

Regional Information Report No. 1J13-09

2013 Summer Troll Fishery Management Plan

by

Pattie Skannes

and

Grant Hagerman

June 2013

Alaska Department of Fish and Game

Division of Commercial Fisheries



Symbols and Abbreviations

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

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

REGIONAL INFORMATION REPORT NO. 1J13-09

2013 SUMMER TROLL FISHERY MANAGEMENT PLAN

By
Pattie Skannes and Grant Hagerman
Alaska Department of Fish and Game, Division of Commercial Fisheries, Sitka

Alaska Department of Fish and Game
Division of Commercial Fisheries, Publications Section
802 3rd, Douglas, Alaska, 99824-0020

June 2013

The Regional Information Report Series was established in 1987 and was redefined in 2007 to meet the Division of Commercial Fisheries regional need for publishing and archiving information such as project operational plans, area management plans, budgetary information, staff comments and opinions to Board of Fisheries proposals, interim or preliminary data and grant agency reports, special meeting or minor workshop results and other regional information not generally reported elsewhere. Reports in this series may contain raw data and preliminary results. Reports in this series receive varying degrees of regional, biometric and editorial review; information in this series may be subsequently finalized and published in a different department reporting series or in the formal literature. Please contact the author or the Division of Commercial Fisheries if in doubt of the level of review or preliminary nature of the data reported. Regional Information Reports are available through the Alaska State Library and on the Internet at: <http://www.adfg.alaska.gov/sf/publications/>

*Pattie Skannes and Grant Hagerman
Alaska Department of Fish and Game, Division of Commercial Fisheries,
304 Lake Street, Room 103, Sitka, Alaska 99835-7563*

This document should be cited as:

Skannes, P. and G. Hagerman. 2013. 2013 Summer Troll Fishery Management Plan. Alaska Department of Fish and Game, Regional Information Report No. 1J13-09, Douglas, Alaska.

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 Sport Fish, Research and Technical Services, 333 Raspberry Rd, Anchorage AK 99518 (907) 267-2375

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
ABSTRACT.....	1
INTRODUCTION.....	1
2013 SUMMER TROLL FISHERY DATES.....	1
MANAGEMENT APPROACH.....	2
Chinook Salmon.....	2
Management Objectives.....	2
Management Methods.....	2
2013 Chinook Salmon Treaty Quota and Allocations.....	3
Coho Salmon.....	4
Management Objectives.....	4
Management Methods.....	4
Tentative 2013 Summer Season Schedule.....	5
Allocation Actions.....	6
SUMMER TROLL FISHING PERIODS AND CLOSED WATERS.....	7
Fishing Periods Under 5AAC 29.100.....	7
Closed Waters Under 5AAC 30.365.....	8
SPORT FISHING AND CHARTERING FROM A REGISTERED COMMERCIAL TROLL VESSEL.....	9
CHUM SALMON FISHERIES.....	9
Icy Strait.....	9
Neets Bay Terminal Harvest Area.....	9
Hidden Falls Terminal Harvest Area.....	10
Sitka Sound.....	10
Cholmondeley Sound.....	11
REGULATIONS PERTAINING TO COMMERCIAL TROLL BYCATCH OF GROUND FISH AND HALIBUT.....	12
FISHERY CONTACTS.....	22

LIST OF TABLES

Table	Page
1. Bycatch Provisions for the Salmon Troll Fishery in State Waters	12

LIST OF FIGURES

Figure	Page
1. Fisheries Performance Data program reporting areas in Southeast Alaska.....	15
2. Southeast Alaska areas closed to trolling for all species following the initial Chinook salmon opening in the Southeast Alaska summer troll season.	16
3. Ketchikan area general summer trolling areas and seasons.....	17
4. District 8 summer troll closed waters.	18
5. Juneau area summer troll closed waters.	19
6. Yakutat area troll closed waters, beginning July 1.	20
7. Southeast Alaska lingcod management areas and Sitka area closed waters.	21

ABSTRACT

This document summarizes the plan that the Alaska Department of Fish and Game will follow to manage the 2013 Southeast Alaska summer commercial salmon troll fishery from July 1 through September 30, 2013. The troll fishery will be managed according to guidelines adopted by the Alaska Board of Fisheries listed in the State of Alaska Administrative Code, Title 5, Chapter 29 Salmon Troll Fishery. The first Chinook salmon fishing period will begin on July 1 to harvest 70% of the summer troll Chinook quota. The remainder of the troll Chinook salmon quota will be harvested following the August coho salmon closure period. The fishery will be open to harvest coho salmon July 1–September 20, with inseason consideration given to a possible conservation closure period in late July, a possible conservation or allocation closure in mid-August, and consideration of an extension of the season through September 30. Chum salmon, especially those produced by Alaskan hatcheries, are also harvested during the summer troll fishery.

