provides an alternative to fishing on wild salmon stocks in Lower Cook Inlet.

In April 2004, the Alaska Legislature passed HB 98, which gave the Alaska Board of Fisheries (board) authority to establish restricted seasons and areas for persons under 16 years of age to participate in sport fishing. In November 2004, the board established three youth-only fisheries at the NDFL. The youth-only fisheries were established in a designated zone within the NDFL on Saturdays during the general peak run timing of early-run king salmon, early-run coho salmon, and late-run coho salmon. Department staff make themselves available for about three to four hours for each youth-only fishery when the most successful fishing occurs (during the rising tide when sea water floods into the lagoon) to help youth anglers gear up and fish returning salmon.

Cook Inlet broodstock have been used to stock NDFL with early-run king salmon and early-run coho salmon, while Resurrection Bay (Bear Lake) broodstock has been used for stocking late-run coho salmon. Under the department's genetic guidelines, stock transfers of late-run coho salmon smolt from Resurrection Bay drainages to Cook Inlet drainages are no longer approved. The last stocking of late-run coho salmon into the NDFL was in 2012 and returning adults will no longer be available for harvest beginning in 2014.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Regulations providing for the youth-only fishery zone on the third Saturday in August at the NDFL when late-run coho salmon are no longer present do not provide a benefit to the youth angler; therefore, this regulation should be repealed. Youth anglers could still fish in the NDFL on the third Saturday in August, but with all anglers throughout the lagoon.

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 73 – 5 AAC 77.545. Kachemak Bay Personal Use Dip Net Fishery Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would require personal use-caught salmon in the China Poot dip net fishery to be marked by removing both tips (lobes) of the tail fin.

WHAT ARE THE CURRENT REGULATIONS? In China Poot Creek, upstream from ADF&G regulatory markers, sockeye salmon may be taken by dip net from July 1 through August 7, with a bag and possession limit of six fish. King, pink, chum, and coho salmon may not be retained or possessed. All king, pink, chum, and coho salmon caught must be released immediately and returned to the water unharmed.

A person may not possess salmon taken under the authority of a personal use salmon fishing permit unless both tips of the tail fin have been removed from the salmon before the salmon is concealed from plain view or transported from the fishing site.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would increase the ability to enforce bag limits in the personal use and sport fisheries.

BACKGROUND: Leisure Lake, at the headwaters of China Poot Creek, has been stocked with sockeye salmon since 1976. Stocking is used to supplement commercial harvest in Kachemak Bay. Sockeye salmon that escape the commercial fishery enter China Poot Creek where barrier falls prevent sockeye salmon passage upstream into Leisure Lake. The personal use fishery, which occurs along 200 yards of China Poot Creek between the intertidal area and the barrier falls, was established to harvest fish returning to a terminal harvest location where they are no longer available to the commercial fishery. The personal use sockeye salmon harvest was reported in the statewide harvest survey from 1983–1995 and averaged 3,680 fish.

The marking requirement for personal use caught salmon is a statewide regulation and is contingent upon the fishery being conducted under the authority of a permit. A permit is not required for Alaska residents to participate in the China Poot personal use fishery; therefore, marking by clipping both tips of the tail fin of the sockeye salmon harvested in the personal use dip net fishery is not required. Alaska residents who participate in the China Poot personal use and sport fisheries may legally possess six sockeye salmon from each fishery, for a total harvest of twelve sockeye salmon. Annually, Alaska Wildlife Troopers and department staff receive complaints of overlimits of personal use-caught salmon. It is difficult to enforce bag and possession limits of personal use-caught sockeye salmon in the China Poot personal use fishery because there is no marking requirement. Enforcement personnel checking bag limits of fish in the Homer harbor or at fishing cleaning tables near the harbor are unable to verify in which fishery the fish were harvested. Difficulties increase when anglers clean personal use-caught sockeye salmon from other fisheries (e.g., Kasilof). Because personal use fish are not marked, it also becomes more difficult to track if these fish are used for commerce.

DEPARTMENT COMMENTS: The department submitted and **SUPPORTS** this proposal. Adopting a marking requirement will facilitate enforceability of the regulation and provide consistency across 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.

PROPOSAL 74 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet - Resurrection Bay Saltwater Area.

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would decrease the lingcod bag limit in Cook Inlet from two to one fish.

WHAT ARE THE CURRENT REGULATIONS? In the salt waters of Cook Inlet west of Gore Point and north of Cape Douglas, including Kachemak Bay and the Barren Islands (Figure 74-1), lingcod may be taken only from July 1 through December 31, there is a bag and possession limit of two fish, and the minimum size is 35 inches in length (28 inches with the head removed). Anglers may gaff only legal-sized lingcod that they harvest during the open season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Guided and unguided harvest opportunity would be reduced. Charter harvest may be reduced by approximately 38%, assuming no change in effort. Anglers may increase targeting and harvest of rockfish and other groundfish. The decreased bag limit would be consistent with North Gulf Coast waters, but inconsistent with Prince William Sound.

BACKGROUND: The sport fishery accounts for the majority of lingcod harvest in Cook Inlet. Most lingcod are caught in state waters from the Barren Islands east through the Chugach Islands to Gore Point. Very few anglers target lingcod exclusively; most lingcod are taken by anglers targeting other species or targeting lingcod in conjunction with other species (combination trip).

Lingcod are common along the outer Kenai Peninsula from Gore Point to the Chugach Islands and around the Barren Islands, and occasionally, juveniles are found in Kachemak Bay and as far north as Anchor Point. While adult lingcod can be found to depths of 1,200 feet, they more typically inhabit nearshore rocky reefs from 30–300 feet in depth.

Lingcod are a relatively fast growing fish and can live up to 29 years. Females grow faster and attain larger sizes than males. The sport fish minimum size limit concentrates harvest on the largest fish, which are the most fecund females. Female lingcod begin to mature at about 30 inches and 50% are mature at an age of seven years and length of 33 inches in Southeast and Southcentral Alaska. Maturity information is not available for male lingcod in Alaska, but nearly all males in southern British Columbia are sexually mature at a length of 28 inches.

In 1992, lacking a comprehensive stock assessment program, the Alaska Board of Fisheries adopted a suite of regulatory measures for the Cook Inlet–Resurrection Bay Saltwater Area as a precautionary approach for management of the sport lingcod fishery. For Cook Inlet (west of Gore Point), these included a minimum size limit of 35 inches total length to allow fish to spawn prior to being harvested, and a closed season of January 1 through June 30 to protect spawners and nest-guarding males. These also included a requirement that lingcod be landed by hand or with a landing net. The last requirement was repealed in 2003 with passage of a statewide prohibition on gaffing of fish that are to be released.

There is no lingcod abundance assessment for Cook Inlet. However, the department assesses the lingcod sport fishery using the following: 1) annual guided and unguided harvest and effort estimated by the Statewide Harvest Survey (SWHS), 2) guided effort and harvest by individual anglers and by statistical area as reported in charter logbooks, and 3) age, length, and sex composition, as well as spatial distribution of harvest estimated through dockside port sampling.

Sport lingcod harvest increased sharply in the mid-2000s (Table 74-1). Guided anglers accounted for 65% to 85% of the total area sport harvest since 2000. Overall, guided harvest, estimated by the SWHS, is similar to harvest reported in guided logbooks (Figure 74-2). Ninety percent of the lingcod harvest was taken by anglers targeting halibut or halibut in combination with other bottomfish.

Average length of harvested lingcod has remained fairly consistent since 1994, at about 40–44 inches. Lingcod average weight increased from approximately 23 lb in 1993 to over 33 lb in 2002, then decreased slightly to 26–28 lb in recent years. Average age and maximum age have increased in the sport harvest since 1993 (Figure 74-3). The harvest is composed of a broad range of age classes (7–29 yrs.) Together, these observations suggest a low exploitation rate and good recruitment most years. Although abundance of lingcod is not estimated, current harvest rates appear to be sustainable given the density of lingcod observed in surveys of waters near Seward, and the likely area of rocky habitat in Lower Cook Inlet.

Charter logbooks indicate that the 2010–2012 average annual guided harvest was 4,177 lingcod. An analysis of logbook harvest data for individual anglers indicates that, assuming recent levels of effort and success, a one-fish bag limit would be expected to reduce lingcod harvest by about 35–42%, or about 1,460–1,750 fish.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Current regulations are designed to allow all fish to spawn prior to becoming susceptible to harvest, protect spawning fish, and protect males during the nest-guarding period. Under current regulations, lingcod harvest has maintained a stable size composition and broad diversity of age classes, which suggests that current harvest levels are 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.

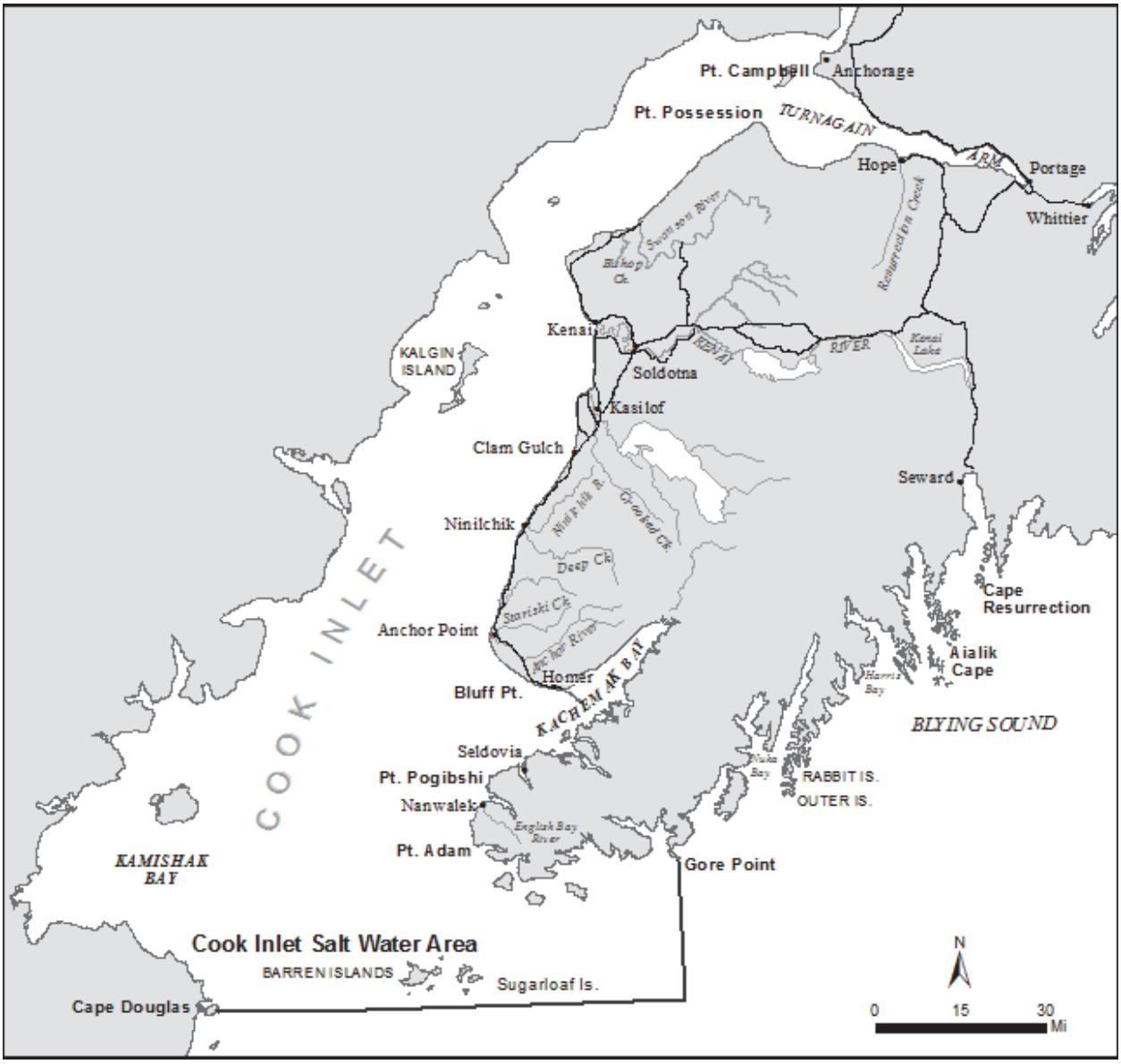

Figure 74-1.–Map of Cook Inlet Salt Water Area.

Table 74-1.–Statewide Harvest Survey estimated sport lingcod harvest (numbers of fish) by guided and unguided anglers in the Central (CCI) and Lower Cook Inlet (LCI) fisheries, 1990–2012[a].

	CCI				LCI				Total Cook Inlet			
Year	Guided	Unguided	Total	% guided	Guided	Unguided	Total	% guided	Guided	Unguided	Total	% guided
1990	71	768	839	8%	1,046	759	1,805	58%	1,117	1,527	2,644	42%
1991	63	926	989	6%	806	945	1,751	46%	869	1,871	2,740	32%
1992	327	615	942	35%	802	1,455	2,257	36%	1,129	2,070	3,199	35%
1993	0	0	0	0%	993	643	1,636	61%	993	643	1,636	61%
1994	0	0	0	0%	766	418	1,184	65%	766	418	1,184	65%
1995	140	9	149	94%	703	267	970	72%	843	276	1,119	75%
1996	392	496	888	44%	855	462	1,317	65%	1,247	958	2,205	57%
1997	190	283	473	40%	1,225	537	1,762	70%	1,415	820	2,235	63%
1998	336	125	461	73%	617	378	995	62%	953	503	1,456	65%
1999	112	107	219	51%	616	463	1,079	57%	728	570	1,298	56%
2000	190	24	214	89%	1,110	490	1,600	69%	1,300	514	1,814	72%
2001	345	128	473	73%	1,054	460	1,514	70%	1,399	588	1,987	70%
2002	206	30	236	87%	910	454	1,364	67%	1,116	484	1,600	70%
2003	242	122	364	66%	1,411	344	1,755	80%	1,653	466	2,119	78%
2004	139	320	459	30%	2,027	825	2,852	71%	2,166	1,145	3,311	65%
2005	283	0	283	100%	1,896	857	2,753	69%	2,179	857	3,036	72%
2006	301	9	310	97%	2,399	598	2,997	80%	2,700	607	3,307	82%
2007	139	47	186	75%	5,218	1,608	6,826	76%	5,357	1,655	7,012	76%
2008	164	32	196	84%	4,839	1,098	5,937	82%	5,003	1,130	6,133	82%
2009	233	112	345	68%	3,789	1,660	5,449	70%	4,022	1,772	5,794	69%
2010	351	55	406	86%	3,692	1,127	4,819	77%	4,043	1,182	5,225	77%
2011	346	346	692	50%	4,951	1,834	6,785	73%	5,297	2,180	7,477	71%
2012	107	363	470	23%	3,743	1,330	5,073	74%	3,850	1,693	5,543	69%

[a] Estimates after 1995 include the West Cook Inlet portion, apportioned between Central and Lower Cook Inlet.

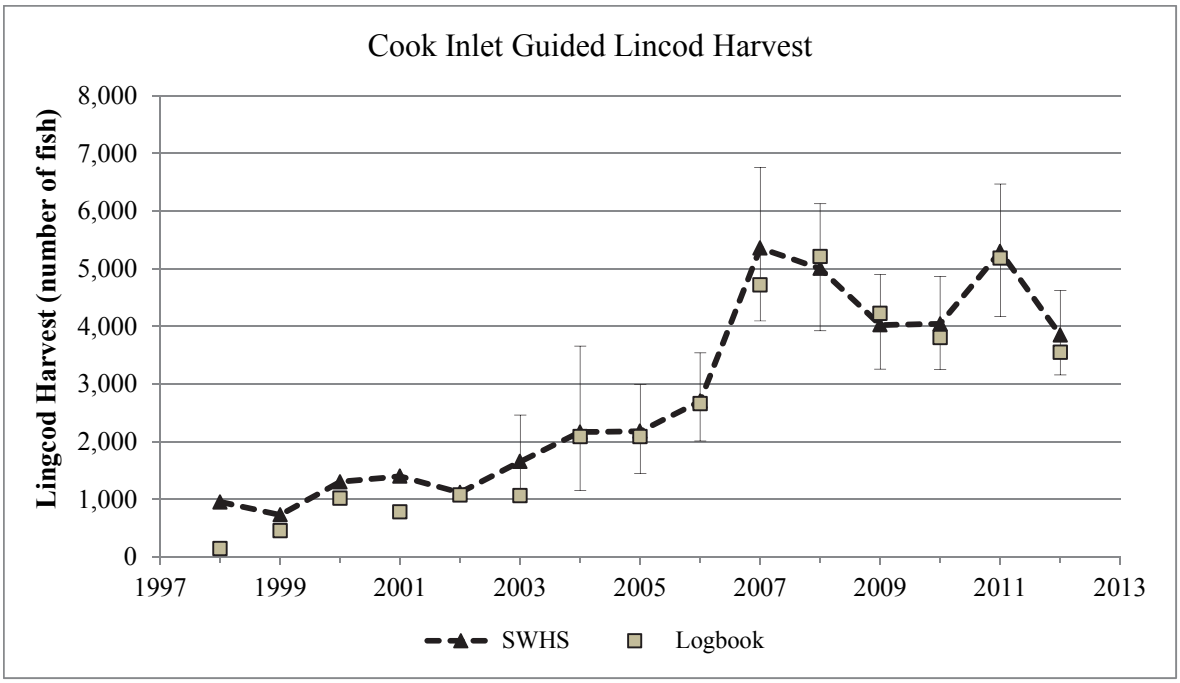

Figure 74-2.–Comparison between lingcod harvest estimated by the Statewide Harvest Survey (with 95% confidence intervals) and censused from charter logbooks (with 95% confidence intervals), 1997–2012.

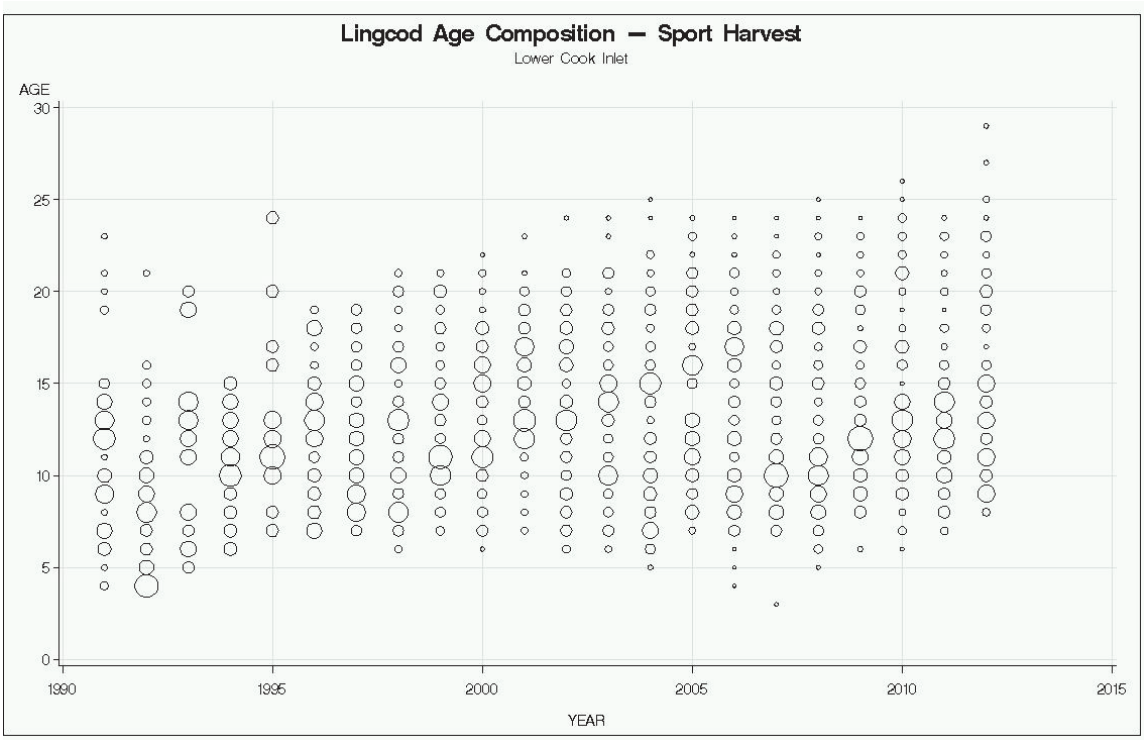

Figure 74-3.–Age composition of the lingcod sport harvest landed at the Homer harbor, 1991–2012. (Bubble diameter is proportional to the percentage of lingcod harvested in each age group.)