Key words: salmon, troll, summer, commercial, management plan, Chinook salmon, coho salmon, Southeast Alaska, chum salmon

INTRODUCTION

The Southeast Alaska/Yakutat commercial salmon troll fishery occurs in State of Alaska and Federal Exclusive Economic Zone (EEZ) waters east of Cape Suckling and north of Dixon Entrance. The fishery is managed according to regulations promulgated by the Alaska Board of Fisheries (board), the North Pacific Fishery Management Council (NPFMC), the National Marine Fisheries Service (NMFS), and the U.S./Canada Pacific Salmon Commission (PSC). Regulations adopted by the board are listed in the State of Alaska Administrative Code, Title 5 (5AAC), Chapter 29 - Salmon Troll Fishery. The department, under emergency order authority, conducts inseason management. The all-gear Chinook salmon fishery will be managed to achieve a harvest target based on the 2008 Bilateral Pacific Salmon Treaty Agreement. The treaty agreement specifies a harvest based on a relationship between a preseason Abundance Index (AI) generated by the Pacific Salmon Commission's Chinook Technical Committee and a target harvest rate specified in the agreement. The Treaty agreement also provides for an inseason adjustment to the harvest level based on an assessment of inseason data. Coho salmon will be managed to ensure escapement goals and to achieve board allocation guidelines. Coho salmon near Dixon Entrance will be managed in cooperation with Canada according to the treaty agreement.

This management plan discusses the management objectives and methods used to achieve board, NPFMC, NMFS, and PSC policies and goals for the commercial summer troll fishery. This plan covers commercial trolling for Chinook, coho, and chum salmon. Other species caught and retained by trollers are considered incidental.

2013 SUMMER TROLL FISHERY DATES

The summer troll fishing season covered in this plan is July 1 through September 20. Chinook salmon may be harvested only during open periods announced by the department. The coho salmon season may be extended for up to 10 days after September 20 in Districts 1–16 (Figure 1) in years when wild coho salmon abundance is projected by the department to meet escapement needs after considering harvest and effort [5AAC 29.110(a)].

MANAGEMENT APPROACH

CHINOOK SALMON

Most of the Chinook salmon harvested in the Alaska summer troll fishery are of wild stock origin. Hatchery stocks harvested in the fishery originate in British Columbia, Canada, Washington, and Oregon with a relatively small number from Alaskan hatcheries. As a result, the Southeast Alaska Chinook salmon harvest is managed on an annual, all-gear harvest quota established by the United States and Canada through the PSC. The ceiling is now abundance-based, with increased quotas when abundance is high, and vice versa. In addition to the harvest ceiling of treaty fish, provisions of the treaty administered by the PSC provide for an additional harvest of Chinook salmon that have been produced in Alaskan hatcheries (add-on). The all-gear add-on is equal to the total number of Alaskan hatchery Chinook caught, minus the pre-treaty production of Chinook salmon and a risk adjustment factor of around 4,700 fish.

Management Objectives

1. Achieve the allowable Chinook salmon harvest.
2. Maximize the harvest of Alaska hatchery-produced Chinook salmon.
3. Manage the fishery according to the board's Summer Salmon Troll Fishery Management Plan (5AAC 29.100)
4. Continue the coastwide natural Chinook salmon stock-rebuilding program.
5. Achieve harvest allocations among user groups as mandated by the board.
6. Minimize the incidental mortality of Chinook salmon to the extent practicable.

Management Methods

Historically, the majority of the annual troll Chinook salmon harvest is taken during the general summer opening, when salmon may be taken throughout most of the Southeast Alaska/Yakutat including the outside waters of the EEZ. Unlike the spring fishery, a quota is set for management of Chinook salmon. One of the major functions of the department's troll management plan is determining when the general summer season for Chinook salmon must be closed in order to stay within the allowable harvest. Tabulating the up-to-date troll catch is difficult due to the large number of fish tickets and the difficulty of receiving them from remote areas in a timely manner. Therefore, a Fisheries Performance Data (FPD) program, consisting of confidential interviews with commercial trollers as they deliver catches, is used to estimate daily catch rates in six areas (Figure 2). The total number of days the fishery will be open for Chinook salmon retention is calculated by dividing the summer season harvest goal by the estimated daily catch by the troll fleet.

From 1992 through 1995, and again in 2000, 2001 and 2008, the department announced a fixed number of days beginning July 1, due to the low number of Chinook salmon available for harvest. From 1996–1999, 2002–2007 and 2009–2012, the Chinook fishery was managed in season and closed by emergency order, due to the larger Chinook quotas during those years. The department will manage the summer troll season according to the BOF management plan (5AAC 29.100), which calls for harvesting 70% of the summer Chinook salmon troll quota (see next section) in an initial opening beginning July 1. The remainder of the Chinook salmon quota is to be harvested following any closure for coho salmon conservation and/or allocation in August.

Following the first Chinook opening, the waters of frequent high Chinook salmon abundance will be closed, consistent with 5AAC 29.025, unless the department determines that less than 30% of the Chinook salmon harvest goal for the initial opening was taken in that opening (Figure 2). In addition, during the second Chinook salmon opening, if the department determines after 10 days that the annual troll Chinook salmon harvest ceiling might not be reached by September 20 with those waters closed, the department shall reopen the waters of frequent high Chinook salmon abundance by emergency order.

The hatchery add-on is calculated inseason through port sampling programs. Chinook salmon are sampled for the presence of adipose fins. The heads from fish that have missing adipose fins are then sent to the Juneau Mark, Tag and Age lab for processing. Coded-wire tags are removed from the heads and decoded. The number of Alaskan hatchery fish is calculated by expanding the number of Alaskan hatchery-produced Chinook salmon in the sampled catch by the total catch.

2013 Chinook Salmon Treaty Quota and Allocations

The Chinook Technical Committee of the PSC has determined that the Chinook salmon abundance index (AI) for Southeast Alaska for 2013 is 1.20. This abundance index equates to an all-gear quota of 176,000 treaty Chinook salmon, which is about 90,800 fewer than the 2012 all-gear quota. According to the BOF allocation plan outlined below, the troll fishery allocation of the all-gear quota is 129,862 treaty Chinook salmon, which is about 67,410 fewer than the 2012 troll treaty allocation. The quota is based on the Southeast Alaska (SEAK) abundance index from 30 stock groups originating from the Oregon coast to Alaska. Of those, seven “driver” stocks make up the majority of the SEAK abundance index. Below-average returns are expected for six of the seven driver stocks in 2013.

The all-gear quota is allocated among commercial and sport fisheries according to management plans established by the board [5AAC 29.060(b) and 47.055]. Most Chinook salmon produced by Alaska hatcheries are not factored into the AI and may be harvested in addition to the treaty limit. The commercial troll fishery is allocated 80% and the recreational fishery 20% of the PST quota, after subtracting 4.3% from the total for the purse seine fishery, 2.9% for the drift gillnet fishery, and 1,000 fish for the set gillnet fishery. The pre-treaty Chinook salmon harvest and risk adjustment factor (4,700 combined) are proportionally shared between the gear groups.

Allocations of the Chinook salmon harvest quota for 2013 are as follows:

All-gear Treaty Quota	Purse Seine	Drift Gillnet	Set Gillnet	Total Net	Sport	Troll
176,000	7,568	5,104	1,000	13,672	32,466	129,862

The summer troll treaty quota is calculated by adding the winter treaty harvest, the projected spring treaty harvest, the pre-treaty Alaska hatchery harvest of 3,700 fish, and a statistical risk factor surrounding the Alaska hatchery contribution estimate of 1,000 fish. The resultant sum is then subtracted from the troll allocation, yielding a summer troll treaty quota. In addition, under the BOF plan, 70% of the summer quota is to be harvested during the first summer opening beginning July 1. **The target harvest for the July Chinook salmon opening will be announced in a news release to be issued by June 21, as will information on the length of the first summer opening.**