PROPOSAL 75 –- 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet - Resurrection Bay Saltwater Area.

PROPOSED BY: Mel Erickson.

WHAT WOULD THE PROPOSAL DO? This proposal would open the lingcod sport fishing season west of Gore Point on June 1 instead of July 1.

WHAT ARE THE CURRENT REGULATIONS? In the salt waters of Cook Inlet west of Gore Point and north of Cape Douglas, including Kachemak Bay and the Barren Islands, lingcod may be taken only from July 1 through December 31, there is a bag and possession limit of two fish, and the minimum size is 35 inches in length (28 inches with the head removed). Anglers may gaff only legal-sized lingcod that they harvest during the open season.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Annual production of lingcod could be reduced by the harvest of male lingcod during a portion of the nest-guarding period. The fishing season west of Gore Point would be inconsistent with waters east of Gore Point. Angler effort and harvest may increase west of Gore Point from anglers wanting to fish for lingcod in June.

BACKGROUND: Lingcod are common along the outer Kenai Peninsula from Gore Point to the Chugach Islands and around the Barren Islands, and occasionally juveniles are found in Kachemak Bay and as far north as Anchor Point. While adult lingcod can be found to depths of 1,200 feet, they more typically inhabit nearshore rocky reefs from 30–300 feet in depth.

Knowledge of spawning is based on studies from the Pacific Northwest and Southeast Alaska. Lingcod spawn from mid-February through mid-March in Southeast Alaska, about one month later than spawning in the Pacific Northwest. Prior to spawning, males move into shallow water along rocky reefs affected by wave action or strong tidal currents and begin defending territories. During spawning, females deposit eggs in layers in a single mass located in crevices or under large boulders within a male territory. Males fertilize the egg mass and remain in the vicinity to guard the nest, while females leave the area after spawning. Males are polygamous, fertilizing eggs of multiple females within a season and between seasons. Males typically guard a single egg mass, but have been observed guarding up to three egg masses.

The egg incubation and nest guarding period averages 7–8 weeks, but can take longer in colder water or water with reduced flow rates. Most nest guarding is done by the end of March in Washington, by mid-April in British Columbia, and by early to mid-May in Southeast Alaska. There are no direct data on the nest guarding season in Southcentral Alaska, but the latitudinal trend suggests nest guarding extends into June. Male lingcod are aggressive throughout the nest-guarding period, making them extremely vulnerable to harvest. Some eggs are lost to predators even when guarded, but harvest of nest-guarding males virtually ensures complete loss of the egg mass.

Lingcod are a relatively fast growing fish and can live up to 29 years. Females grow faster and attain larger sizes than males. The sport fish minimum size limit concentrates harvest on the

largest fish, which are the most fecund females. Female lingcod begin to mature at about 30 inches and 50% are mature at an age of seven years and length of 33 inches in Southeast and Southcentral Alaska. Maturity information is not available for male lingcod in Alaska, but nearly all males in southern British Columbia are at a length of 28 inches.

In 1992, lacking a comprehensive stock assessment, the Alaska Board of Fisheries adopted a precautionary approach for management of the sport lingcod fishery, which included a minimum size limit to allow fish to spawn prior to being harvested, and a closed season to protect spawners and nest-guarding males.

There is no lingcod abundance assessment for Cook Inlet. However, the department assesses the lingcod sport fishery using the following: 1) annual guided and unguided harvest and effort estimated by the Statewide Harvest Survey (SWHS), 2) guided effort and harvest by individual anglers and by statistical area as reported in charter logbooks, and 3) age, length, and sex composition, as well as spatial distribution of harvest estimated through dockside port sampling.

Sport lingcod harvest increased sharply in the mid-2000s (Table 75-1). Guided anglers accounted for 65% to 85% of the total area sport harvest since 2000. Overall, guided harvest estimated by the SWHS is similar to harvest reported in guided logbooks (Figure 75-2). Ninety percent of the lingcod harvest was taken by anglers targeting halibut or halibut in combination with other bottomfish.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The earlier season could result in the harvest of nest-guarding males, potentially reducing long-term recruitment to 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.

Table75-1.–Statewide Harvest Survey estimated sport lingcod harvest (numbers of fish) by guided and unguided anglers in the Central (CCI) and Lower Cook Inlet (LCI) fisheries, 1990–2012[a].

	CCI				LCI				Total Cook Inlet			
Year	Guided	Unguided	Total	% guided	Guided	Unguided	Total	% guided	Guided	Unguided	Total	% guided
1990	71	768	839	8%	1,046	759	1,805	58%	1,117	1,527	2,644	42%
1991	63	926	989	6%	806	945	1,751	46%	869	1,871	2,740	32%
1992	327	615	942	35%	802	1,455	2,257	36%	1,129	2,070	3,199	35%
1993	0	0	0	0%	993	643	1,636	61%	993	643	1,636	61%
1994	0	0	0	0%	766	418	1,184	65%	766	418	1,184	65%
1995	140	9	149	94%	703	267	970	72%	843	276	1,119	75%
1996	392	496	888	44%	855	462	1,317	65%	1,247	958	2,205	57%
1997	190	283	473	40%	1,225	537	1,762	70%	1,415	820	2,235	63%
1998	336	125	461	73%	617	378	995	62%	953	503	1,456	65%
1999	112	107	219	51%	616	463	1,079	57%	728	570	1,298	56%
2000	190	24	214	89%	1,110	490	1,600	69%	1,300	514	1,814	72%
2001	345	128	473	73%	1,054	460	1,514	70%	1,399	588	1,987	70%
2002	206	30	236	87%	910	454	1,364	67%	1,116	484	1,600	70%
2003	242	122	364	66%	1,411	344	1,755	80%	1,653	466	2,119	78%
2004	139	320	459	30%	2,027	825	2,852	71%	2,166	1,145	3,311	65%
2005	283	0	283	100%	1,896	857	2,753	69%	2,179	857	3,036	72%
2006	301	9	310	97%	2,399	598	2,997	80%	2,700	607	3,307	82%
2007	139	47	186	75%	5,218	1,608	6,826	76%	5,357	1,655	7,012	76%
2008	164	32	196	84%	4,839	1,098	5,937	82%	5,003	1,130	6,133	82%
2009	233	112	345	68%	3,789	1,660	5,449	70%	4,022	1,772	5,794	69%
2010	351	55	406	86%	3,692	1,127	4,819	77%	4,043	1,182	5,225	77%
2011	346	346	692	50%	4,951	1,834	6,785	73%	5,297	2,180	7,477	71%
2012	107	363	470	23%	3,743	1,330	5,073	74%	3,850	1,693	5,543	69%

[a] Estimates after 1995 include the West Cook Inlet portion, apportioned between Central and Lower Cook Inlet.

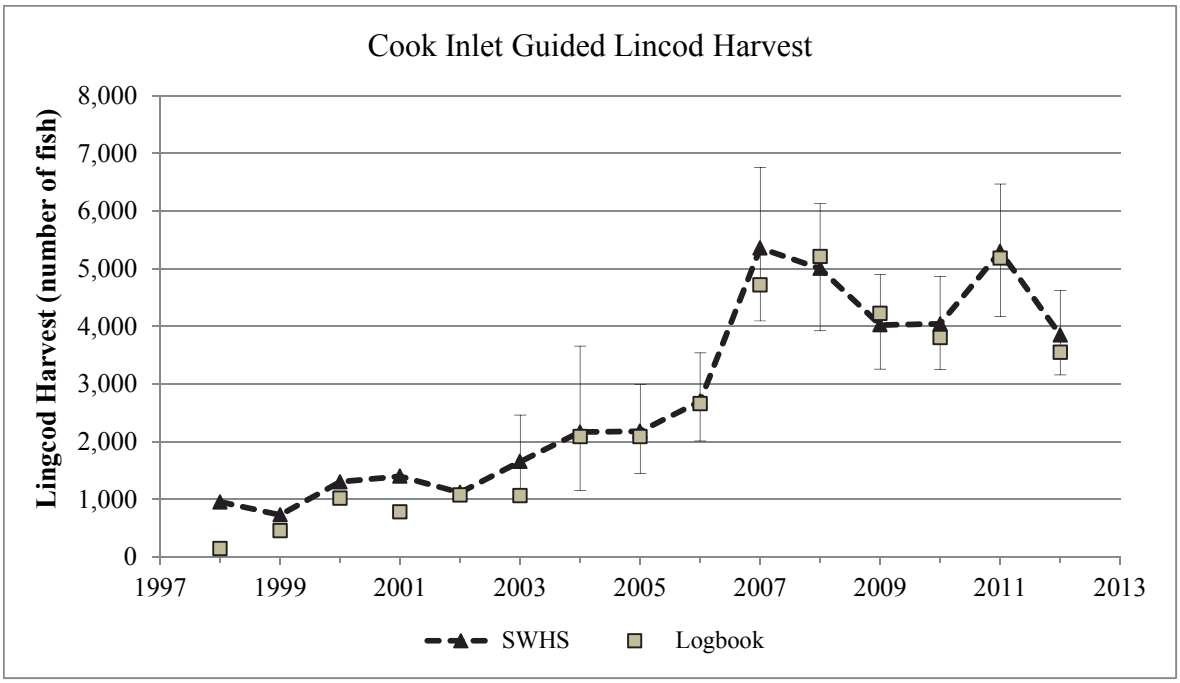

Figure 75-1.–Comparison between lingcod harvest estimated by the Statewide Harvest Survey (with 95% confidence intervals) and censused from charter logbooks (with 95% confidence intervals), 1997–2012.

COMMITTEE B: LOWER COOK INLET SUBSISTENCE AND COMMERCIAL FISHING (9 PROPOSALS)
COOK INLET SUBSISTENCE FISHERY: 76
SALMON FISHING DISTRICTS, SUBDISTRICTS, AND SECTIONS: 77, 78
CLOSED WATERS – SALMON: 80
COOK INLET GROUNDFISH POT STORAGE AND LANDING REQUIREMENTS: 86, 87
GROUNDFISH TRAWL, POLLOCK MANAGEMENT PLANS, AND OBSERVER COVERAGE: 43, 44, 45

PROPOSAL 76 – 5 AAC 01.560. Fishing seasons and daily fishing periods.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would clarify the language used to describe the subsistence fishing periods for Seldovia Bay that open the first two consecutive Saturdays and Sundays in August.

WHAT ARE THE CURRENT REGULATIONS? In Seldovia Bay, subsistence fishing is permitted during the first two Saturdays and Sundays in August, without stating explicitly that those would be the first two consecutive Saturdays and Sundays.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adoption of this proposal would remove any confusion regarding which Saturdays and Sundays in August are open to fishing in Seldovia Bay. There would be no change in management of this fishery.

BACKGROUND: Since 1996, this regulation has been in the regulation book as currently written. However, there have been calls from the public asking the department to clarify the current regulation because it does not explicitly state that the subsistence fishing periods would be the first two consecutive Saturdays and Sundays. Without the inclusion of "consecutive", the public has been unsure of the schedule during years when August begins on a Sunday.

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.

SUBSISTENCE REGULATION REVIEW:
1. Is this stock in a nonsubsistence area? No.
2. Is the stock customarily and traditionally taken or used for subsistence? Yes; the Alaska Board of Fisheries (board) has made a positive customary and traditional use finding for salmon, except enhanced salmon, in the waters along the eastern shoreline of Seldovia Bay from Seldovia Point at 59° 28.22′ N. lat., 151°42.37′ W. long., to an ADF&G regulatory marker located at 59° 24.90′ N. lat., and along the shoreline from an ADF&G regulatory marker located approximately 1,000 feet southwest of Naskowhak Point at 59° 27.10′ N. lat., 151° 44.70′ W. long., to an ADF&G regulatory marker located on an unnamed point at 59° 26.87′ N. lat., 151° 46.42′ W. long. (5 AAC 01.566(a)(1)(B)).

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 not made a finding regarding the amount reasonably necessary for subsistence; however, the board has established a guideline harvest level for king salmon of 200 fish (5 AAC 01.560(b)(8)(C)), and an annual possession limit of 20 king salmon per household (5 AAC 01.595(a)(1)).
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 uses? This is a board determination.

PROPOSAL 77 – 5 AAC 21.200. Fishing districts, subdistricts, and sections.

PROPOSED BY: Cook Inlet Seiners Association.

WHAT WOULD THE PROPOSAL DO? This proposal would redefine sections in the western arm of Port Dick Subdistrict in the Outer District.

WHAT ARE THE CURRENT REGULATIONS? Current regulations define two sections in the west arm of Port Dick. The North Section includes most of the north shore of the west arm of Port Dick. The South Section includes the remaining waters along southern shore of the west arm of Port Dick (Figure 77-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would create three sections in the west arm of Port Dick that would approximately partition the three significant salmon spawning streams in that area (Figure 77-2).

BACKGROUND: The language defining the Port Dick North and South sections has been in regulation since 1977. Pink and chum salmon returning to natal streams in Port Dick West Arm tend to generally congregate around those streams, in addition to moving back and forth in this bay with tidal cycles, to a lesser degree. Returns to index streams in the west arm of Port Dick have been dissimilar in some years, with one system receiving large returns of pink or chum salmon, while one or more of the other systems has lagged. Currently, the Port Dick North Section encompasses the waters surrounding two of these index streams, with the third (Head End Creek) bordering largely on the Port Dick South Section.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal. Redefining sections in the west arm of Port Dick based on proximity to significant spawning systems (Figure 77-2) would allow managers to focus harvest and effort on specific spawning systems without resorting to complex emergency order actions.

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

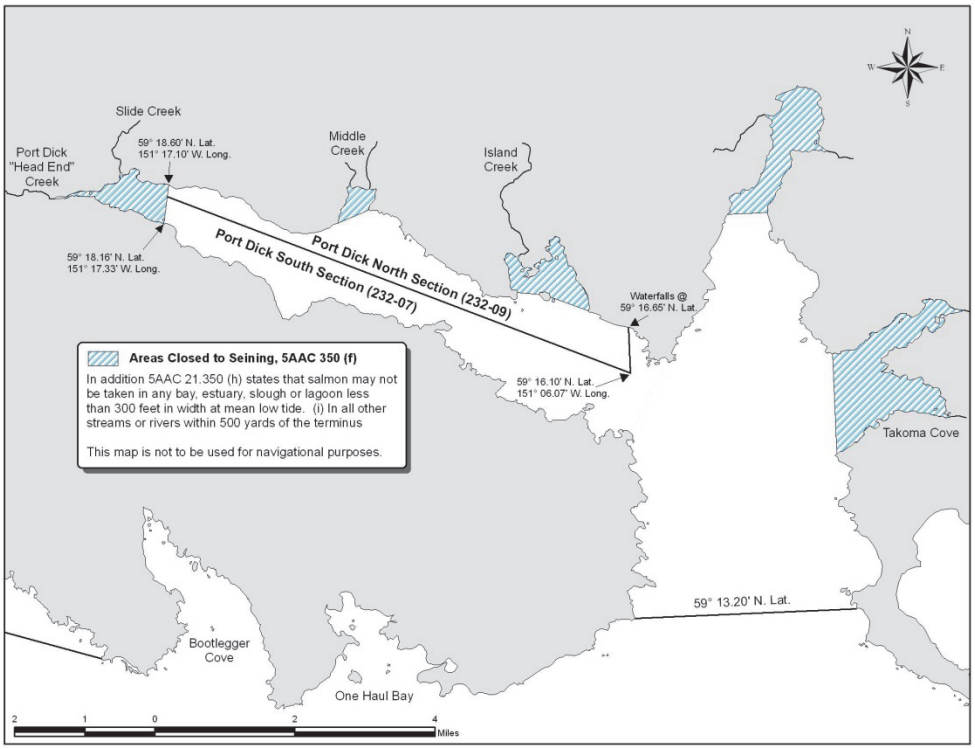

Figure 77-1.–Existing sections in the Port Dick Subdistrict of the Outer District.

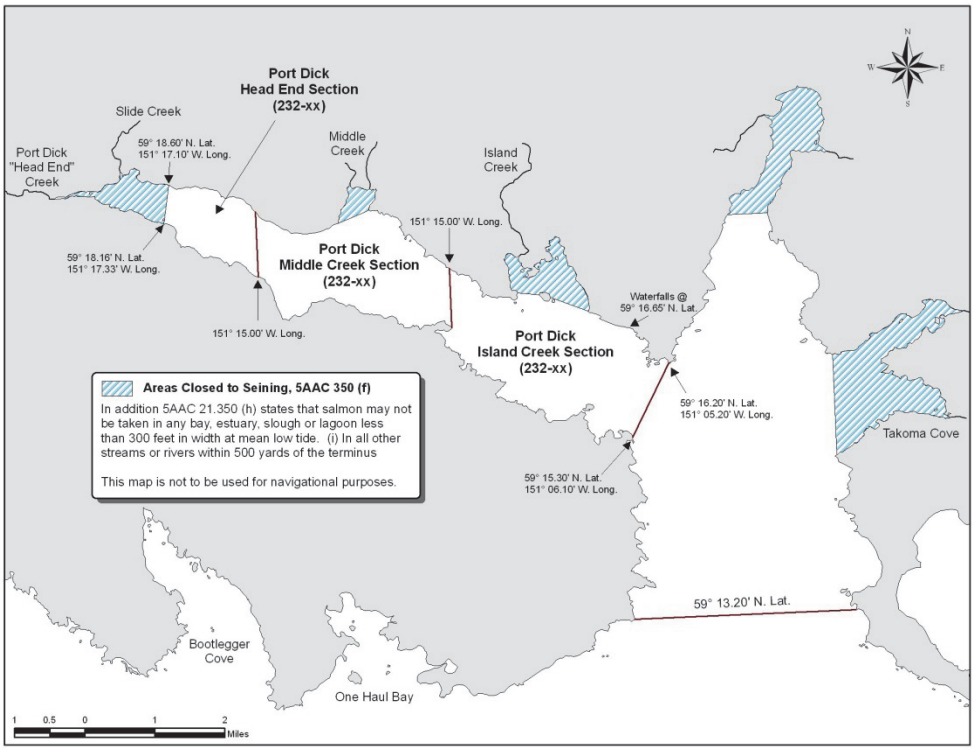

Figure 77-2.–Proposed sections in the Port Dick area of the Outer District.

PROPOSAL 78 – 5 AAC 21.200. Fishing districts, subdistricts, and sections.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would replace the "300 yards offshore" reference that defines the southwestern corner of the Port Dick North Section with a latitude and longitude coordinate, remove other references to department regulatory markers, and replace them with latitude and longitude coordinates for three subdistricts within the Southern District of Cook Inlet.

WHAT ARE THE CURRENT REGULATIONS? Current regulations define boundaries of the Humpy Creek Subdistrict, Northshore Subdistrict, and Halibut Cove Subdistrict using references to department regulatory markers. The Port Dick North Section is defined using references to department regulatory markers and a point 300 yards offshore.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adoption of this proposal will facilitate compliance and enforcement because regulatory markers will be clearly defined with latitude and longitude coordinates.

BACKGROUND: Prior to widespread availability of global positioning system receivers, fishing districts were defined using physical markers, or general distances from defined points. Subsequently, an unknown number of these historical regulatory markers have been lost, destroyed, or degraded significantly.