COHO SALMON

Most coho salmon harvested in the troll fishery are of Alaskan origin. They spawn in approximately 2,500 streams in Southeast Alaska during the fall and early winter months. Coho salmon harvests were depressed in the mid to late 1970s but improved through most of the 1980s and 1990s. Factors contributing to the increased harvests include the improved spawning escapement levels achieved under the conservative management regime implemented in 1980, increased marine survivals due to favorable ocean conditions, increased targeting of coho salmon by trollers and increasing Alaska hatchery production. Hatchery coho salmon production (almost entirely from Southeast Alaska facilities) first became significant in 1980. The contribution of hatchery coho salmon has varied since then from 0.4% of the total troll catch in 1980 to 26% in 2012.

Early in the season, coho salmon stocks returning to southern Southeast Alaska are harvested by the troll fishery in northern and central outside areas, where they intermingle with coho salmon bound for northern and central areas of the region. Troll fishery harvests of coho salmon in outer coastal areas generally peak during mid-July to mid-August. Harvests in inside fisheries generally peak during late August to mid-September.

Management Objectives

1. Provide adequate escapement of coho salmon, by area, to ensure sustainable populations.
2. Provide maximum opportunities for harvest consistent with conservation objectives.
3. Manage the coho salmon fisheries to maintain allocation guidelines over the long-term, consistent with board regulations.
4. Manage coho salmon on the U.S./Canada border to comply with provisions of the PST Agreement.

Management Methods

Management of coho salmon is based on aggregate abundance. Lack of a general coho salmon stock identification technique prevents assessment of run strength of individual stock groups contributing to these early-season mixed stock fisheries. The widespread and complex nature of the troll fishery necessitates a closely coordinated management program. Inseason management is accomplished through a team consisting of the Southeast regional supervisor, the regional management coordinator, two troll fishery management biologists, and 13 area management biologists. Department contact information is listed at the end of this plan.

The department's perspectives and management approach have continued to evolve, with recent changes in environmental conditions and fishery patterns, combined with improved information about the resource. A decade-long cooling trend in the Gulf of Alaska has affected survival rates and run strength throughout the region, as well as coastal migration patterns of returning coho salmon. Marine survival of both wild and hatchery coho salmon has shifted from favoring stocks in northern parts of the region, as was the case from the early-1980s to through the mid-2000s, to strongly favoring southern stocks, as has been the case since 2007. At the same time, southern stocks have shown less tendency to be caught in northern coastal waters, and appear to be approaching more directly in the southern part of the region, with reduced exposure to the area of highest troll effort north of Cape Ommaney. Meanwhile, increased interest from trollers in harvesting chum salmon near terminal areas has reduced effort directed at coho salmon. The combined effect of these factors for the wild indicator stock in the Ketchikan area has been a

substantial reduction in troll and all-fishery exploitation rates on total return abundance that has continued to trend near the long-term average, resulting in spawning escapements substantially exceeding the biological escapement goal in each year during 2007–2012. On the other hand, the recent cooling climatic trend in the North Pacific appears to have resulted in a substantial decrease in survival and return abundance in northern mainland systems. The current climate pattern in the Gulf of Alaska suggests that the recent trend in northern and southern parts of the region will persist in the near future. Therefore, managers will remain more cautious in inseason assessments and decisions affecting stocks northern areas and less cautious about stocks in southern Southeast Alaska.

The coho salmon fisheries are managed to comply with the Southeastern Alaska/Yakutat Area coho salmon fishery management plan [5AAC 29.110]. Inseason run strength is used to achieve ADF&G conservation objectives and BOF allocation objectives adopted in the management plan. The current coho management plan calls for a troll closure for up to seven day in late July if the total projected commercial harvest of wild coho salmon is less than 1.1 million fish [5AAC 29.110 (b)(1)]. A troll closure for up to ten days typically occurs in mid-August and is required to be a minimum of two days by regulation for a fair start prior to the second Chinook salmon opening. The actual length of that closure is determined in early August, when an assessment determines whether the number of coho reaching inside areas is adequate to provide for spawning requirements, given usual or restricted inside fisheries on coho and other species [5AAC 29.110 (b)(2)(A)]; or the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to average 1971–1980 levels [5AAC 29.110 (b)(2)(B)]. There are no harvest ceilings for Southeast Alaska coho salmon fisheries. However, under the 2008 Pacific Salmon Treaty Agreement, the area near the U.S./Canada border will close if the harvest rates by Alaska trollers fishing in the border area during early July fall below specified thresholds.

The criteria for extending the coho salmon fishery after September 20 was modified in 2012, through the Board of Fisheries process. The regulatory period for coho retention in the troll fishery is June 1 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered.

Long-term wild stock and hatchery stock CWT programs, dockside sampling programs to sample the harvest for CWTs, escapement monitoring, and the troll FPD collection program all began in the early 1980s and continue through the present day. As years of data were gathered from each program, more information and understanding of stock movement, stock timing, and stock harvest were accumulated. As a result, a model was developed in 1989 to accurately estimate the end of season all-gear coho salmon commercial harvest by late July using the salmon troll FPD. In the mid-1990s, escapement goals were established for several stocks in Southeast Alaska based on spawner-recruit relationships from long-term databases of harvest rate, harvest, age composition, and escapement information. These long-term monitoring programs have provided the backbone for successful conservation of coho salmon in Southeast Alaska.

Tentative 2013 Summer Season Schedule

The following is a generalized timetable for summer salmon management. It is emphasized that some modifications to this schedule may be required.

DATES**EXPECTED REGULATORY ACTIONS**

July 1	The 2013 general summer troll season opens for all salmon species; the initial troll Chinook salmon opening will close when 70% of the total summer harvest target has been harvested. The first Chinook salmon retention period will likely be managed for a pre-determined number of days and will close by Emergency Order. The waters of frequent high Chinook salmon abundance will close following the Chinook salmon closure.
Mid- through late- July	Coho salmon run strength in Southern Southeast Alaska is assessed. Portions of Districts 101–104 may close if run strength indicates conservation concerns for coho salmon stocks near the U.S./Canada border.
July 25 or later	If the projected run size is less than 1.1 million wild coho salmon, up to a 7-day regionwide conservation closure may be implemented. The projected total season commercial harvest will be used as index of run size.
Early August	An assessment of coho run strength will determine the need for and length of a mid-August troll closure.
Mid- to late- August	A regionwide closure of up to 10 days will be implemented if required for either coho salmon conservation or allocation, based on assessment of stock and fishery performance data relative to BOF-established criteria. If a regionwide conservation closure has occurred during late July, the likelihood of a closure being implemented for allocation at this time will be reduced. Following any closure of the troll fishery, the Chinook salmon fishery will reopen to take the remaining treaty Chinook salmon. A minimum closure of 2 days is required prior to the second Chinook salmon opening to allow for a fair start (5AAC 29.100(c)(1)(B)(ii)).
Late-August to September 20	Coho salmon conservation measures may be implemented regionwide or by area, as required to protect weak coho stocks.
Mid-September	An assessment of wild coho abundance to determine if the troll season may be extended beyond September 20.
September 20	Established regulatory closing date of general summer troll season. All salmon must be offloaded prior to fishing in the Winter Troll Fishery, beginning October 11.

Allocation Actions

The board has established long-term allocation goals for the coho salmon harvest by each commercial gear type. Target percentages established by the board are 61% for troll, 19% for purse seine, 13% for drift gillnet, and 7% for set gillnet. The board stated that subsistence, personal use, and recreational harvests of coho salmon are not affected by the established allocations between commercial gear types. The board also stated that:

“These percentages are guidelines only and may vary from season to season given natural fluctuations in salmon abundance and distribution and the limitations of fisheries management. It is, however, the board’s intent that these allocation guidelines be met as closely as possible over the long term. It is not the board’s intent for the department to disrupt any of the traditional commercial fisheries that the historical allocation is founded. The department may, however, make inseason adjustments to attempt to achieve these long term allocation guidelines.”

The department will, however, implement applicable, existing regulations (5AAC 29.110). These regulations indicate that:

A regionwide troll closure for up to 10 days is required during the coho salmon season to address allocations between outer coastal fisheries and inside water fisheries if the department determines that the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to the 1971–1980 levels. Primary inside fishery indicators for this assessment are overall coho salmon harvests, escapement projections for streams where escapement goals have been established, and CPUE in the Tree Point, Prince of Wales, Taku/Snettisham, and Lynn Canal drift gillnet fisheries.