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 80 – 5 AAC 21.350. Closed waters.

PROPOSED BY: Alaska Department of Fish and Game and Department of Public Safety.

WHAT WOULD THE PROPOSAL DO? This proposal would amend the *Closed Waters* section for Lower Cook Inlet (LCI) to:

1) remove references to department regulatory markers, and replace them with latitude and longitude coordinates in LCI;
2) include closed waters currently only defined on maps created by the department;
3) add latitude and longitude coordinates to areas currently in the *Closed Waters* section where coordinates are missing; and
4) correct misspelled place names and inaccurate latitude and/or longitudes.

WHAT ARE THE CURRENT REGULATIONS? Current regulations do not describe several areas closed to commercial fishing in LCI, which are identified only on department-printed maps and/or identified by department regulatory or boundary markers. Many of the described areas are lacking in global positioning system coordinates and some references in current regulations are inaccurate.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adoption of this proposal would help clarify and more accurately describe closed waters in LCI. The *Closed Waters* section of regulation 5 AAC 21.350 would provide a comprehensive listing of all closed waters in LCI as defined by latitude and longitude coordinates.

BACKGROUND: Currently in regulation, there are 14 areas listed in 5 AAC 21.350(d–g), *Closed Waters,* specific to LCI:

1) Mud Bay
2) Sadie Cove (south)
3) Tutka Bay (southeast)
4) Jakolof Bay (south)
5) Seldovia Bay (south)
6) Port Graham (south)
7) Northshore District
8) Cottonwood Bay (portions)
9) Port Chatham (portions)
10) Windy Bay (portions)
11) Taylor Bay (portions)
12) Tacoma Cove - Sunday Harbor (portions)
13) Resurrection Bay (portions)
14) Aialik Fjord (north).

The department has also specified 13 additional areas as closed to commercial harvest. These are identified on maps produced by the department office in Homer. Some of the closed areas on these maps are identified by regulatory markers. These areas are not currently defined in regulation:

15) Chenik Lagoon
16) Iniskin Bay - Sugarloaf Creek (portions)
17) Iniskin Bay - Right Arm (portions)
18) Ursus Cove (portions)
22) Port Dick - Head Creek
23) Port Dick - Middle Creek
24) Port Dick - Island Creek,
25) McCarty Fjord (north)

19) Dogfish (Koyuktolik) Bay (lagoon)
20) Chugach Bay (portions)
21) Rocky Bay (portions)
26) McCarty and Delight lagoons
27) Desire Lake creek.

The department has also identified four areas currently in regulation where either there are no precise latitude and longitude coordinates or there is a typographic error in position or place name:

28) China Poot Bay (no latitude/longitude reference)
29) Jakolof Bay (place name misspelled)
30) Cottonwood Bay (errant longitude)
31) Resurrection Bay (no latitude/longitude reference in southern portion of Resurrection Bay).

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 86 – 5 AAC 28.332. Groundfish pot storage requirements for Cook Inlet.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would modify Cook Inlet groundfish pot storage requirements.

WHAT ARE THE CURRENT REGULATIONS? Regulations state that following the closure of a parallel season, pot gear may be stored in the water with bait and bait containers removed, doors open, but the gear must be removed from the water no longer than five days after closure of the fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The proposal would clarify the intent of the regulation, which was meant to apply to parallel and state-waters groundfish fisheries.

BACKGROUND: The regulatory language is confusing because section (a) only refers to the parallel season and thereby implies that a vessel participating in a groundfish season other than parallel does not have to remove bait from pots or secure doors open.

If nothing is done, there will continue to be confusion for fishermen and department staff regarding pot storage requirements following the closure of certain groundfish seasons, particularly state-waters Pacific cod seasons.

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 87 – 5 AAC 28.371. Landing requirements for Cook Inlet Area.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? This proposal would modify offloading requirements for groundfish by allowing more time for vessels to unload if they have arrived in port within the 24 hours of the closure of the fishery.

WHAT ARE THE CURRENT REGULATIONS? After closure of any directed groundfish season in the Cook Inlet Management Area, a vessel that participated in that fishery may not have that species of groundfish on board after 24 hours following that closure. Exceptions exist if that species has been designated as bycatch for another directed fishery and the amount on board is permissible under retained bycatch restrictions, or if the vessel has been delayed due to extraordinary circumstances beyond the control of the vessel operator and the vessel operator has contacted a local representative of the department within 24 hours following closure of the season, who then granted a reasonable amount of time for the vessel to reach the port of delivery or processing location.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Processors will have more time to offload vessels and adequately process groundfish during times when several vessels arrive in port simultaneously following closure of a fishery. If groundfish remain on ice in the hold of the vessel until the offload can be properly completed, product quality will be maintained until the processor can accommodate the vessel. Department staff will benefit because the regulatory language will reflect the department's intent and staff will not have to respond to phone calls requesting offloading extensions when the vessel is in port and available for immediate offload.

If nothing is done, vessels will routinely require permission from the department to offload after the 24-hour landing requirement or else risk enforcement action due to noncompliance, even if the vessel is in port and available for immediate offload. Processors will continue to have concerns about their abilities to offload vessels quickly enough to ensure that vessels are in compliance with landing requirements, particularly when several vessels arrive in port simultaneously following the closure of a groundfish fishery.

The quality of the groundfish harvested may be improved if this proposal is adopted. If processors are forced to remove groundfish from a vessel without adequate processing time, raw product quality could be negatively affected if not kept on ice. If the groundfish remains on ice in the hold of the vessel until the offload can be properly completed, product quality will be maintained until the processor can accommodate the vessel.

BACKGROUND: Although regulation 5 AAC 28.371 requires that vessels have finished offloading groundfish within 24 hours following closure of a groundfish fishery, often vessels have begun offloading, but have not completed the offload within the requisite time. The department has generally considered a vessel in compliance with the intent of the regulation if the offload has begun within the allotted timeframe. There are many smaller vessels (<50') participating in Cook Inlet Area groundfish fisheries and their hold capacities are relatively small

(<50K lb) which can make it difficult for processors to complete all offloading within 24 hours of the closure of the fishery. In Seward, only two processors regularly service the smaller vessels and this offloading backup has occurred. In the Pacific cod fishery in 2012 and 2013, permission to offload vessels after the 24-hour landing requirement was granted to the fleet through the plant manager, who expressed concern to department staff. It was determined that the intent of the regulation was met if a vessel was in port, scheduled with a processor to offload, and available for immediate offload with the permit holder on board the vessel. Although 5 AAC 28.371 provides for a vessel to contact the department if delayed due to extraordinary circumstances (e.g., mechanical issues or weather), there is no provision for a vessel ready to offload, but unable to because the buyer or processor is backed up with other vessels.

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 43 – 5 AAC 28.36X. Cook Inlet State-Waters Groundfish Trawl Management Plan; 5 AAC 28.46X. Kodiak Area State-Waters Groundfish Trawl Management Plan; and 5 AAC 28.53X. Chignik Area State-Waters Groundfish Trawl Management Plan.

PROPOSED BY: Matt Hegge.

WHAT WOULD THE PROPOSAL DO? This proposal would create state-waters (0–3 nautical miles) management plans for all groundfish species in the Cook Inlet, Kodiak, and Chignik management areas for nonpelagic trawl vessels less than or equal to 58 feet in length. Management plans would be based on 25% of the acceptable biological catch (ABC) for groundfish species abundance in the Central Gulf of Alaska (CGOA).

State-waters management plans would establish prohibited species caps, and require 100% observer coverage paid for by the vessel. Groundfish trawl fisheries would open January 20 with a vessel landing limit of 150,000 pounds total of all groundfish species and a time period of no less than 72 hours between landings. Harvest of Pacific cod would be limited to no more than 100,000 pounds per landing.

WHAT ARE THE CURRENT REGULATIONS? Except for a seasonal nonpelagic trawl opening on the westside of Kodiak and Afognak islands (Figure 43-1), all other state waters in the Cook Inlet, Kodiak, and Chignik, management areas are closed to nonpelagic trawl gear. The Kodiak and Chignik management areas are closed under 5 AAC 39.164, whereas the Cook Inlet management area is closed under 5 AAC 28.330. In the area open to nonpelagic trawl gear in the Kodiak Area, the state opens a parallel fishery concurrent to the adjacent federal fishery and adopts federal area closures, bycatch limits, and inseason management actions by emergency order, 5 AAC 28.086, *Parallel groundfish fishery emergency order authority*.

Two other regulations address nonpelagic trawl gear in state waters. *Bottom Trawl Fisheries Management Plan* (5 AAC 39.163), was adopted in 1984 based on concerns for crab and halibut bycatch during groundfish fisheries. When adopted, the Alaska Board of Fisheries (board) determined onboard observers provided the only effective means of collecting information essential to management of certain nonpelagic trawl fisheries. The plan does not specifically close or prohibit nonpelagic trawl gear inside state waters, but mandates onboard observer coverage for vessels operating within certain state waters where nonpelagic trawling is allowed. Because very limited nonpelagic trawl fisheries occur in state waters and because the state does not have an observer program, observer coverage during parallel fisheries has been determined by federal rules.

Non Pelagic Trawl Gear Restrictions (5 AAC 39.164), was initially adopted in 1986 in response to concerns regarding declining king crab stocks. When adopted, the regulation closed bays around Kodiak Island either year-round or on a seasonal basis. In 1999, the regulation was amended and seasonal closures were extended year-round. Closed waters increased to include previously open state waters in the Kodiak and Chignik management areas, with the exception of a seasonal opening in state waters along the westside of Kodiak and Afognak islands, which remain open to nonpelagic trawl gear on a seasonal basis (5 AAC 28.410 (c); Figure 43-1).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The State of Alaska would prosecute nonpelagic groundfish trawl fisheries independently of federal trawl fisheries. The state-waters guideline harvest levels (GHL) would be based on 25% of the CGOA ABC for each groundfish species or species complex. The proposal would restrict 25% of the CGOA groundfish ABCs to vessels 58 feet in length or less. Currently, most nonpelagic trawl vessels operating in the CGOA exceed 58 feet in length. Reduced harvest levels and vessel size restrictions may result in smaller harvests, shorter seasons, and increased competition among existing federal/parallel trawl participants.

In contrast, state-waters nonpelagic trawl fisheries would provide harvest opportunity for vessels eligible to participate in those fisheries. Federal trawl fisheries are limited-access fisheries; the department interprets that the proposed state-waters trawl fisheries would be open-access fisheries, which may provide opportunity for new entrants into the fishery.

Currently 25% of the CGOA Pacific cod ABC is apportioned to the State of Alaska in support of state-waters Pacific cod pot and jig fisheries in the Cook Inlet, Kodiak, and Chignik areas. A separate state-waters Pacific cod nonpelagic trawl fishery would increase the total amount of Pacific cod ABC allocated to state-waters fisheries.

Separate bycatch caps for halibut, king salmon, and crab species would be established for the state-waters nonpelagic trawl fisheries; however, the proposal does not provide specific recommendations for the allowable bycatch limits that would apply to the state-waters nonpelagic trawl fisheries. This proposal would require 100% observer coverage for all nonpelagic trawl vessels participating in the proposed state-waters fishery; however, the state does not have a groundfish observer program.

BACKGROUND: The National Marine Fisheries Service (NMFS) establishes most groundfish harvest levels in waters off Alaska, in addition to specifying prohibited species catch limits and observer coverage requirements. For the 2013 fisheries, NMFS established 17 unique ABCs for groundfish species specific to the CGOA. Many of the established ABCs were for groundfish species that are 1) not commonly targeted with nonpelagic trawl gear (walleye pollock) or 2) do not occur inside state waters in large abundance (sablefish, deepwater flatfish, and most rockfish species). Based on department crab and groundfish surveys, several commercially important groundfish species occur inside state waters in quantities that may support commercial nonpelagic trawl fisheries. These species include Pacific cod, flathead sole, rock sole, yellowfin sole, arrowtooth flounder, big skate, and longnose skate. The 2013 CGOA ABCs for these seven species totaled approximately 532 million pounds. As proposed, the state-waters GHLs for these species would total 133 million pounds based on 25% of their respective ABCs. Determining GHLs would require annual coordination between the state and federal governments.

Since 2000, state waters in the Chignik and Cook Inlet areas have been closed to nonpelagic trawl gear. Walleye pollock, arrowtooth flounder, and rock sole were the dominant species harvested by nonpelagic trawl gear in state waters of the Kodiak Area from 2000–2012 (Table 43-1).

Federally-permitted nonpelagic trawl vessels are subject to federal observer program requirements. Annually, NMFS-certified observers are deployed across most federal groundfish and halibut fisheries based on management and conservation needs. Vessels subject to observer requirements are placed into one of two observer coverage categories: 1) full coverage category, or 2) partial coverage category. Most trawl catcher vessels in the Gulf of Alaska are placed into the partial coverage category, resulting in a level of observer coverage less than 100%. Funding associated with deploying federal observers on vessels in the partial coverage category is provided through annual fees based on the exvessel value of groundfish and halibut retained during those fisheries.

Establishing a state groundfish observer program would be duplicative to the federal groundfish observer program for transboundary groundfish species. A state groundfish observer program would require a substantial investment in time and resources for the state of Alaska. Because NMFS provides stock assessment for most groundfish, maintaining a compatible state-waters observer program with data collected by the NMFS observer program would be essential to provide the same quality and type of information in order to be used for both catch accounting and stock assessment. In addition to establishing a state groundfish observer program, the department would need additional groundfish management staff to develop and manage new state-waters nonpelagic trawl fisheries.

The North Pacific Fishery Management Council (NPFMC) recently adopted Gulf of Alaska (GOA) king salmon prohibited species bycatch caps (PSC) for federal (pelagic and nonpelagic) trawl fisheries and reduced the GOA halibut PSC caps for trawl and longline fisheries. Currently, federal PSC caps are apportioned based on season, fishery target species, and gear/processing sector type. When the apportioned PSC cap is achieved, the directed fishing season is closed for the applicable federal fishing sector.

The NPFMC is currently considering a new management program for federal GOA trawl vessels (catcher vessels and catcher processors) aimed at reducing bycatch of nontarget species, including Pacific halibut and king salmon. This action is ongoing; in October 2013, the NPFMC proposed evaluation of a cooperative program which would allocate pollock, Pacific cod, halibut PSC, and king salmon PSC in federal waters. The initial design proposed in October includes 100% observer coverage on all trawl catcher vessels (trawl catcher processors already have at least 100% coverage). This action is intended to solicit and focus public input prior to the NPFMC determining alternatives for a formal analysis. It is not possible to project when final action on such a program would occur, but it is likely at least 18 months to two years away. The NPFMC has specifically noted that the interrelationships between state-waters, parallel, and federal fisheries management programs will be considered as trawl bycatch management measures are developed, and will necessitate coordination with the Alaska Board of Fisheries.

DEPARTMENT COMMENTS: The department is **OPPOSED** to this proposal. The department supports closure of state waters included in this proposal to nonpelagic trawl gear to protect nearshore habitat and fishery resources.

COST ANALYSIS: Approval of this proposal would result in an additional direct cost for a private person to participate in this fishery if fishery participants are required to pay for

observers. Observer fees vary depending on the observer provider; however, observer coverage may cost vessel operators $450 per day.

Table 43-1.–Nonpelagic trawl harvest of the top five species in waters of the Kodiak area open to nonpelagic trawl gear, 2000–2012.

Kodiak	**Pounds**	**Chignik**	**Cook Inlet**
Walleye Pollock	3,315,314	**Closed to nonpelagic trawl gear**	
Arrowtooth Flounder	2,084,378		
Rock Sole	1,357,237		
Pacific cod	604,024		
Flathead Sole	586,295		

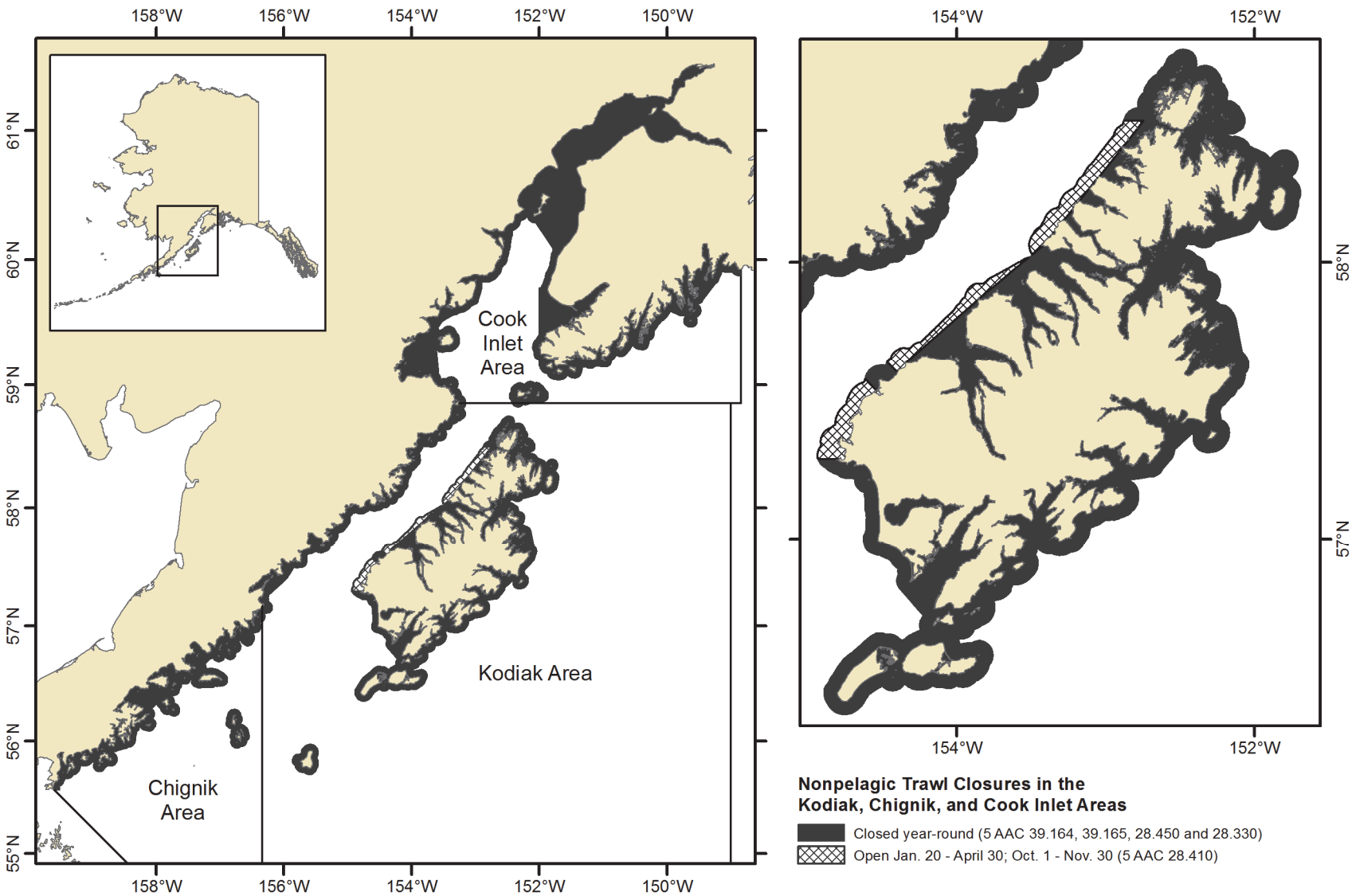

Figure 43-1.–Nonpelagic trawl gear restrictions in state-waters of the Cook Inlet, Kodiak, and Chignik areas.

PROPOSAL 44 – 5 AAC 28.36X. Cook Inlet Area Pollock Management Plan; 5 AAC 28.46X. Kodiak Area Pollock Management Plan and 5 AAC 28.53X. Chignik Area Pollock Management Plan.

PROPOSED BY: Matt Hegge.

WHAT WOULD THE PROPOSAL DO? This proposal would create state-waters (0–3 nautical miles; nmi) walleye pollock fisheries in the Cook Inlet, Kodiak, and Chignik areas for vessels less than or equal to 58 feet in overall length using pelagic trawl, nonpelagic trawl, seine, or jig gear. This proposal would also require 100% observer coverage for all trawl vessels, paid for by the vessel, and establish a vessel landing limit of 150,000 pounds with a time period of no less than 48 hours between landings.

WHAT ARE THE CURRENT REGULATIONS? Walleye pollock fisheries in the Cook Inlet, Kodiak, and Chignik areas are managed as parallel fisheries (5 AAC 28.086). During parallel fisheries, the state opens a fishery from 0–3 nmi offshore concurrent to adjacent federal walleye pollock fisheries in the exclusive economic zone (3–200 nmi) and adopts by emergency order most federal rules, including seasons, area closures, bycatch limits, and management actions.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The State of Alaska would prosecute state-waters walleye pollock fisheries in the Cook Inlet, Kodiak, and Chignik areas independently of federal walleye pollock fisheries. The guideline harvest level (GHL) would be based on 25% of the Central Gulf of Alaska (CGOA) areas 620 and 630 walleye pollock acceptable biological catch (ABC).

Developing state-waters walleye pollock fisheries would result in reduction in catch for federal/parallel participants. The proposal would reserve 25% of the CGOA walleye pollock ABCs in areas 620 and 630 for vessels 58 feet in length or less in state waters. Currently, most vessels targeting walleye pollock in the CGOA exceed 58 feet in length. Reduced harvest levels and vessel size restrictions may result in smaller harvests, shorter seasons, and increased competition among existing federal/parallel trawl participants.

This proposal would require 100% observer coverage for trawl vessels participating in the proposed state-waters fishery; however, the state does not have a groundfish observer program.

BACKGROUND: The North Pacific Fishery Management Council (NPFMC) is currently considering a new management program for federal Gulf of Alaska (GOA) trawl vessels (catcher vessels and catcher processors) aimed at reducing bycatch of non-target species including Pacific halibut and king salmon. This action is ongoing; in October 2013, the NPFMC proposed a preliminary program design based on a voluntary cooperative structure that would allocate pollock, Pacific cod, halibut prohibited species catch (PSC), and king salmon PSC in federal waters to cooperatives. This action is intended to solicit and focus public input prior to the NPFMC determining alternatives for a formal analysis. The initial design proposed in October includes 100% observer coverage on all trawl catcher vessels (trawl catcher processors already have at least 100% coverage). It is not possible to project when final action on such a program would occur, but it is likely at least 18 months to two years away. The NPFMC has specifically

noted that the interrelationships between state-waters, parallel, and federal fisheries management programs will be considered as trawl bycatch management measures are developed, and will necessitate coordination with the Alaska Board of Fisheries (board).

National Marine Fisheries Service (NMFS) annually establishes separate walleye pollock ABCs for areas 620 and 630 in the CGOA (Figure 44-1). The Cook Inlet, Kodiak, and Chignik areas overlap with federal CGOA areas 620 and 630, such that state waters of the Cook Inlet area are entirely within area 630; Kodiak Area state waters are within both areas 620 and a portion of 630, and state waters of the Chignik Area, mostly within area 620 (Figure 44-1). The 2012 walleye pollock ABCs in Areas 620 and 630 totaled approximately 159 million pounds (Area 620 = 101 million pounds; Area 630 = 58 million pounds). The proposed GHL for the state-waters fisheries would total approximately 40 million pounds based on 25% of the combined areas 620 and 630 pollock ABCs.

From 2003 to 2012, walleye pollock harvested during the parallel fishery in federal Area 620 averaged approximately 19% of the walleye pollock ABC; ranging from 5% in 2005 to 35% in 2004 (Table 44-1). Parallel harvest within Area 630 averaged approximately 33% of the walleye pollock ABC; ranging from 5% of the ABC in 2011, to 49% in 2005. The majority of the parallel fishery harvest occurred in the Kodiak Area (Table 44-2).

From 2003 to 2012, an average of six trawl vessels 58 feet in length or less participated in the Chignik Area parallel walleye pollock fishery and an average of two trawl vessels participated in the Kodiak Area parallel fishery (Table 44-3). In 2012 all vessels 58 feet in length participating in the Chignik and Kodiak parallel fisheries were federally permitted to fish in federal waters. Parallel harvest by trawl vessels 58 feet in length or less averaged approximately 1.5 million pounds annually in the Chignik and Kodiak areas from 2003 to 2012 (Table 44-3). No trawl vessels 58 feet in length or less have targeted walleye pollock in the Cook Inlet Area. In 2004, a single commissioner's permit was issued to a vessel greater than 58 feet to allow pelagic trawl harvest of walleye pollock in state waters of the Cook Inlet Area. Walleye pollock harvest by jig gear vessels is limited and harvest records indicate most walleye pollock is retained as bycatch during directed jig gear fisheries for Pacific cod. Seine gear is not an allowable gear type for walleye pollock; therefore, no harvest information is available.

Pacific cod are commonly harvested as bycatch or as a secondary target species during directed walleye pollock trawl fisheries. The Cook Inlet, Kodiak, and Chignik areas are currently allocated a combined 25% of the CGOA Pacific cod ABC in support of state-waters Pacific cod fisheries for vessels using pot and jig gear. If adopted, the department seeks guidance from the board regarding Pacific cod GHL allocation and catch accounting during state-waters walleye pollock fisheries. Additionally, the NPFMC recently adopted king salmon PSC bycatch caps for federal/parallel walleye pollock fisheries in the GOA, which were implemented in late 2012. The federal PSC caps are apportioned based on season, fishery target species, and gear/processing sector type. When the apportioned PSC cap is achieved, the directed fishing season is closed for the applicable federal fishing sector.

Federally-permitted pelagic trawl vessels are subject to federal observer program requirements. Annually, NMFS-certified observers are deployed across most federal groundfish and halibut fisheries based on management and conservation needs. Vessels subject to observer requirements

are placed into one of two observer coverage categories: 1) full coverage category or 2) partial coverage category. Most trawl catcher vessels in the GOA are placed into the partial coverage category, resulting in a level of observer coverage less than 100%. Funding associated with deploying federal observers on vessels in the partial coverage category is provided through annual fees based on the exvalue of groundfish and halibut retained during those fisheries.

Establishing a state groundfish observer program would be duplicative to the federal groundfish observer program for transboundary groundfish species. A state groundfish observer program would require a substantial investment in time and resources for the State of Alaska. Because NMFS provides stock assessment for most groundfish, maintaining a compatible state-waters observer program with data collected by the NMFS observer program would be essential to provide the same quality and type of information in order to be used for both catch accounting and stock assessment.

The state would need additional personnel to manage these walleye pollock fisheries. Additional personnel would be needed for management of open-access derby style fisheries, coordinating dockside sampling, reviewing and analyzing inseason and postseason harvest and bycatch data from observer program and maintaining databases of fishery performance and length/weight data.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. However, as previously stated in proposal 43, the department is **OPPOSED** to nonpelagic trawl gear in state waters to reduce bycatch and protect habitat. The department would need funding to implement these new fisheries.

COST ANALYSIS: Approval of this proposal would result in an additional direct cost for a private person to participate in this fishery if fishery participants are required to pay for observers. Observer fees vary depending on the observer provider; however, observer coverage may cost vessel operators $450 per day.

Table 44-1.–Walleye pollock acceptable biological catch (ABC) and retained harvest during parallel fisheries in federal areas 620 and 630 by year, 2003–2012.

	Area 620			Area 630		
Year	Parallel Harvest (Pounds)	620 ABC (Pounds)	Parallel Harvest as % of ABC	Parallel Harvest (Pounds)	630 ABC (Pounds)	Parallel Harvest as % of ABC
2003	7,184,392	43,397,996	17%	9,430,035	22,793,593	41%
2004	20,573,987	58,400,453	35%	11,116,438	30,952,902	36%
2005	3,698,705	75,847,837	5%	20,106,754	41,266,126	49%
2006	9,009,723	67,223,353	13%	19,209,333	40,670,878	47%
2007	6,310,075	46,252,983	14%	12,688,622	32,738,646	39%
2008	12,044,715	42,286,866	28%	10,699,750	30,071,053	36%
2009	7,770,885	31,080,770	25%	11,179,782	24,378,717	46%
2010	17,202,527	61,938,873	28%	6,509,534	42,147,975	15%
2011	9,484,954	82,375,724	12%	2,201,175	44,610,539	5%
2012	18,638,681	100,989,353	18%	9,195,678	58,087,397	16%
Average	11,191,864	60,979,421	19%	11,233,710	36,771,783	33%

Note: Harvest excludes discards at-sea.

Table 44-2.–Total retained parallel walleye pollock harvest, by all gear types, in the Cook Inlet, Chignik, and Kodiak management areas, 2003–2012.

	Cook Inlet		Chignik		Kodiak			
Year	Harvest (Pounds)	Harvest as % of Area 630 ABC	Harvest (Pounds)	Harvest as % of Area 620 ABC	Area 630 Harvest (Pounds)	Harvest as % of Area 630 ABC	Area 620 Harvest (Pounds)	Harvest as % of Area 620 ABC
2003	CF	CF	100,968	0%	9,430,014	41%	7,083,424	16%
2004	342,305	1%	1,118,569	2%	10,774,133	35%	19,455,418	33%
2005	CF	CF	857,414	1%	20,106,655	49%	2,841,291	4%
2006	CF	CF	1,186,683	2%	19,209,320	47%	7,823,040	12%
2007	1,694	0%	76,421	0%	12,686,928	39%	6,233,653	13%
2008	CF	CF	169,459	0%	10,699,664	36%	11,875,256	28%
2009	5,269	0%	CF	CF	11,174,513	46%	7,770,787	25%
2010	CF	CF	175	0%	6,509,379	15%	17,202,351	28%
2011	5,761	0%	131,221	0%	2,195,415	5%	9,353,733	11%
2012	4,301	0%	5,406,273	5%	9,191,376	16%	13,232,408	13%
Average	71,866	0%	1,005,243	1%	11,197,740	33%	10,287,136	18%

CF = Confidential data

Note: Harvest excludes discards at-sea

Table 44-3.–Parallel walleye pollock harvest by pelagic and nonpelagic trawl vessels greater than 58 feet and less than or equal to 58 feet in the Chignik and Kodiak areas, 2003–2012.

	Chignik				Kodiak			
	Vessels less than or Equal to 58 Feet		Vessels Greater than 58 Feet		Vessels less than or Equal to 58 Feet		Vessels Greater than 58 Feet	
Year	Harvest (Pounds)	Vessel Count	Harvest (Pounds)	Vessel Count	Harvest (Pounds)	Vessel Count	Harvest (Pounds)	Vessel Count
2003	CF	2	CF	1	CF	1	16,319,568	33
2004	922,546	4	CF	2	0	0	30,208,945	38
2005	429,682	4	524,984	3	CF	2	22,605,699	36
2006	642,675	3	CF	2	CF	2	26,851,128	31
2007	CF	1	0	0	0	0	18,723,343	27
2008	CF	1	0	0	CF	1	22,394,257	32
2009	0	0	0	0	CF	1	18,584,399	30
2010	0	0	0	0	1,604,716	4	22,025,932	32
2011	CF	1	CF	1	1,106,214	3	10,355,108	29
2012	4,103,067	11	CF	1	1,837,227	4	20,413,182	36
Average	1,524,493	6	524,984	1	1,516,052	2	20,848,156	32

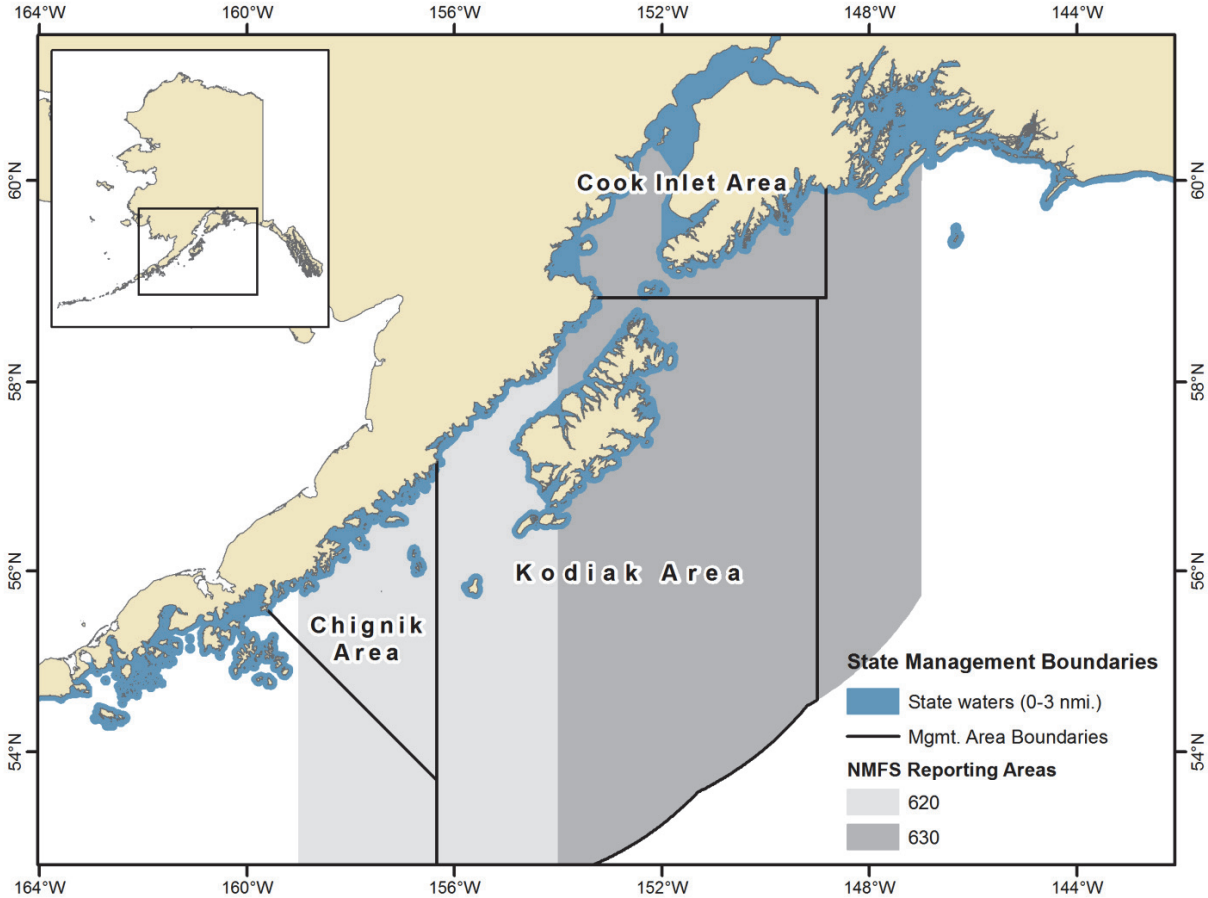

Figure 44-1.–Map depicting the Cook Inlet, Kodiak, and Chignik management areas and federal areas 620 and 630 for walleye pollock.

PROPOSAL 45 – 5 AAC 28.XXX. New Section.

PROPOSED BY: Alaska Marine Conservation Council, Cape Barnbus Inc., and Ouzinkie Community Holdings.

WHAT WOULD THE PROPOSAL DO? This proposal would require 100% observer coverage for trawl vessels targeting groundfish inside state waters (0–3 nautical miles) of the Cook Inlet, Kodiak, and Chignik management areas.

WHAT ARE THE CURRENT REGULATIONS? The state opens a parallel pelagic trawl walleye pollock fishery concurrent to the federal fishery (3–200 nmi) and adopts most federal rules and management actions inside state waters by emergency order (5 AAC 28.086). Pelagic trawl gear is a legal gear type in all state waters of the Cook Inlet, Kodiak, and Chignik areas; however, during the parallel walleye pollock fishery, the state adopts most Steller sea lion federal closures prohibiting directed walleye pollock fishing in some areas inside state waters.

Except for a portion of state waters on the westside of Kodiak Island and Afognak Island (Figure 45-1), nonpelagic trawl gear is prohibited in all state waters of Kodiak, Chignik, and Cook Inlet areas (5 AAC 39.164; 5 AAC 28.330). Where nonpelagic trawl gear is allowed, the state opens a parallel fishery concurrent to the adjacent federal fishery. During the parallel season, the state adopts by emergency order federal rules and management actions inside state waters.

Annually, National Marine Fisheries Service (NMFS) observers are deployed across most federal/parallel groundfish and halibut fisheries based on management and conservation needs. Federally-permitted trawl vessels are subject to federal observer program requirements during parallel fisheries. Trawl vessels without federal fishing permits are not subject to federal observer requirements during parallel fisheries. All Gulf of Alaska trawl vessels that currently participate in parallel groundfish fisheries have federal license limitation permits (LLP) and federal fisheries permits (FFP).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? All vessels targeting groundfish with trawl gear would be required to have an observer onboard the vessel 100% of the time while operating inside state waters, although the state does not have a groundfish observer program. The proposal does not specify which management agency (Alaska Department of Fish and Game or NMFS) would be responsible for deploying observers and administering the program. Although the Alaska Board of Fisheries (board) could require 100% observer coverage in state waters, the state does not have authority to regulate the federal observer program and thus, some state program would be required. Increased trawl vessel observer coverage inside state waters would provide increased bycatch and discard monitoring, and biological samples in support of research and assessment of fishery resources.

BACKGROUND: The North Pacific Fishery Management Council (NPFMC) recently adopted Gulf of Alaska (GOA) king salmon prohibited species (PSC) bycatch caps for federal trawl (pelagic and nonpelagic) fisheries and reduced halibut PSC caps for trawl and longline fisheries. Federal PSC caps are apportioned based on season, fishery target species, and gear/processing sector type. When the apportioned PSC cap is achieved, the directed fishing season is closed for

the applicable federal fishing sector. Currently, there are no state or federal PSC caps for crab species in the GOA.

Vessels subject to federal/parallel observer requirements are placed into one of two observer coverage categories: 1) full coverage category or 2) partial coverage category. Most trawl catcher vessels in the GOA are placed into the partial coverage category resulting in a level of observer coverage less than 100%. Funding associated with deploying federal observers on vessels in the partial coverage category is provided through annual fees based on the exvessel value of groundfish and halibut retained during those fisheries.

The NPFMC is currently considering a new management program for federal GOA trawl vessels (catcher vessels and catcher processors) aimed at reducing bycatch of non-target species including Pacific halibut and king salmon. This action is ongoing; in October 2013, the NPFMC proposed a preliminary program design based on a voluntary cooperative structure that would allocate pollock, Pacific cod, halibut PSC, and king salmon PSC in federal waters to cooperatives. The initial design proposed in October includes 100% observer coverage on all trawl catcher vessels (trawl catcher processors already have at least 100% coverage). It is not possible to project when final action on such a program would occur, but it is likely at least 18 months to two years away. Although specific management alternatives have not been developed at this time, groundfish observer coverage has been identified by the NPFMC as an important consideration.

Establishing a state groundfish observer program would be duplicative to the federal groundfish observer program that currently operates in the parallel trawl fisheries for transboundary groundfish species. A state groundfish observer program would require a substantial investment in time and resources for the State of Alaska. Because NMFS provides stock assessment for most groundfish, maintaining a state-waters observer program with data compatible with data collected by the NMFS observer program would be essential to provide the same quality and type of information in order to be used for both catch accounting and stock assessment.

DEPARTMENT COMMENTS: The department supports collection of onboard fishery data; however, is **NEUTRAL** on requiring 100% coverage.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery if fishery participants are required to pay for observers. Observer fees vary depending on the observer provider; however, observer coverage may cost vessel operators $450 per day.