If a regionwide troll closure is implemented to conserve coho salmon during late July or early August, the length and timing of an additional closure during August will consider the combined impacts of both closures. Any potential transfer of coho salmon harvest to inside fisheries resulting from an early closure, if implemented, will be reflected in inside fishery performance indicators used for comparison against the allocation criteria.

SUMMER TROLL FISHING PERIODS AND CLOSED WATERS

Salmon trolling is permitted in all areas during the first Chinook salmon retention period of the 2013 general summer season except for those waters described in 5AAC 29.100 and the closed waters listed in 5AAC 29.150. In addition, during subsequent Chinook salmon retention periods, waters designated as frequent high Chinook salmon abundance (5AAC 29.025) (Figure 2) will be closed as necessary.

FISHING PERIODS UNDER 5AAC 29.100

Regulations under 5AAC 29.100 describe open fishing periods as follows:

(d) Sections 1-C, 1-E, and 1-F, salmon may be taken only as follows: (Figure 3)

- (1) Section 1-C: from August 15 through September 20;
- (2) Section 1-E:

(A) in the waters of Section 1-E, bounded by a line from the southernmost tip of Nose Point to a point in West Behm Canal at 55° 48.73' N. lat., 131° 44.01' W. long., located approximately one mile west of Nose Point, then south to a point at 55° 43.92' N. lat., 131° 45.44' W. long., located approximately one mile west of the northernmost tip of Bushy Point, then south to a point at 55° 39.09' N. lat., 131° 44.69' W. long., located approximately one mile west of Escape Point, to the northernmost tip of Escape Point, and in waters of Neets Bay west of the longitude of the southernmost tip of Chin Point and in Traitors Cove west of 131° 41.80' W. long., from July 1 through September 20;

(B) all other waters of Section 1-E, from July 13 through September 20;

(3) Section 1-F: open from July 1 through September 20, with the following restrictions:

(A) from July 1 through July 12, the waters of Section 1-F east of line from the northernmost tip of Kirk Point at 54° 59.98' N. lat., 131° 00.78' W. long. to Mary Island Light at 55° 05.90' N. lat., 131° 10.89' W. long. to the southernmost tip of Cone Island at 55° 14.47' N. lat., 131° 19.36' W. long. are closed;

(B) from July 13 through July 31, the waters of Section 1-F east of a line from the southernmost tip of Black Island at 55° 07.84' N. lat., 131° 04.89' W. long. to the westernmost tip of Slate Island at 55° 05.68' N. lat., 131° 03.92' W. long. to the westernmost tip of White Reef at 55° 03.95' N. lat., 131° 02.51' W. long. to the easternmost tip of Black Rock at 55° 01.37' N. lat., 131° 03.62' W. long. to the northernmost tip of Kirk Point at 54° 59.98' N. lat., 131° 00.78' W. long., are closed.

(e) In District 8, the weekly fishing periods for trolling are the same as for drift gillnetting.

The closed waters of District 8 are described by regulation in 5AAC 29.150(i), (Figure 4).

(f) In District 11 salmon may be taken only in Sections 11-C and 11-D. (Figure 5).

(g) In District 15 salmon may be taken only in Sections 15-A and 15-C. (Figure 5).

CLOSED WATERS UNDER 5AAC 30.365

In the **Yakutat area**, waters near the mouth of the **Situk River will be closed to the harvest of Chinook salmon by troll gear effective July 1**. The projected Chinook salmon escapement to the Situk River, at 475 large Chinook, is slightly below the 2012 preseason projection and within the range of 451–730 large fish. This projection calls for management actions as described in 5AAC 30.365(b)(3)(B), the Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan. A portion of District 181 south of Yakutat Bay, in State waters, will close to Chinook salmon retention by troll gear beginning at 12:01 a.m., July 1. This area is displayed in Figure 6, and described as follows:

“...in the waters of Alaska bounded on the west by the seaward limit of the three-nautical-mile territorial sea and on the north by a line extending seaward from 59° 32.49' N lat, 139° 51.79' W. long (Ocean Cape) and intersecting the three-nautical-mile limit at 59° 39.69' N. lat, 139° 55.49' W. long and on the south by a line extending seaward from 59° 21.92' N. lat, 139° 23.15' W. long and intersecting the three-nautical-mile limit at 59° 19.90' N. lat, 139° 26.39' W. long.”