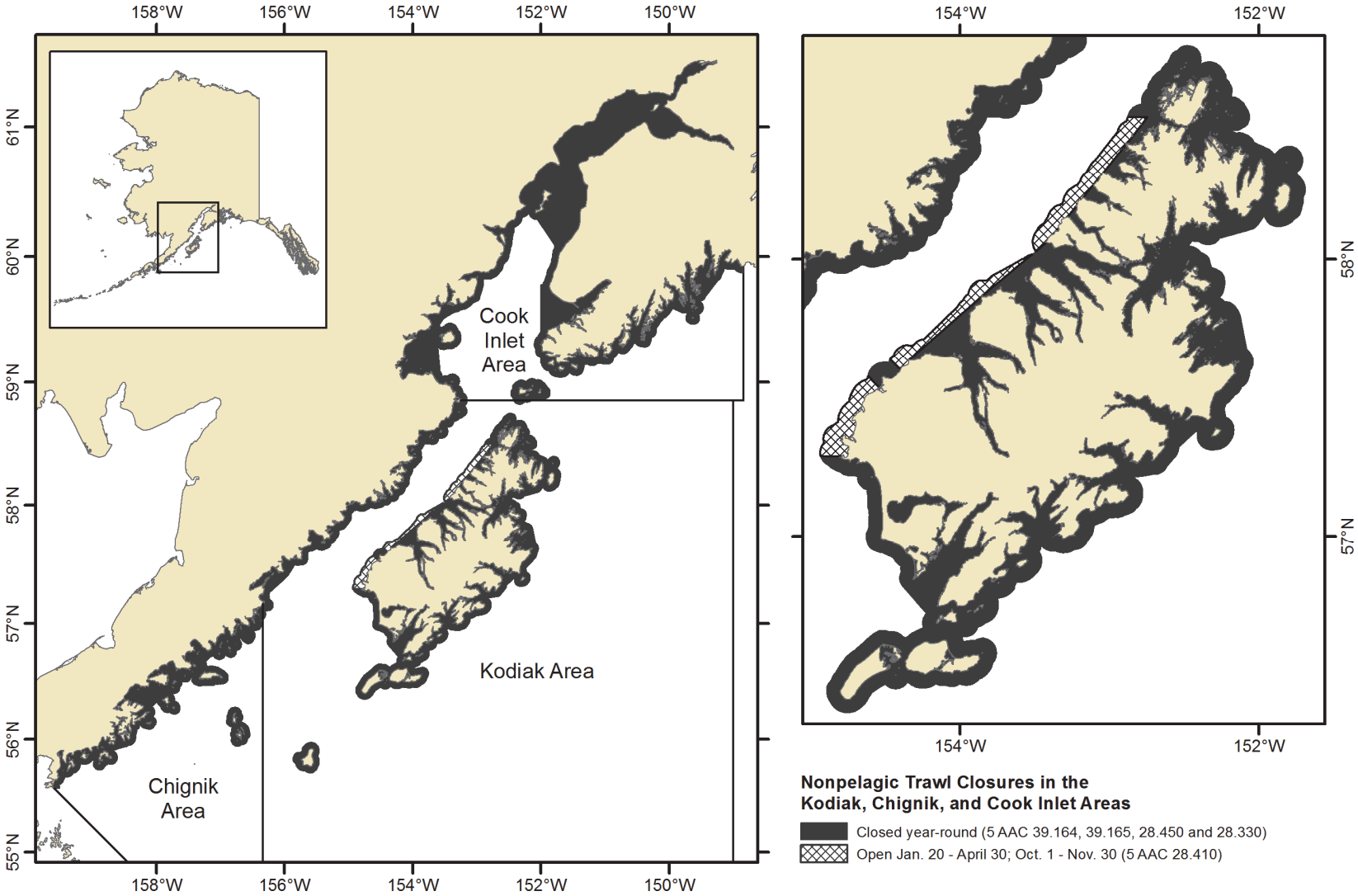

Figure 45-1.–Nonpelagic trawl gear closures in state-waters of the Cook Inlet, Kodiak, and Chignik areas.

COMMITTEE OF THE WHOLE: COOK INLET SPORT FISHING, COMMERCIAL FISHING, AND HATCHERY MANAGEMENT PLANS (18 Proposals)
SPORT FISH: 46–57
COMMERCIAL FISHERIES: 79, 81
SALMON HATCHERY MANAGEMENT PLANS AND SPECIAL HARVEST AREAS: 82, 83, 84, 85

PROPOSAL 46 – 5 AAC 58.0XX. New Section.

PROPOSED BY: Andy Housh.

WHAT WOULD THE PROPOSAL DO? This proposal would provide vessel-based harvest limits for the Cook Inlet saltwater sport fisheries.

WHAT ARE THE CURRENT REGULATIONS? Bag and possession limits are specific to individual anglers. A "bag limit" is defined in statewide regulations, 5 AAC 75.995, as the maximum legal take per person per day, in the area in which the person is fishing, even though part or all of the fish are immediately preserved; a fish when landed and killed becomes a part of the bag limit of the person originally hooking it. "Possession limit" means the maximum number of unpreserved fish, except halibut, that a person may have in possession.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would create a regionwide exception to statewide individual-based bag limits. In Cook Inlet, it would change the harvest distribution among anglers fishing from a vessel; successful anglers would harvest more fish and less successful anglers would harvest fewer than under current regulations. Whether or not harvest would increase overall would depend on the harvest limits set per vessel (and species).

This proposal would create area boundaries where harvest limit rules would be different on each side of a boundary. Anglers would be responsible for fishing under either current individual-based bag limits on one side of the line, or vessel-based limits on the other. It is not clear what rules would apply to anglers and vessels that fish on both sides of a boundary during a fishing trip. Different standards for bag limits by area would degrade understanding by the public and potentially create unforeseeable compliance and enforcement issues.

BACKGROUND: Vessel-based harvest limits have not been implemented at any time since statehood. The definition of "bag limit" is consistent across the state and requires individual anglers to be responsible for their harvests and bag limits. Experienced anglers can aid anglers requiring assistance by helping to land fish, but the fish is part of the bag limit of the angler who originally hooked it.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. The definition of "bag limit" is consistent across the state and among species. Adoption of this proposal would create inconsistencies among areas and thereby increase regulatory complexity, and would likely create compliance issues near the area boundaries. It would also create inconsistent harvest rules by species because current individual-based harvest limits for halibut are set by federal regulation and

would require federal action to change. The department continues to support statewide individual-based harvest limits.

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 47 – 5 AAC 56.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area; 5 AAC 57.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai River Drainage Area; 5 AAC 59.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Anchorage Bowl Drainages Area; 5 AAC 60.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Knik Arm Drainages Area; 5 AAC 61.110. General provisions for seasons, bag, possession, and size limits, and methods and means for the Susitna River Drainage Area; and 5 AAC 62.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the West Cook Inlet Area. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? All anglers would be required to use barbless hooks when fishing for salmon in Cook Inlet freshwater systems.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 75.020(a), *Sport fishing gear,* states unless otherwise provided, sport fishing may only be conducted by use of a closely attended, single line having no more than one plug, spinner, or series of spinners or two flies or two hooks.

There are no regulations prohibiting barbed hooks in Alaska.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would affect many anglers. Based on recent Statewide Harvest Survey data an estimated 187,000 anglers participate in Cook Inlet freshwater fisheries. Prohibiting the use of barbed hooks in Cook Inlet salmon fisheries would reduce angler efficiency by some amount. A 2010 study by California Department of Fish and Game examined the capture efficiency of artificial flies fished with barbed and barbless hooks in trout fisheries in California. The study found angler efficiency decreased by 11–24%, with young and inexperienced anglers disproportionately affected. The prohibition of barbed hooks would apply to fisheries on many hatchery stocked lakes and streams in Anchorage, Matanuska–Susitna Valley, and Kenai Peninsula, in addition to wild stocks. Reduced angler efficiency would result in either anglers fishing longer in order to achieve their bag limit for salmon, or a reduced harvest. Prohibiting barbed hooks would not reduce mortality of released fish by a measurable amount.

Requiring all anglers to use barbless hooks only in Cook Inlet fresh waters and only for salmon would add complexity to the regulations, increasing the likelihood of violations.

BACKGROUND: The proposal implies that high numbers of salmon released by anglers experience mortality and seeks to reduce mortality of released fish by prohibiting barbed hooks. Some salmon anglers currently use barbless hooks voluntarily. In 2012, the total number of salmon harvested in commercial, sport and personal fisheries in the waters of Cook Inlet was approximately 5,710,500 salmon. In the sport fishery, anglers harvested an estimated 622,200 of 1,160,000 salmon caught in Cook Inlet fresh water fisheries, indicating a release of 537,800

salmon. Studies indicate estimates of release mortality vary greatly depending on a number of factors, but conservatively fall between 9–20%. Using these parameters, salmon mortality attributed to released fish in Cook Inlet fresh waters would be approximately 0.9–2.0% of total removals.

The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location. Studies of mortality rates on fish released using barbed and barbless hooks are inconclusive. Results largely suggest there is no significant difference in mortality rates of fish caught on barbed versus barbless hooks, although due to the vast body of research on the topic, some studies do support the use of barbless hooks for specific species in some fisheries. It is important to consider the species and fishery when reviewing the results of release mortality studies.

Some western states have implemented barbless hook regulations. Washington and Oregon have barbless regulations for salmon, steelhead (Endangered Species Act listed), and cutthroat trout on sections of the Columbia and Willamette rivers as part of a broad based policy to restructure Columbia River sport fisheries and address allocation issues by reducing angler efficiency. Montana, Colorado, Wyoming, Utah, and Nevada have either rejected barbless hook proposals or repealed barbless regulations for reasons including regulatory complexity and lack of measurable biological benefit.

The Alaska Board of Fisheries has adopted regulations to promote best practices for releasing fish and reducing release-related mortality by prohibiting removing a fish from the water if it is to be released; prohibiting bait, which can affect hook placement and increase catch rates; prohibiting multiple hooks; and prohibiting fishing after a limit of a specific species is harvested. The department promotes best practices for releasing fish, including the use of barbless hooks, through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Anglers may currently use barbless hooks, and many do. The department encourages anglers to use best practices through outreach efforts. However, we do not support a regulation requiring the practice because of the negative effects it would cause to sport fishing opportunity in the absence of a measurable biological benefit. The department is **NEUTRAL** on allocative aspects of this proposal.

COST ANALYSIS: Depending on how the board defines a barbless hook, approval of this proposal could result in an additional direct cost for a private person to participate in these fisheries.

PROPOSAL 48 – 5 AAC 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 58.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower and Upper Cook Inlet Finfish meetings.)*

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would designate all waters where catch-and-release fishing occurs on salmon as "single, unbaited, barbless hook waters." In those waters, it would thereby prohibit the use of multiple hooks, single hooks with a gap between point and shank greater than one-half inch, barbed hooks, and bait when fishing for any species year-round.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 75.023. Gear for single-hook waters.

(a) In waters designated as single-hook waters, sport fishing is permitted only as follows:

(1) with not more than one single hook with gap between point and shank one-half inch or less;

(2) hooks or lures (including those of standard manufacture) may not have additional weight attached to them; weights may be used only ahead of the hook or lure.

(b) Multiple hooks are prohibited in waters designated as single-hook waters.

5 AAC 75.020(a), *Sport fishing gear*, states unless otherwise provided, sport fishing may only be conducted by use of a closely attended, single line having no more than one plug, spinner, or series of spinners or two flies or two hooks.

Alaska fishing regulations allow, but do not require, barbless hooks. There are no regulations prohibiting barbed hooks in Alaska. Although there is a regulatory definition, the Alaska Board of Fisheries (board) has not designated waters in Alaska as "single-hook waters". The board has required the use of single hooks in some waters in Cook Inlet, such as fly-fishing-only waters (one unweighted, single hook fly with a gap between point and shank of 3/8 inch or less), and many rainbow trout and king salmon fisheries where the harvest potential was reduced in order to provide opportunity.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Since salmon may be released in all waters of Alaska, this proposal could apply in all waters of Cook Inlet that produce salmon. It would affect many anglers; based on recent Statewide Harvest Survey data, an estimated 187,000 anglers participate in Cook Inlet freshwater fisheries. Prohibiting the use of barbed hooks in Cook Inlet salmon fisheries would reduce angler efficiency by some amount. A 2010 study by California Department of Fish and Game examined the capture efficiency of artificial flies fished with barbed and barbless hooks in trout fisheries in California. The study found angler efficiency decreased by 11–24%, with young and inexperienced anglers disproportionately affected. The prohibition of barbed hooks would apply to fisheries on many hatchery stocked lakes and streams in Anchorage, Matanuska–Susitna Valley, and Kenai Peninsula, in addition to wild stocks. Reduced angler efficiency would result in either anglers fishing longer in order to achieve their bag limit for salmon, or a reduced

harvest. Prohibiting barbed hooks would not reduce mortality of released fish by a measurable amount.

Requiring all anglers to use barbless, single-hooks only in Cook Inlet fresh waters and only for salmon would add complexity to the regulations. The divergent regulations and lack of clarity for which waters the regulation would apply would increase the likelihood of violations.

BACKGROUND: The proposal implies that high numbers of salmon released by anglers experience mortality and seeks to reduce mortality of released fish by prohibiting barbed hooks. Some salmon anglers currently use barbless hooks voluntarily. In 2012, the total number of salmon harvested in commercial, sport and personal use fisheries in the waters of Cook Inlet was approximately 5,710,500 salmon. In the sport fishery, anglers harvested an estimated 622,200 of 1,160,000 salmon caught in Cook Inlet fresh water fisheries, indicating a release of 537,800 salmon. Studies indicate estimates of release mortality vary greatly depending on a number of factors, but conservatively fall between 9–20%. Using these parameters, salmon mortality attributed to released fish in Cook Inlet fresh waters would be approximately 0.9–2.0% of total removals.

The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location. Studies of mortality rates on fish released using barbed and barbless hooks are inconclusive. Results largely suggest there is no significant difference in mortality rates of fish caught on barbed versus barbless hooks, although due to the vast body of research on the topic, some studies do support the use of barbless hooks for specific species in some fisheries. It is important to consider the species and fishery when reviewing the results of release mortality studies.

Some western states have implemented barbless hook regulations. Washington and Oregon have barbless regulations for salmon, steelhead (Endangered Species Act listed), and cutthroat trout on sections of the Columbia and Willamette rivers as part of a broad based policy to restructure Columbia River sport fisheries and address allocation issues by reducing angler efficiency. Montana, Colorado, Wyoming, Utah, and Nevada have either rejected barbless hook proposals or repealed barbless regulations for reasons including regulatory complexity and lack of measurable biological benefit.

The board has adopted regulations to promote best practices for releasing fish and reducing release related mortality by prohibiting removing a fish from the water if it is to be released, prohibiting bait, which can affect hook placement and increase catch rates; prohibiting multiple hooks; and prohibiting fishing after a limit of a specific species is harvested. The department promotes best practices for releasing fish, including the use of barbless hooks, through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Anglers may currently use single barbless hooks, and many do. The department encourages anglers to use best practices through outreach efforts. However, we do not support a regulation requiring the use of single, unbaited, barbless hooks because of the negative effects it would cause to sport fishing opportunity in the absence of a measurable biological benefit. The department is **NEUTRAL** on allocative aspects of this proposal.

COST ANALYSIS: Depending on how the board defines a barbless hook, approval of this proposal could result in an additional direct cost for a private person to participate in these fisheries.

PROPOSAL 49 – 5 AAC 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 58.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower and Upper Cook Inlet Finfish meetings.)*

PROPOSED BY: United Cook Inlet Drift Association.

WHAT WOULD THE PROPOSAL DO? This proposal would modify the existing gear for waters designated as "single-hook waters" to require the use of single, unbaited, barbless circle hooks.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 75.023. Gear for single-hook waters.

(a) In waters designated as single-hook waters, sport fishing is permitted only as follows:

(1) with not more than one single hook with gap between point and shank one-half inch or less;

(2) hooks or lures (including those of standard manufacture) may not have additional weight attached to them; weights may be used only ahead of the hook or lure.

(b) Multiple hooks are prohibited in waters designated as single-hook waters.

5 AAC 75.020(a), *Sport fishing gear,* states unless otherwise provided, sport fishing may only be conducted by use of a closely attended, single line having no more than one plug, spinner, or series of spinners or two flies or two hooks.

Alaska fishing regulations allow, but do not require, barbless hooks. There are no regulations prohibiting barbed hooks or requiring the use of circle hooks in Alaska. The Alaska Board of Fisheries (board) has not designated waters in Alaska as "single-hook waters". The board has required the use of single hooks in some waters in Cook Inlet, such as fly-fishing-only waters (one unweighted, single-hook fly with a gap between point and shank of 3/8 inch or less), and many rainbow trout and king salmon fisheries where the harvest potential was reduced in order to provide opportunity.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal is to be applied to waters currently designated as "single-hook waters" it would have no effect because no waters have been designated as such. However, if the board designated "single-hook waters" in the future, or, alternately, if the intent of the proposal is to apply to waters in which single hooks are required, this proposal would affect several fisheries.

Prohibiting the use of barbed hooks in Cook Inlet salmon fisheries would reduce angler efficiency by some amount. A 2010 study by California Department of Fish and Game examined the capture efficiency of artificial flies fished with barbed and barbless hooks in trout fisheries in California. The study found angler efficiency decreased by 11–24%, with young and inexperienced anglers disproportionately affected. The prohibition of barbed hooks would apply to fisheries on many hatchery stocked lakes and streams in Anchorage, Matanuska–Susitna Valley, and Kenai Peninsula, in addition to wild stocks. Reduced angler efficiency would result in either anglers fishing longer in order to achieve their bag limit for salmon, or a reduced

harvest. Prohibiting barbed hooks would not reduce mortality of released fish by a measurable amount.

Requiring all anglers to use single, unbaited, barbless, circle hooks only in Cook Inlet fresh waters and only for salmon would add complexity to the regulations. The divergent regulations and lack of clarity for which waters the regulation would apply would increase the likelihood of violations.

BACKGROUND: The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location. Studies of mortality rates on fish released using barbed and barbless hooks are inconclusive. Results largely suggest there is no significant difference in mortality rates of fish caught on barbed versus barbless hooks, although due to the vast body of research on the topic, some studies do support the use of barbless hooks for specific species in some fisheries. It is important to consider the species and fishery when reviewing the results of release mortality studies.

Some western states have implemented barbless hook regulations. Washington and Oregon have barbless regulations for salmon, steelhead (Endangered Species Act listed), and cutthroat trout on sections of the Columbia and Willamette rivers as part of a broad based policy to restructure Columbia River sport fisheries and address allocation issues by reducing angler efficiency. Montana, Colorado, Wyoming, Utah, and Nevada have either rejected barbless hook proposals or repealed barbless regulations for reasons including regulatory complexity and lack of measurable biological benefit.

The board has adopted regulations to promote best practices for releasing fish and reducing release related mortality by prohibiting removing a fish from the water if it is to be released, prohibiting bait which can affect hook placement and increase catch rates, prohibiting multiple hooks, and prohibiting fishing after a limit of a specific species is harvested. The department uses the commissioner's emergency order authority to reduce mortality when necessary to achieve goals or provide sustainability by prohibiting use of bait, multiple hooks, or closing fisheries. The department promotes best practices for releasing fish, including the use of barbless hooks, through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

For circle hooks to perform as designed, anglers must alter the method by which they set the hook relative to the method used for standard hooks. Instead of "setting" the hook by jerking the rod, the angler must apply gentle, steady pressure to the hook. To function properly, the entire circle hook needs to be ingested by a fish. The angler must provide the fish with sufficient time to actually ingest the entire hook. If the angler jerks the rod to set the hook, the circle hook will often be pulled out of the fish's mouth. This is why the use of circle hooks is generally combined with bait.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Anglers may currently use barbless and circle hooks. The department encourages anglers to use best practices through outreach efforts. However, we do not support a regulation requiring the use of unbaited, barbless circle hooks where single hooks are required because of the negative effects to sport fishing opportunity in the absence of a measurable biological benefit. The department is **NEUTRAL** on allocative aspects of this proposal.

COST ANALYSIS: Depending on how the board defines a barbless circle hook, approval of this proposal could result in an additional direct cost for a private person to participate in these fisheries.

PROPOSAL 50 — 5 AAC 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit the release of coho salmon caught while sport fishing in Cook Inlet fresh waters.

WHAT ARE THE CURRENT REGULATIONS? In Cook Inlet, a coho salmon 16 inches or longer that is removed from fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a coho salmon 16 inches or longer from the water before releasing it.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce fishing opportunity because it would require anglers who would otherwise intend to release coho salmon alive, including anglers targeting other species, to harvest coho salmon. Anglers with a limit of coho salmon would be unable to fish for other species without the risk of committing a violation if they caught another coho salmon. They would be prohibited from releasing the coho salmon and retaining it would exceed their bag limit. This proposal would also create additional regulation and thereby increase regulatory complexity.

This proposal would likely reduce overall mortality of coho salmon caught in the Cook Inlet freshwater sport fishery. However, the effect to total mortality would be relatively small. Since salmon fisheries are managed for sustained yields by ensuring escapement goals are achieved, effects to salmon production would also be minimal.

BACKGROUND: The proposal implies that high numbers of salmon released by anglers experience mortality, and it seeks to reduce mortality of released fish by prohibiting releasing fish. In the 2012 sport fishery, Cook Inlet anglers (excluding North Gulf/Resurrection Bay) harvested an estimated 89,850 of 133,900 coho salmon caught in fresh waters, indicating a release of 44,000 coho salmon. Studies indicate estimates of release mortality vary greatly depending on a number of factors, but conservatively fall between 9–20%. Using these parameters, salmon mortality attributed to released fish in Cook Inlet would be approximately 3,960–8,800 coho salmon.

The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such as the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location.

Two studies have been conducted in Alaska to estimate release mortality of coho salmon. A study in the late 1980s on the Little Susitna River estimated a mortality rate of 69% for coho salmon caught and released within the intertidal portion of the river. The same study reported

that coho salmon released above tidal influence experienced a 12% mortality rate. A 2001 study on the Unalakleet River in western Alaska estimated a release mortality rate for coho salmon of 15%. That study found location in the river made no difference in coho salmon mortality. Both studies concluded that hook placement was the major factor affecting the fate of an individual fish.

The Alaska Board of Fisheries (board) has adopted regulations to promote best practices for releasing fish and reducing release-related mortality by prohibiting removing a fish from the water if it is to be released; prohibiting bait, which can affect hook placement and increase catch rates; prohibiting multiple hooks; and prohibiting fishing after a limit of a specific species is harvested. The department promotes best practices for releasing fish through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal**.** Anglers release fish for a number of reasons. Some anglers prefer to release fish rather than harvest them. Anglers also choose to release a fish because it is not the targeted species, is not legal size, is snagged, or is not edible. The department encourages anglers to use best practices through outreach efforts. Sport fishing regulations for coho salmon in Cook Inlet, recently adopted by the board, are some of the most restrictive regulations in the state for 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 these fisheries.

PROPOSAL 51 – 5 AAC 58.030. Methods, means, and general provisions – Finfish.

PROPOSED BY: Brandie Ware.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit the release of coho salmon caught while sport fishing in the Cook Inlet–Resurrection Bay Saltwater Area.

WHAT ARE THE CURRENT REGULATIONS? The harvest limit for coho salmon in the Cook Inlet–Resurrection Bay Saltwater Area is three per day, three in possession. Resurrection Bay, north of a line between Aialik Cape and Cape Resurrection, and the Nick Dudiak Fishing Lagoon in Homer, are designated terminal harvest areas with a limit of six coho salmon per day, twelve in possession. Terminal harvest areas are designed to provide harvest opportunity for stocked salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce fishing opportunity because it would require anglers who would otherwise intend to release coho salmon alive, including anglers targeting other species, to harvest coho salmon. Anglers with a limit of coho salmon would be unable to fish for coho salmon or other species without the risk of committing a violation if they caught another coho salmon. They would be prohibited from releasing the coho salmon and retaining it would exceed their bag limit. This proposal would also create additional regulation and thereby increase regulatory complexity.

This proposal would reduce overall mortality of coho salmon caught in the Cook Inlet–Resurrection Bay area. However, the effect on total mortality would be relatively small. Since salmon fisheries are managed for sustained yields by ensuring escapement goals are achieved, effects on salmon production would also be minimal.

BACKGROUND: The North Gulf Coast coho salmon fishery out of Seward is one of the largest coho salmon sport fisheries in the state. Since 2001, anglers fishing these waters have caught an average 131,234 coho salmon annually, and released 24,107, or an average of 18% of their catch. This mixed stock fishery has a very long fishing season, with anglers catching coho salmon at the end of June through September. Hatchery-released coho salmon caught in the Resurrection Bay fishery come from Prince William Sound, Resurrection Bay, and Cook Inlet. Charter boat operators often report catching and releasing juvenile coho salmon that had just migrated to salt water that spring and by midsummer were about eleven inches long.

The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such as the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location. The literature suggests the release mortality of coho salmon caught in salt water ranges from 6% to more than 20%. In the Cook Inlet – Resurrection Bay salt water area, of the 131,234 coho salmon caught annually, about 2,411 (10% of those released) die due to release mortality.

The Alaska Board of Fisheries has adopted regulations to promote best practices for releasing fish and reducing release related mortality by prohibiting removing a fish from the water if it is to be released; prohibiting bait, which can affect hook placement and increase catch rates; prohibiting multiple hooks; and prohibiting fishing after a limit of a specific species is harvested. The department promotes best practices for releasing fish through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal**.** The mortality of released coho salmon in this marine fishery is relatively low. Anglers release fish for a number of reasons. Some anglers prefer to release fish rather than harvest them. Anglers also choose to release a fish because it is not the targeted species, is not legal size, is snagged, or is not edible. The department encourages anglers to use best practices through outreach efforts.

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 52 — 5 AAC 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit anglers from releasing any salmon caught, up to the bag limit, while fishing in all Cook Inlet fresh waters.

WHAT ARE THE CURRENT REGULATIONS? The limit for king salmon 20 inches or greater in length is one per day, one in possession, with an annual limit of five from Cook Inlet waters. A king salmon 20 inches or greater intended for release may not be removed from the water. The limit of king salmon less than 20 inches is 10 per day. A coho salmon may not be removed from the water before release.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would affect many anglers; based on recent Statewide Harvest Survey data, an estimated 187,000 anglers participate in Cook Inlet fresh water sport fisheries. Under this proposal, all sport anglers who fish for salmon in Cook Inlet freshwater systems would be required to retain all salmon caught, up to the bag limit for that species.

This proposal would reduce fishing opportunity for salmon because it would prohibit anglers who would otherwise intend to release salmon alive from doing so. Anglers fishing for resident species like rainbow trout, Dolly Varden, and Arctic grayling would be required to keep all the salmon they caught up to their limit. Anglers with a limit of salmon would be unable to fish for other species without the risk of committing a violation if they caught another salmon. They would be prohibited from releasing the salmon and retaining it would exceed their bag limit.

Prohibiting anglers from releasing any salmon, and only in Cook Inlet fresh waters, would add complexity to the regulations, increasing the likelihood of violations.

This proposal would reduce overall mortality of salmon caught in the Cook Inlet freshwater sport fisheries. However, the effect on total mortality due to savings in release mortality would be relatively small. Since salmon fisheries are managed for sustained yields by ensuring escapement goals are achieved, effects on salmon production would also be small.

BACKGROUND: The proposal implies that high numbers of salmon released by anglers experience mortality, and it seeks to reduce mortality of released fish by prohibiting releasing salmon. In 2012, the total number of salmon harvested in commercial, sport and personal use fisheries in the waters of Cook Inlet was approximately 5,710,500 salmon. In the sport fishery, anglers harvested an estimated 622,200 of 1,160,000 salmon caught in Cook Inlet fresh waters, indicating a release of 537,800 salmon. Studies indicate estimates of release mortality vary greatly depending on a number of factors but conservatively fall between 9–20%. Using these parameters, salmon mortality attributed to released fish in Cook Inlet fresh waters would be approximately 0.9–2.0% of the total removals.

The mortality of released fish is dependent mostly on hook placement. Hooking mortality is often higher for fish that have been hooked in vital areas, such the esophagus or gills. Other factors, such as fish size, gear type, bleeding, and elapsed time to unhook the fish, can influence survival to a lesser degree than hook location.

The Alaska Board of Fisheries has adopted regulations to promote best practices for releasing fish and reducing release-related mortality by prohibiting removing a fish from the water if it is to be released; prohibiting bait, which can affect hook placement and increase catch rates;, prohibiting multiple hooks; and prohibiting fishing after a limit of a specific species is harvested. The department promotes best practices for releasing fish through education and outreach. The department uses emergency order authority to reduce mortality when necessary to achieve escapement goals or provide sustainability. It does so primarily through harvest limit reductions, but also by prohibiting use of bait and multiple hooks.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal**.** The mortality of released salmon in Cook Inlet fresh waters is relatively low. Anglers release fish for a number of reasons. Some anglers prefer to release fish rather than harvest them. Anglers also choose to release a fish because it is not the targeted species, is not legal size, is snagged, or is not edible. The department encourages anglers to use best practices through outreach efforts.

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

PROPOSAL 53 – 5 AAC 56.120. General provisions for seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Homer Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit anglers who are releasing a fish in fresh water from removing the fish's head from the water.

WHAT ARE THE CURRENT REGULATIONS? A coho salmon 16 inches or longer that is removed from fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a coho salmon 16 inches or longer from the water before releasing it.

A king salmon 20 inches or longer that is removed from salt or fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a king salmon 20 inches or longer from the water before releasing it.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Prohibiting anglers from removing a fish's head from the water before releasing it would unnecessarily complicate an existing regulation to promote best practices for releasing fish without measurable biological benefit. Requiring anglers to keep a fish's head in the water when removing the hook could increase stress and handling time.

BACKGROUND: Best practices for releasing fish are promoted through a combination of regulation and education. In fisheries where handling mortality was an issue, the board implemented regulations prohibiting removing king and coho salmon, and rainbow/steelhead trout from the water before releasing them. These regulations are enforceable and effectively prohibit anglers from landing their catch on the shore, or holding a fish out of the water for a photo. Current regulations allow anglers to keep a fish in the water while providing the best opportunity to quickly remove the hook from its mouth.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal as a conservation measure. The department encourages anglers to use best practices through outreach efforts. Approval of the proposal would unnecessarily complicate an existing regulation and be difficult to enforce.

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 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Central Peninsula Fish and Game Advisory Committee.

WHAT WOULD THE PROPOSAL DO? This proposal would prohibit sport fishing in major Cook Inlet spawning areas when spawning fish are present.

WHAT ARE THE CURRENT REGULATIONS? There are many area and date closures in place intended to protect stocks that are easily accessible in tributary streams and vulnerable stocks lacking inseason assessment. Many streams on the Kenai Peninsula, Anchorage, and the Mat-Su Valley are closed each spring to all fishing during rainbow trout spawning. Sections of streams at the head of Turnagain Arm are closed each year to all fishing after July 14, to provide additional protection to coho and king salmon stocks vulnerable in tributaries with no inseason assessment.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The department would need to identify "major spawning areas" for all species of fish. Regulations would become more complex and fishing opportunity would be reduced or eliminated in many Cook Inlet waters.

BACKGROUND: Throughout much of the open water season in Southcentral Alaska, the freshwater systems host spawning salmon of one species or another. Spawning can take place throughout a system: from the intertidal reaches, where pink salmon spawn, throughout a river system and into lakes where sockeye salmon spawn.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. It would require the department to establish criteria to define "major" spawning sites throughout Cook Inlet. Current closures in many Cook Inlet streams are in place to protect king, coho, and sockeye salmon and rainbow trout. These closures adequately protect stocks that are easily accessible in tributary streams.

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 55 –- 5 AAC 56.124. Harvest record required; annual limits for the Kenai Peninsula Area; 5 AAC 57.124. Harvest record required; annual limits for the Kenai River Drainage Area; 5 AAC 58.024. Harvest record required; annual limits; 5 AAC 59.124. Harvest record required; annual limits for the Anchorage Bowl Drainages Area; 5 AAC 60.124. Harvest record required; annual limits for the Knik Arm Drainages Area; 5 AAC 61.124. Harvest record required; annual limits for the Susitna River Drainage Area; and 5 AAC 62.124. Harvest record required; annual limits for the West Cook Inlet Area. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Mary J. Adami.

WHAT WOULD THE PROPOSAL DO? This proposal would decrease the Cook Inlet king salmon annual limit of king salmon 20 inches or greater in length to two, of which only one can be from the Kenai River.

WHAT ARE THE CURRENT REGULATIONS? An annual limit of five king salmon 20 inches or longer may be taken from fresh waters of Cook Inlet north of the latitude of Point Adam, and from Cook Inlet salt waters, with two exceptions. King salmon harvested in Cook Inlet salt waters south of Anchor Point Light from October 1 to March 31 and king salmon longer than 20 inches, but less than 28 inches harvested in the Kenai River from January 1 through June 30, are not included in the limit.

Of these five total king salmon:

- No more than two may be taken from the Kenai River.
- No more than two may be taken from Deep Creek and Anchor River combined.

There are no king salmon annual limits in effect for North Gulf Coast waters.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The sport harvest of king salmon and the opportunity for anglers to harvest wild and hatchery-released king salmon would be reduced.

BACKGROUND: The department has an escapement-based management system and monitors major king salmon streams throughout Cook Inlet. There are currently 23 streams in Cook Inlet with escapement goals for king salmon. The department's emergency order authority is used to reduce the bag limit or close fishing in each system to achieve escapement goals. Stocked king salmon fisheries are also part of this five fish annual limit. In 2014, king salmon will be stocked into Ship Creek (365,000 annual stocking goal), Eklutna Tailrace (424,000), Nick Dudiak Fishing Lagoon (210,000), Deception Creek (212,000), and Crooked Creek (150,000), and all are part of the annual Cook Inlet bag limit.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because limiting opportunity is not needed to achieve escapement goals and is **NEUTRAL** on the allocative aspects**.**

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

PROPOSAL 56 – 5 AAC 58.022. Waters; seasons; bag, possession, and size limits; and special provisions for Cook Inlet-Resurrection Bay Saltwater Area. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: Mary J. Adami.

WHAT WOULD THE PROPOSAL DO? This proposal would decrease the Cook Inlet saltwater king salmon bag and possession limit to one king salmon, reduce the annual limit to two king salmon, and provide that no portion of a fish may be removed from the water before release.

WHAT ARE THE CURRENT REGULATIONS? The Cook Inlet salt water bag and possession limit for king salmon is two fish. A total annual limit of five king salmon 20 inches or longer may be taken from fresh waters of Cook Inlet north of the latitude of Point Adam, and from Cook Inlet salt waters, with two exceptions. King salmon harvested in Cook Inlet salt waters south of Anchor Point Light from October 1 to March 31 and king salmon longer than 20 inches, but less than 28 inches harvested in the Kenai River from January 1 through June 30, are not included in the limit.

Of these five total king salmon:

- No more than two may be taken from the Kenai River.
- No more than two may be taken from Deep Creek and Anchor River combined.

There are no king salmon annual limits in effect for North Gulf Coast waters.

A king salmon 20 inches or longer that is removed from salt or fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a king salmon 20 inches or longer from the water before releasing it.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The sport harvest of king salmon and the opportunity for anglers to harvest wild and hatchery-released king salmon would be reduced. Prohibiting removing any part of a fish from the water before releasing it would unnecessarily complicate a regulation to promote best practices for releasing fish without measurable biological benefit.

BACKGROUND: The department has an escapement-based management system and monitors major king salmon streams throughout Cook Inlet. There are currently 23 streams in Cook Inlet with escapement goals for king salmon. The department's emergency order authority is used to reduce the bag limit or close fishing in each system to achieve escapement goals. Stocked king salmon fisheries are also part of this five fish annual limit. In 2014, king salmon will be stocked into Ship Creek (365,000 annual stocking goal), Eklutna Tailrace (424,000), Nick Dudiak Fishing Lagoon (210,000), Deception Creek (212,000), and Crooked Creek (150,000), and all are part of the annual Cook Inlet bag limit.

Best practices for releasing fish are promoted through a combination of regulation and education. In fisheries where handling mortality was potentially an issue, the Alaska Board of Fisheries implemented regulations prohibiting removing king and coho salmon, and rainbow/steelhead trout from the water before releasing them. These regulations are enforceable and effectively prohibit anglers from landing their catch on the shore, or holding a fish out of the water for a photo. The current regulations allow anglers to keep a fish in the water while providing the best opportunity to quickly remove the hook from its mouth.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal because limiting opportunity is not needed to achieve escapement goals and is **NEUTRAL** on the allocative aspects**.**

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 57 – 5 AAC 56.XXX. New Section; 5 AAC 57.XXX. New Section; 5 AAC 58.XXX. New Section; 5 AAC 59.XXX. New Section; 5 AAC 60.XXX. New Section; 5 AAC 61.XXX. New Section; and 5 AAC 62.XXX. New Section. *(This proposal will be considered at the Lower Cook Inlet and Upper Cook Inlet (UCI) Finfish meetings, but deliberated at the UCI meeting.)*

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal would limit the amount of sport-caught fish that can be exported to one hundred pounds of fillets.

WHAT ARE THE CURRENT REGULATIONS? There are no regulations limiting the export of fish harvested by any user group in Cook Inlet.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? An export limit of sport-caught fish in Cook Inlet would be an exception to regulations statewide, and a mechanism for recording the harvest of every fish and enforcing an export limit would have to be established. A means of inspecting all sport-caught harvest leaving the state would have to be developed, including establishing check stations on major roads, border crossings, airports, ferry terminals, freight shipping companies, etc. Which agency or group of agencies would be responsible for enforcing this limit would have to be determined. The Alaska Board of Fisheries would need to determine appropriate export limits for whole or processed fish.

BACKGROUND: The department manages sport fishery harvests by bag, possession, and annual limits; methods and means; and time and area closures that are established in regulation or by emergency order. Where and how fish are transported, and in what quantity, do not affect the department's ability to achieve escapement objectives or manage for sustained yield.

Estimates from the Statewide Harvest Survey indicate that between 2001 and 2012, resident sport anglers fished an average of 746,405 anger days of effort annually in Cook Inlet salt and fresh waters, while nonresident anglers fished an average of 501,579 angler days of effort annually in these waters. Between 2001 and 2012, resident sport anglers harvested, in the fresh and salt waters of Cook Inlet, an average of 30,602 king salmon, 155,544 coho salmon, 177,528 sockeye salmon, 12,512 pink salmon, and 2,626 chum salmon annually. During this same timeframe and area, nonresident anglers harvested an average of 29,992 king salmon, 128,302 coho salmon, 206,418 sockeye salmon, 15,287 pink salmon and 2,346 chum salmon annually. Resident anglers also harvest several hundred thousand salmon each year in personal use fisheries in Cook Inlet.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Extensive logistical concerns, a need for additional enforcement personnel, and the requirement to construct a new recordkeeping system integrating all exporting sources make this proposal virtually untenable and expensive.

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

PROPOSAL 79 – 5 AAC 21.350. Closed waters. *(This proposal will be considered at the Lower Cook Inlet meeting and heard and deliberated at the Upper Cook Inlet Finfish meeting.)*

PROPOSED BY: Mark Glassmaker.

WHAT WOULD THE PROPOSAL DO? This proposal would close waters to commercial fishing within one statute mile of the terminus of any anadromous fish stream on the west side of the Central District, from the northern boundary of the district south to Harriet Point, as measured from mean lower low tide, not mean high tide. Although specific streams are mentioned in the proposal, this proposal seeks to make the one statute mile measurement apply to every anadromous stream in this area of Cook Inlet. This proposal also seeks to increase the distance that commercial fishing may be allowed from a stream bed or channel of any anadromous fish stream throughout the intertidal portion of that stream from the current distance of 900 feet to 1,000 yards (3,000 feet).

WHAT ARE THE CURRENT REGULATIONS? Regulation 5 AAC 21.350 lists specific waters closed to commercial salmon fishing in Upper Cook Inlet, including the west side of Central District of Cook Inlet (Figure 79-1), as follows:

(b) Central District

(5) on the west side of the Central District from the northern boundary of the district south to Harriet Point (60° 23.75' N. lat., 152° 14.00' W. long.),

(A) within one statute mile of the terminus, at mean high tide, of the Kustatan River and Drift River;

(B) within one statute mile of the terminus, at mean lower low water, of the Cannery Creek;

(C) within one statute mile of the Big River;

(D) within 500 yards of the terminus, at mean high tide, of any anadromous fish stream;

(E) within 900 feet of the stream bed or channel of any anadromous fish stream throughout the intertidal portion of that stream out to the lower low water mark;

There are also specific areas along the west side of the Central District that are closed to set gillnetting that overlap with the area in question of this proposal (Figure 79-1).

5 AAC 21.330(b)(3)(A) reads:

(b) Set gillnets may be used only in the following locations:

(3) Central District: set gillnets may be used only in the following locations:

(A) waters along the west coast in the Central District

(i) from the northern boundary of the district to the Drift River terminal and only within five miles of the mean high tide mark;

(ii) from 60° 29.50' N. lat., 152° 19.00' W. long., to 60° 28.50' N. lat., 152° 19.50' W. long. and only within five miles of the mean high tide mark;

(iii) from 60° 27.50' N. lat., 152° 19.74' W. long., to 60° 22.75' N. lat., 152° 16.50' W. long. and only within five miles of the mean high tide mark;

(iv) from 60° 21.47' N. lat., 152° 21.50' W. long., to 60° 20.67' N. lat., 152° 22.50' W. long. and only within five miles of the mean high tide mark;

(v) from 60° 16.19' N. lat., 152° 29.90' W. long. to 60° 14.24' N. lat., 152° 32.62' W. long. and from 60° 13.42' N. lat., 152° 34.65' W. long. to 60° 05.25' N. lat., 152° 34.92' W. long. and only within five miles of the mean high tide mark;

(vi) near Johnson River from 60° 01.32' N. lat., 152° 36.25' W. long., to 59° 55.67' N. lat., 152° 41.67' W. long. and only within five miles of the mean high tide mark;

(vii) along the north side of Chinitna Bay from 59° 53.17' N. lat., 153° W. long., to 59° 51.52' N. lat., 153° 08.17' W. long. and only within 2,500 feet of the mean high tide mark;

Current regulations (5 AAC 21.350(i) and 5 AAC 39.290(a)) also close waters within 500 yards of a salmon stream. In addition, commercial salmon fishing is prohibited within the fresh waters of streams and rivers of the state, and over the beds or channels of fresh waters of streams and rivers of the state during all stages of the tide.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce areas currently open to commercial fishing on the west side of Cook Inlet. This proposal specifies that closed waters be measured from mean lower low tide, not mean high tide, as is currently done at Kustatan and Drift rivers. There are extensive tide flats in these areas, which may stretch for miles, and the proposal would potentially close a large portion of these areas if measured from mean lower low tide and not mean high tide. This proposal also increases the closed waters area from 500 yards (1,500 feet) to one statute mile (5,280 feet) around numerous salmon streams on the west side of the of the Central District of Cook Inlet. In addition, this proposal increases the closed waters from 900 feet to 1,000 yards (3,000 feet) of the stream bed of any anadromous fish stream. This proposal may also impact shore fisheries leases in this area Cook Inlet.

BACKGROUND: The Alaska Board of Fisheries (board) considered a closed waters proposal for the Kustatan and Drift rivers, and Bachatna and Packers creeks in 2005. In 2005, the proposal would have changed the closed waters description for the Kustatan and Drift rivers sections to be one mile from mean lower low water. The board did not pass the proposal in 2005.

The board also considered and adopted a new definition of closed waters (5 AAC 39.290) and salmon stream (5 AAC 39.975) at the 2013 Statewide Finfish and Supplemental Issues board meeting. The board changed the definition because there was confusion on how closed waters were defined and enforced by the Department of Public Safety. The new definition prohibits commercial fishing in waters within 500 yards of a salmon stream. In addition, commercial salmon fishing is prohibited within the fresh waters of streams and rivers of the state, and over the beds or channels of fresh waters of streams and rivers of the state during all stages of the tide. The department and board have also regularly updated 5 AAC 21.350, which lists waters closed to commercial fishing in Upper Cook Inlet.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. This proposal would unnecessarily close waters currently open to commercial fishing. Existing regulations

provide adequate protections around the terminus of salmon streams. 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.

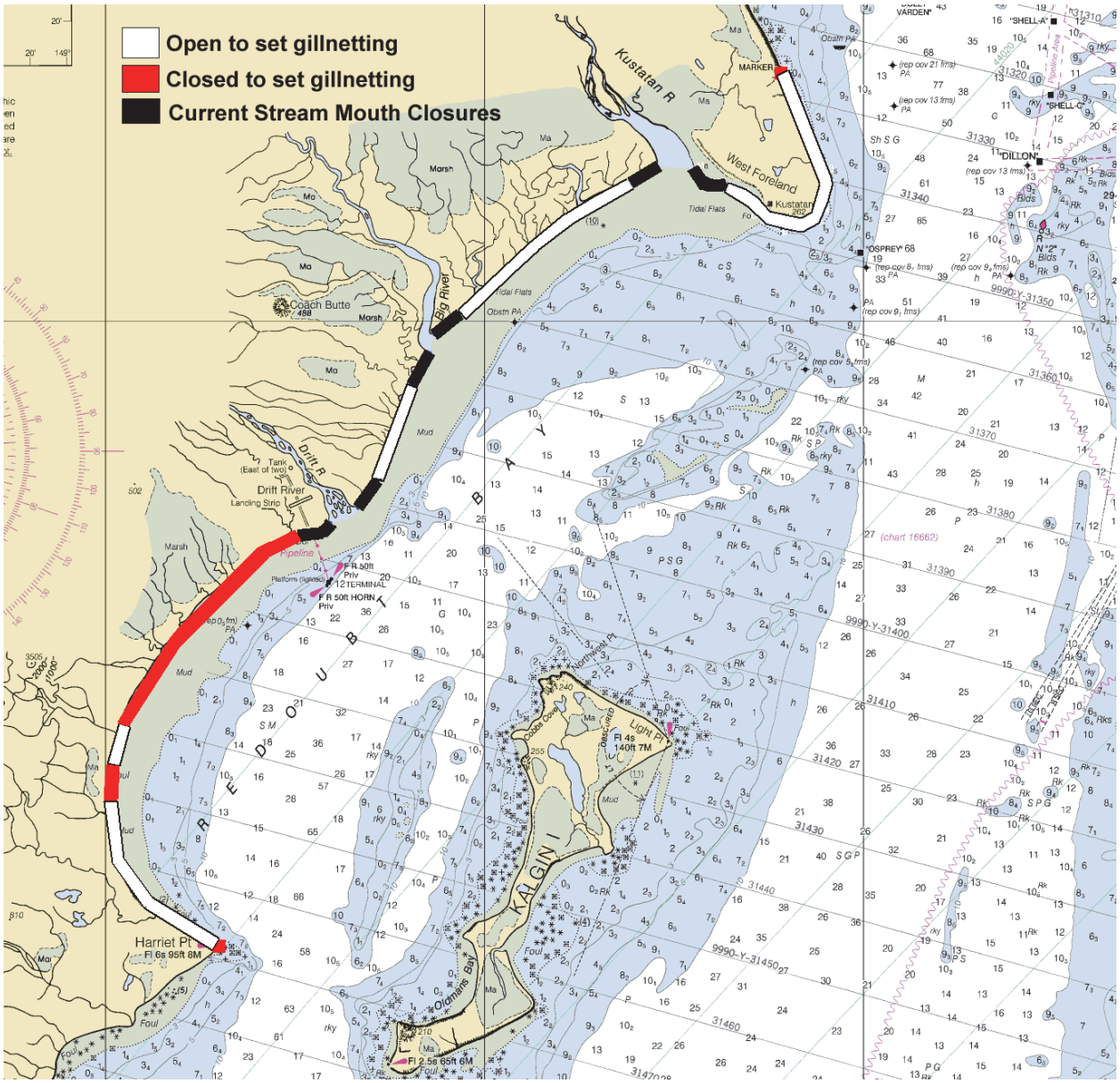

Figure 79-1.–Map of the west side of Cook Inlet showing areas of beach open and closed to set gillnetting from the northern boundary of the Central District to Harriet Point.

PROPOSAL 81 – 5 AAC 21.331. Gillnet specifications and operations; 5 AAC 21.332. Seine specifications and operations; and 5 AAC 27.410. Fishing seasons for Cook Inlet Area. *(The finfish aspects of this proposal will be considered at the Lower Cook Inlet meeting and heard and deliberated at the Upper Cook Inlet meeting. The king and Tanner crab aspects of this proposal will be considered during the Statewide King and Tanner Crab meeting.)*

PROPOSED BY: Don Johnson.

WHAT WOULD THE PROPOSAL DO? This proposal would establish various management measures to address declines in returning king salmon to Cook Inlet, including requiring setnet gear be "certified" as avoiding king salmon interception, closing commercial herring and crab fisheries, and identifying critical habitat areas. This proposal also seeks to have escapement goals increased so that nitrogen/phosphorous levels in freshwater ecosystems will increase and asks for aquaculture projects to be "certified" as not promoting or advancing one stock at the expense of other stocks.

WHAT ARE THE CURRENT REGULATIONS? Current regulations that concern commercial herring management in Lower Cook Inlet (LCI; 5 AAC 27.465) are based on abundance of this species. Herring in Upper Cook Inlet (UCI) are managed under the *Central District Herring Management Plan* (5 AAC 27.409).

Current regulations regarding commercial crab fisheries (king and Tanner) can be found in Chapter 34 of the Alaska Administrative Code (AAC; 5 AAC 34).

Salmon escapement goals are regularly reviewed in management areas and set to produce maximum sustained yield (MSY) and/or sustained yield based on the *Policy for the management of sustainable salmon fisheries* (SSFP; 5 AAC 39.222) and the *Policy for statewide salmon escapement goals* (EGP; 5 AAC 39.223). In addition, the SSFP directs the department to report to the Alaska Board of Fisheries (board) on the status of salmon stocks that present a concern related to yield, management, or conservation. When a stock of concern is identified, the department develops an action plan to ensure that the stock is sustainable.

Under the SSFP, the department is responsible for establishing biological and sustainable escapement goals. The board may establish an optimal escapement goal, if deemed appropriate, which considers biological and allocative factors and which may differ from the biological escapement goal or the sustainable escapement goal.

Current regulations regarding permitting and planning of private nonprofit salmon hatcheries can be found in Chapter 40 (5 AAC 40).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Although there are too many actions this proposal is seeking to adequately describe effects if adopted, the following are a few potential effects: commercial herring fisheries would remain closed during years where increased herring abundance would allow a commercial harvest. It is unclear who or how set gillnets would be certified as avoiding king salmon. Therefore, it is unknown what the effects of this proposal would be. Increasing escapement goals beyond the goals set by the

department would reduce harvest opportunity for all users. Salmon escapement goals are currently set to produce MSY (where possible). An increase in an escapement goal would likely result in the escapement exceeding an escapement goal range, which would decrease (not increase) the productivity and yield of a stock.

BACKGROUND: Commercial harvests of herring in LCI have been closed since 1974 in the Outer and Eastern districts, since 1979 in the Southern District, and since 1999 in the Kamishak District. In UCI, there are four areas where herring may be harvested with gillnets only. Each area has a very small harvest cap, which has never been reached. Two of the areas receive no participation, one area only has one or two participants, and the fourth area has, at most, about a dozen participants. All of the herring is sold as bait.

Regulation 5 AAC 21.331 specifies the maximum mesh size for gillnets in Cook Inlet is six inches. This restriction is for king salmon conservation. In other areas of the state, if there is a king salmon conservation issue, gear size is often reduced to six inches. It is unclear as to how gear could be certified as avoiding king salmon interception.

Regarding aquaculture programs, Alaska's hatchery program was designed to increase salmon abundance and enhance fisheries, while protecting wild stocks. The hatchery program has attempted to minimize interactions between wild and hatchery stocks by locating hatcheries away from naturally-occurring populations of salmon.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. This proposal would unnecessarily close commercial fisheries currently open and those that could possibly be opened to commercial fishing. It would also put unnecessary restrictions on many commercial salmon fisheries without proven benefits. Existing regulations provide adequate protections for salmon and herring fisheries throughout Alaska. 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, depending on the certification process of set gillnets.

PROPOSAL 82 – 5 AAC 21.XXX. Tutka Bay Lagoon Salmon Hatchery Management Plan.

PROPOSED BY: Cook Inlet Aquaculture Association.

WHAT WOULD THE PROPOSAL DO? This proposal would create a management plan for Tutka Bay Lagoon salmon hatchery to specify harvest priorities within the special harvest area (SHA), describe the locations of the Tutka Bay Lagoon, Paint River, and Halibut Cove Lagoon SHAs, and specify that Cook Inlet Aquaculture Association (CIAA), and its agents and employees, are authorized to harvest returning enhanced pink and sockeye salmon from hatchery SHAs. In addition, the proposal provides for common property fisheries, and achieves hatchery broodstock and cost recovery goals.

WHAT ARE THE CURRENT REGULATIONS? There is no regulatory management plan for the Tutka Bay Lagoon salmon hatchery. Management of this facility is conducted under authority of the department and the regional planning team as defined in 5 AAC 40.005. The department, in consultation with the hatchery operator, manages commercial fisheries using emergency order (EO) openings to obtain broodstock and cost recovery goals set by the hatchery operator and approved by the department.

Broodstock is defined as the number of spawners required to perpetuate and achieve natural, semi-artificial, and artificial production objectives (5 AAC 40.990(6)(A)). A cost-recovery goal is defined as the number of hatchery-produced fish taken for the hatchery harvest requirement, to be used to pay for the hatchery's reasonable operating and capital costs, at current market prices for the species involved (5 AAC 40.990(6)(B)).

Sport fishing for salmon in Cook Inlet is open year-round under standard regulations. The marine waters of Tutka Bay Lagoon within 100 yards of the Tutka Bay Lagoon hatchery net pens are closed year-round to sport fishing for any species. Statewide EO authority (5 AAC 75.003) provides direction to the department for managing sport fisheries for wild and hatchery salmon. The department, in consultation with the hatchery operator, closes sport fisheries, when necessary, using EO authority to ensure broodstock goals are met, but does not close sport fisheries to achieve cost-recovery goals.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would clarify the SHA boundary and provide CIAA clear authority to harvest enhanced salmon in the SHA. The proposal is not expected to change how the department manages commercial fisheries in the SHA. However, the proposal seeks to determine harvest priorities within the SHA and it is unclear how sport fisheries within the SHA would be affected.

BACKGROUND: The Tutka Hatchery was constructed in 1976, is owned by the department, and has been operated by CIAA since 1992. This facility consistently released 30 million to 100 million pink salmon fry from 1989–2004, as well as smaller quantities of sockeye and chum salmon. Production ceased in 2005 due to low market value of pink salmon, resulting in an inability to reach cost recovery goals for this facility. The CIAA Board of Directors (BOD) elected to suspend year-round operations at Tutka Hatchery in 2004. The CIAA BOD reviewed pink salmon operations at the hatchery and elected to pursue year-round pink salmon operations

in 2009. Production resumed in 2012, with 11 million pink salmon fry released that spring and 4.5 million released in 2013. CIAA has a permitted capacity of 125 million pink and 600 thousand sockeye salmon eggs. CIAA anticipates releasing approximately 100 million fry from this facility in 2014.

DEPARTMENT COMMENTS: The department **SUPPORTS** creating a Tutka Bay Lagoon salmon hatchery management plan that defines SHAs and clarifies hatchery operator authority. The department is **NEUTRAL** on the allocative aspects of this proposal. Should the board seek to approve the proposal, the department requests further direction under provision (a) of the proposed language.

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 83 – 5 AAC 21.377. Port Graham Salmon Hatchery Management Plan.

PROPOSED BY: Cook Inlet Aquaculture Association.

WHAT WOULD THE PROPOSAL DO? This proposal would modify the existing management plan for Port Graham Hatchery (PGH) by identifying the special harvest area (SHA) for this facility and specifying that the Cook Inlet Aquaculture Association (CIAA), as well as its agents and employees, are authorized to harvest returning enhanced salmon from hatchery SHAs. In addition, the proposal provides for common property fisheries, and achieves hatchery broodstock and cost-recovery goals.

WHAT ARE THE CURRENT REGULATIONS? The current *Port Graham Salmon Hatchery Management Plan* specifies that the department consult with hatchery operators in managing the Port Graham Subdistrict to provide for a common property fishery and to achieve the escapement goal set by the hatchery operator and approved by the department. The department, in consultation with the hatchery operator, manages commercial fisheries using emergency order (EO) openings to obtain broodstock and cost-recovery goals that are set by the hatchery operator and approved by the department.

Broodstock is defined as the number of spawners required to perpetuate and achieve natural, semi-artificial, and artificial production objectives (5 AAC 40.990(6)(A)). A cost-recovery goal is defined as the number of hatchery-produced fish taken for the hatchery harvest requirement, to be used to pay for the hatchery's reasonable operating and capital costs, at current market prices for the species involved (5 AAC 40.990(6)(B)).

Sport fishing for salmon in Cook Inlet salt waters is open year-round under standard regulations. Statewide EO authority (5 AAC 75.003) provides direction to the department for managing sport fisheries for wild and hatchery salmon. The department, in consultation with the hatchery operator, closes sport fisheries, when necessary, using EO authority to ensure broodstock goals are met, but does not close sport fisheries to achieve cost-recovery goals.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would clarify SHA boundaries and provide CIAA clear authority to harvest enhanced salmon in the SHA. The proposal is not expected to change how the department manages commercial fisheries in the SHA. However, the proposal seeks to determine harvest priorities within the SHA and it is unclear how sport fisheries within the SHA would be affected.

BACKGROUND: The PGH was permitted in September 1992 after having released sockeye and pink salmon during that and the previous year under educational and scientific permits. This facility is owned by the Port Graham Native Association and was operated by the PGH Corporation until 2007. While this facility has a permitted egg capacity of 1.35 and 110 million sockeye and pink salmon eggs, respectively, the average release was only 421,000 sockeye and 13.2 million pink salmon prior to 2007. In 2006, the loss of a hatchery manager combined with financial troubles resulted in pink and sockeye salmon releases ending in 2006, and 2007, respectively. In 2010, PGH Corporation approached CIAA to resume operations of PGH for pink salmon production. Cook Inlet Aquaculture Association released 8 million pink salmon fry in

2013. CIAA anticipates releasing a similar number of pink salmon fry in 2014. CIAA is currently negotiating to take over operation of this facility.

DEPARTMENT COMMENTS: The department **SUPPORTS** defining SHAs and clarifying hatchery operator authority in the *Port Graham Salmon Hatchery Management Plan*. The department is **NEUTRAL** on the allocative aspects of this proposal. Should the board seek to approve the proposal, the department requests further direction under provision (a) of the proposed language.

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 84 – 5 AAC 21.373. Trail Lakes Salmon Hatchery Management Plan.

PROPOSED BY: Cook Inlet Aquaculture Association.

WHAT WOULD THE PROPOSAL DO? This proposal would create a management plan for the Trail Lakes Hatchery (TLH) to specify harvest priorities within the special harvest area (SHA); to describe the locations of the Bear Lake, China Poot and Hazel lakes, Tutka Bay, and Kirschner Lake SHAs; and to specify that Cook Inlet Aquaculture Association (CIAA), and its agents and employees, are authorized to harvest returning enhanced salmon from hatchery SHAs.

WHAT ARE THE CURRENT REGULATIONS? The *Trail Lakes Hatchery Sockeye Salmon Management Plan* (5 AAC 21.373) expired in 2011. Management of this facility is currently conducted under authority of the department and the regional planning team as defined in 5 AAC 40.005. The department, in consultation with the hatchery operator, manages commercial common property fisheries using emergency order (EO) openings to obtain broodstock and cost-recovery goals set by the hatchery operator and approved by the department.

Broodstock is defined as the number of spawners required to perpetuate and achieve natural, semi-artificial, and artificial production objectives (5 AAC 40.990(6)(A)). A cost-recovery goal is defined as the number of hatchery-produced fish taken for the hatchery harvest requirement, to be used to pay for the hatchery's reasonable operating and capital costs, at current market prices for the species involved (5 AAC 40.990(6)(B).

Sport fishing for salmon in Resurrection Bay salt waters is open year-round under standard regulations. The limit for salmon, other than king salmon, is six per day, six in possession. Resurrection Bay fresh waters are closed year-round to fishing for all salmon, except the waters of Resurrection River downstream of the Seward Highway and Nash Road. In these waters, the season for salmon, other than king salmon, is June 16–December 31. The harvest limit is three salmon per day, three in possession, of which only two may be coho salmon. Only unbaited, single-hook, artificial lures are allowed.

Statewide EO authority (5 AAC 75.003) provides direction to the department for managing sport fisheries for wild and hatchery salmon. The department, in consultation with the hatchery operator, closes sport fisheries, when necessary, using EO authority to ensure broodstock goals are met, but does not close sport fisheries to achieve cost-recovery goals.

5 AAC 21.376, *Resurrection Bay Salmon Management Plan* directs the department to manage, by EO, Resurrection Bay coho and king salmon stocks primarily for recreational use, manage indigenous pink and chum salmon primarily for commercial use insofar as it does not interfere in time or areas with the recreational fishery, and manage the commercial fishery in Resurrection Bay in a manner that does not interfere with the recreational fishery.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would clarify SHA boundaries and provide CIAA clear authority to harvest enhanced salmon in the SHA. The proposal is not expected to change how the department manages

commercial fisheries in the SHA. However, the proposal seeks to determine harvest priorities within the SHA and it is unclear how sport fisheries within the SHA would be affected.

BACKGROUND: The TLH was constructed in 1982, is owned by the department, and has been operated by CIAA since 1989. This facility has consistently reared from 2 million to 18 million sockeye salmon annually since 1983, as well as an average of 740,000 coho salmon annually.

At the November 2004 Alaska Board of Fisheries (board) meeting, CIAA proposed an amendment to 5 AAC 21.375, *Bear Lake Management Plan*, requesting that the sockeye salmon harvestable surplus annually returning as a result of the Bear Lake enhancement project be managed to achieve an equal split (in numbers of fish) between the common property seine user group and TLH. The board adopted this provision, which became effective for the 2005 fishing season. Knowing that CIAA traditionally harvested fish at its Bear Creek weir site and that it also harvested fish near the end of the run after commercial fishermen had dispersed to other areas, the department generally allowed more opportunity for the commercial common property fleet at the beginning of each year's run. Despite somewhat large interannual variability from the desired 50/50 apportionment, over the 2005–2009 seasons during which this provision of the *Bear Lake Management Plan* was in place, the cumulative division of harvest showed that CIAA harvested approximately 49% of the available sockeye salmon, while common property seiners accounted for 51%. However, because a portion of CIAA's harvest came from fresh water or from later stages of the run, the value of its harvest was considerably less than that of the common property fleet.

CIAA petitioned the board in early 2009 to adopt a new management plan for the organization's TLH, citing the need to harvest 100% of returning adults to meet its hatchery cost- recovery goal or it may become insolvent. The petition was converted into a proposal and passed into regulation in the spring of 2009. The *Trail Lakes Hatchery Management Plan* contained a sunset provision that the 100% allocation for cost recovery would only extend until May, 1, 2011, at which time CIAA indicated it would be financially stable. The management plan also contained a provision that no management restrictions would be imposed on the noncommercial fisheries in order to achieve the Trail Lakes Hatchery objectives (i.e., cost-recovery goal) for sockeye salmon. Because the new plan contained a number of provisions taken directly from 5 AAC 21.375, *Bear Lake Management Plan,* and thus carried the basic intent of that plan, the Bear Lake plan was repealed from regulation. During the 2010 Lower Cook Inlet board meeting, CIAA petitioned the board to consider removing the sunset provision and make the hatchery management plan permanent. However, the board took no action and therefore, the plan sunsetted on May 1, 2011.

The *Trail Lakes Hatchery Annual Management Plan* calls for a sockeye salmon escapement range of 5,600–13,200 fish into Bear Lake to provide for broodstock and wild sockeye salmon spawning needs. Bear Lake escapement consists of the established sustainable escapement goal (SEG) of 700–8,300 sockeye salmon and hatchery broodstock requirements (4,258 sockeye salmon in 2013). When combined, these elements comprise the "desired inriver return" (4,958–12,558 sockeye salmon). Since 2000, an average of 13,088 sockeye salmon have been passed through into Bear Lake through the Bear Creek weir (Table 84-1). The last time the escapement goal was not achieved was in 1992 (prior to the freshwater sport fishery). CIAA harvests sockeye

salmon for cost recovery in Resurrection Bay downstream of the sport fishery and at the Bear Creek weir upstream of the sport fishery. CIAA stops all fish entering Bear Lake at the Bear Creek weir. Here it harvests fish for cost recovery and passes fish into the lake for wild spawning and for broodstock.

The freshwater drainage of Resurrection River, downstream of the Seward Highway and downstream of Nash Road, has been open to sport fishing for sockeye salmon since 2007 and since 2004 for coho salmon. Too few anglers report fishing in this freshwater area to obtain reliable estimates of catch and harvest from the Statewide Harvest Survey. Since 2000, the average sport harvest of sockeye salmon in the entire North Gulf Coast Management Area has been 4,893 fish, cost recovery by CIAA has averaged 39,943 sockeye salmon, and average commercial harvest has been 16,328 sockeye salmon. In 2009, the board authorized closing commercial harvest in Resurrection Bay, but specifically allowed the sport fishery at the mouth of Resurrection River to continue to allow CIAA to harvest more sockeye salmon for cost recovery for two years.

DEPARTMENT COMMENTS: The department **SUPPORTS** creating a *Trail Lakes Hatchery Management Plan* that defines SHAs and clarifies hatchery operator authority. The department is **NEUTRAL** on the allocative aspects of this proposal. Should the board seek to approve the proposal, the department requests further direction under provision (a) of the proposed language.

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 84-1.–Resurrection Bay sockeye salmon harvest, escapement, and broodstock, 2000–2013.

Year	Commercial Harvest [a]	CIAA Cost Recovery [b]	Sport Harvest [c]	Total Harvest	Bear Lake Broodstock and Escapement [b]	Total Run
2000	19,193	1,695	1,485	22,373	11,904	34,277
2001	2,629	398	1,263	4,290	12,801	17,091
2002	14,647	2,723	3,112	20,482	12,504	32,986
2003	7,341	2,754	2,077	12,172	13,233	25,405
2004	16,645	0	2,984	19,629	11,923	31,552
2005	19,297	37,654	5,460	62,411	13,407	75,818
2006	32,393	28,000	4,977	65,370	11,060	76,430
2007	15,407	7,000	5,761	28,168	11,420	39,588
2008	57,060	31,384	5,732	94,176	12,994	107,170
2009	Closed	136,128	10,619	146,747	12,819	159,566
2010	Closed	21,881	4,949	26,830	12,884	39,714
2011	56,111	150,863	9,592	216,566	13,220	229,786
2012	Closed	83,453	5,593	89,046	12,459	101,505
2013[d]	Closed	44,624	NA	44,624	12,605	57,229
Average	24,072	39,183	4,893	60,920	12,517	73,437

[a] Source FMR No. 12-30 by Hollowell, Otis, and Ford.

[b] Source ADF&G database of Trail Lakes Hatchery Annual Reports.

[c] Sport harvest estimates from SWHS includes harvest from entire NGC area. Too few anglers report fishing in the Resurrection River to report reliable estimates from that specific drainage.

[d] Preliminary estimates. Personal communication with Caroline Cherry of CIAA.

NA= Data not available.

PROPOSAL 85 – 5 AAC 21.376. Resurrection Bay Salmon Management Plan and 5 AAC 56.122. Special provisions and localized additions and exceptions to the seasons, bag, possession, and size limits, and methods and means for the Kenai Peninsula Area.

PROPOSED BY: John McCombs.

WHAT WOULD THE PROPOSAL DO? This proposal seeks to close the Bear Creek sockeye salmon sport fishery until the broodstock goal is met.

WHAT ARE THE CURRENT REGULATIONS? Sport fishing is allowed year-round in Resurrection Bay salt water, with bag limits of six salmon per day, all of which may be sockeye or coho salmon. Sport fishing in Resurrection River is open downstream of Nash Road and the Seward Highway from June 16–December 31, with gear limited to single-hook artificial lures only (Figure 85–1). The bag limit is three salmon per day, of which only two may be coho salmon.

The *Resurrection Bay Salmon Management Plan* (5 AAC 21.376) provides allocation and management guidelines for Resurrection Bay salmon fisheries. The plan directs the commissioner to "manage the commercial fishery in Resurrection Bay in a manner that does not interfere with the recreational fishery."

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would prohibit anglers from fishing on available Resurrection River salmon during the peak of the fishery. It would allocate sockeye salmon currently caught by sport anglers to Cook Inlet Aquaculture Association (CIAA) for cost recovery, and in some years, the commercial common property fishery.

BACKGROUND: The *Trail Lakes Hatchery Management Plan* calls for a sockeye salmon escapement range of 5,600–13,200 fish into Bear Lake to provide for broodstock and wild sockeye salmon spawning needs. Bear Lake escapement consists of the established sustainable escapement goal (SEG) of 700–8,300 sockeye salmon and hatchery broodstock requirements (4,258 sockeye salmon in 2013). When combined, these elements comprise the "desired inriver return" (4,958–12,558 sockeye salmon). Since 2000, an average of 13,088 sockeye salmon have been passed through into Bear Lake through the Bear Creek weir (Table 85-1, Figure 85-2). The last time the escapement goal was not achieved was in 1992 (prior to the freshwater sport fishery). CIAA harvests sockeye salmon for cost recovery in Resurrection Bay downstream of the sport fishery and at the Bear Creek weir upstream of the sport fishery. CIAA stops all fish entering Bear Lake at the Bear Creek weir. Here it harvests fish for cost recovery and passes fish into the lake for wild spawning and for broodstock.

The freshwater drainage of Resurrection River, downstream of the Seward Highway and downstream of Nash Road, has only been open to sport fishing for sockeye salmon since 2007 and since 2004 for coho salmon (Figure 85-1). Too few anglers report fishing in this freshwater area to obtain reliable estimates of catch and harvest from the Statewide Harvest Survey. Since 2000, the average sport harvest of sockeye salmon in the entire North Gulf Coast Management

Area has been 4,893 fish, cost recovery by CIAA has averaged 39,943 sockeye salmon, and the average commercial harvest has been 16,328 sockeye salmon.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this allocative proposal. The department has demonstrated that fisheries in the Bear lake Special Harvest Area can be managed under current regulations to achieve Trail Lakes Hatchery broodstock 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.

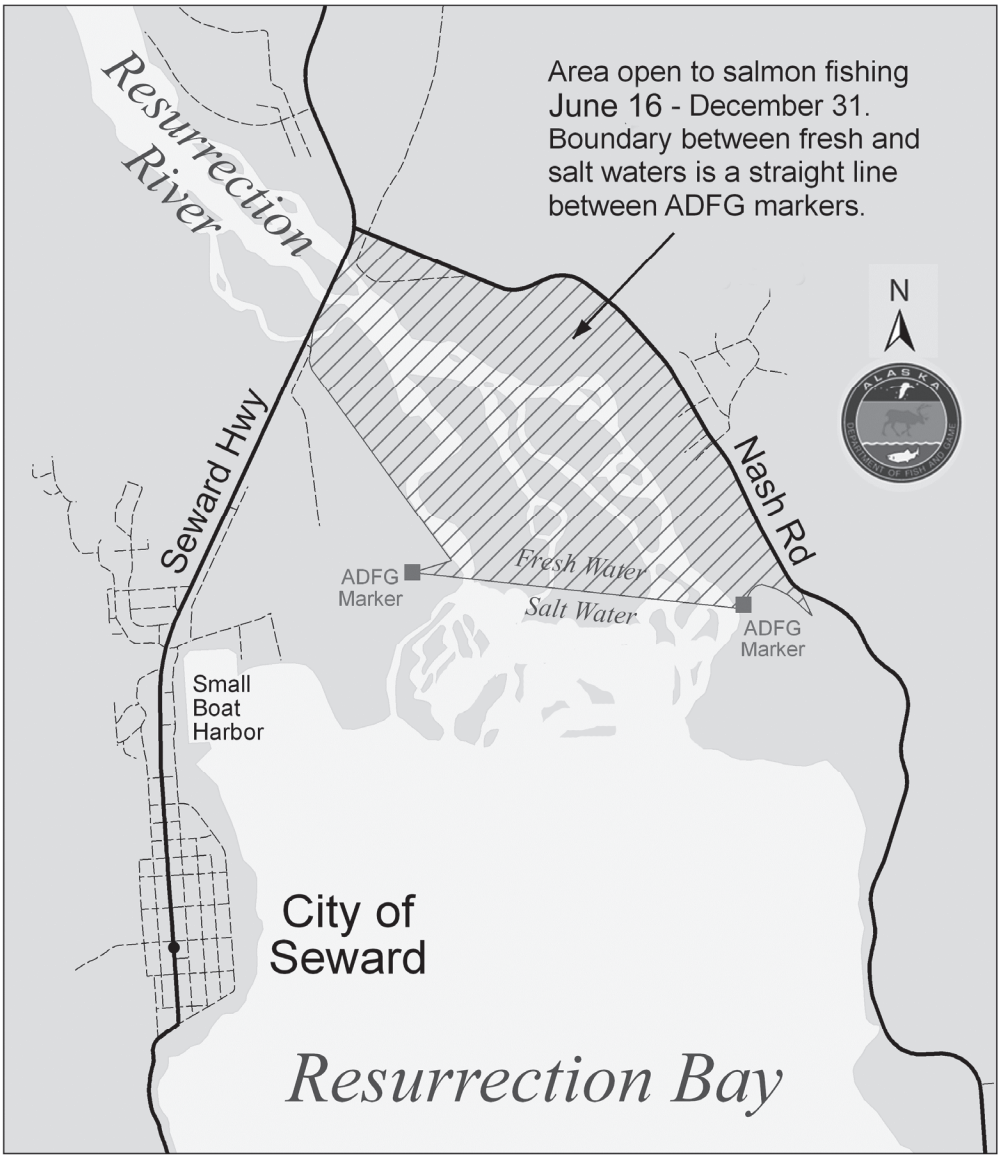

Figure 85-1.–Map of Resurrection Bay, Bear Creek and sport fishing boundaries.

Table 85-1.–Resurrection Bay sockeye salmon harvest, escapement, and broodstock, 2000–2013.

Year	Commercial Harvest [a]	CIAA Cost Recovery [b]	Sport Harvest [c]	Total Harvest	Bear Lake Broodstock and Escapement [b]	Total Run
2000	19,193	1,695	1,485	22,373	11,904	34,277
2001	2,629	398	1,263	4,290	12,801	17,091
2002	14,647	2,723	3,112	20,482	12,504	32,986
2003	7,341	2,754	2,077	12,172	13,233	25,405
2004	16,645	0	2,984	19,629	11,923	31,552
2005	19,297	37,654	5,460	62,411	13,407	75,818
2006	32,393	28,000	4,977	65,370	11,060	76,430
2007	15,407	7,000	5,761	28,168	11,420	39,588
2008	57,060	31,384	5,732	94,176	12,994	107,170
2009	Closed	136,128	10,619	146,747	12,819	159,566
2010	Closed	21,881	4,949	26,830	12,884	39,714
2011	56,111	150,863	9,592	216,566	13,220	229,786
2012	Closed	83,453	5,593	89,046	12,459	101,505
2013[d]	Closed	44,624	NA	44,624	12,605	57,229
Average	24,072	39,183	4,893	60,920	12,517	73,437

[a] Source FMR No. 12-30 by Hollowell, Otis, and Ford.

[b] Source ADF&G database of Trail Lakes Hatchery Annual Reports.

[c] Sport harvest estimates from SWHS includes harvest from entire NGC area. Too few anglers report fishing in the Resurrection River to report reliable estimates from that specific drainage.

[d] Preliminary estimates. Personal communication with Caroline Cherry of CIAA.

NA= Data not available.

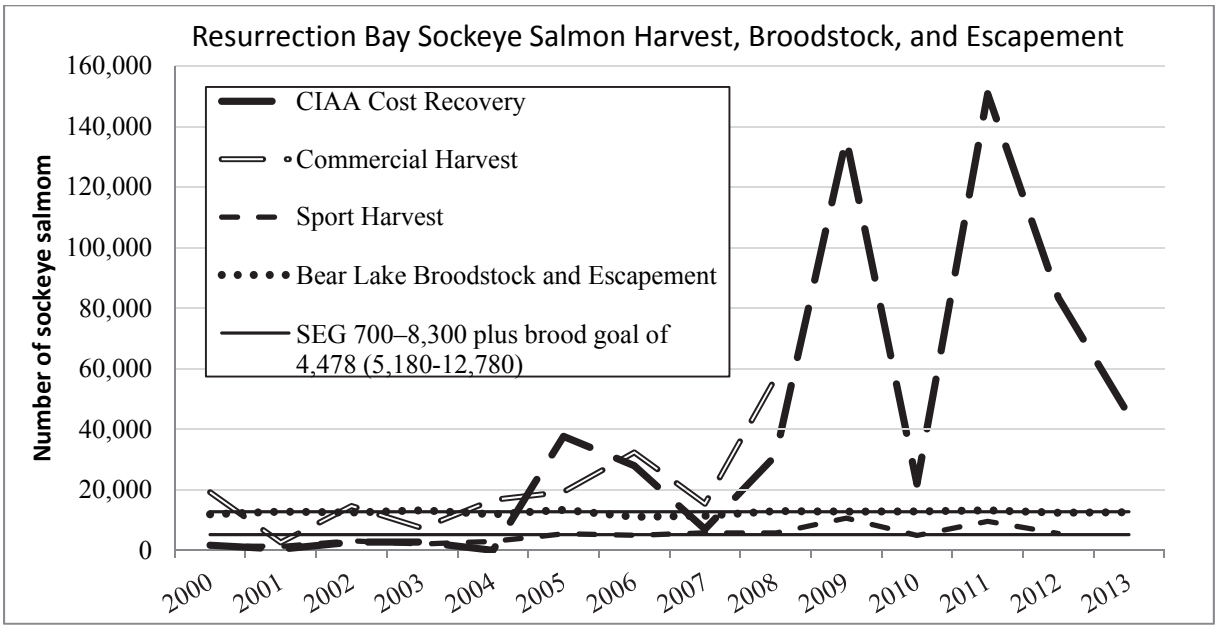

Figure 85-2.–Resurrection Bay sockeye salmon harvest, escapement, and broodstock, 2000–2013.