As a clarification, trolling will be allowed within this area but retention of Chinook salmon will be prohibited until further notice. If Chinook salmon escapements to the Situk River improve significantly, the need for this closure will be re-evaluated.

SPORT FISHING AND CHARTERING FROM A REGISTERED COMMERCIAL TROLL VESSEL

- A person may sport fish from a registered commercial salmon hand troll or power troll vessel [5AAC 47.041 (a)], though **may not sport fish and commercial fish from the same vessel on the same day** [5AAC 47.041 (f)]. A person who sport fishes from a vessel licensed for commercial fishing, other than a charter vessel when paying clients are onboard, shall mark the salmon by **removing its dorsal fin** immediately upon bringing a salmon onboard [5AAC 47.041 (c)].
- Sport fishing from a commercially licensed vessel while commercially-caught salmon are in possession is illegal in waters closed to commercial fishing [5AAC 47.041(d)].
- A downrigger may be used in conjunction with a fishing rod when sport fishing. However, a downrigger may **not** be used in conjunction with a fishing rod to take salmon when engaged in commercial hand trolling [5AAC 29.120 (b)(2)(B)].
- A **registered troll vessel may also be registered as a charter vessel**, though that vessel may not be used to troll commercially and charter on the same day [5AAC 75.995(8)]. Charter boat registration applications are available at Fish and Game offices.
- A person **may not possess unpreserved sport-caught salmon** on any commercial salmon vessel while engaging in commercial salmon fishing [5AAC 47.041(g)]. The definition of “preserved fish” excludes unfrozen fish temporarily stored in coolers that contain ice or dry ice or fish that are lightly salted [5AAC 75.995(21)]. In other words, “preserved” means “frozen” and sport-caught salmon must be frozen if onboard a commercial salmon vessel which is engaged in commercial salmon fishing.

CHUM SALMON FISHERIES

The following sections describe areas where trollers have targeted chum salmon during recent years.

ICY STRAIT

The Douglas Island Pink and Chum, Inc. (DIPAC) projects a return of 2.82 million chum salmon to the Macauley Hatchery and other release sites in 2013, up by 15% from the 2012 projection of 2.46 million. Trollers have targeted DIPAC chum salmon in Icy Strait during June and early July since 2010.

NEETS BAY TERMINAL HARVEST AREA

SSRAA is expecting approximately 1.59 million summer chum salmon to return to the Neets Bay THA, which is 6% less than the 1.70 million summer chum projected to return in 2012. Trollers may target Neets Bay chum salmon outside the THA in West Behm Canal when those waters are open to trolling (Figure 3). The Neets Bay THA will close to trolling at noon on July 2 to provide for cost recovery and could remain closed throughout the summer season. SSRAA will monitor troll harvest and effort on a daily basis and a portion of the THA may open to trolling at a later time.

HIDDEN FALLS TERMINAL HARVEST AREA

NSRAA has projected a return of approximately 1.32 million chum salmon to the Hidden Falls THA in 2013, which is 60% higher than the 2012 projection of 820,000 fish. The Hidden Falls terminal harvest area boundary definition is being modified to provide for easier enforcement and compliance with the THA boundaries. Rather than the use of range markers at the northern and southern boundaries, these boundaries will be defined by points indicated by markers on the Baranof Island shoreline to offshore coordinates. A line between the two offshore coordinates defines the outer boundary as a straight line approximately two miles offshore Baranof Island. The new definition describes the Hidden Falls THA as the waters of Chatham Strait, Kasnyku Bay, and Takatz Bay, within the boundaries of a line from South Point, as indicated by a marker at 57° 16.28' N. latitude, 134° 51.78' W. longitude to a point offshore at 57° 16.28' N. latitude, 134° 48.00' W. longitude, then running south to a point at 57° 06.76' N. latitude, 134° 43.00' W. longitude then due west to a point on the Baranof Island shoreline, approximately one mile south of Takatz Bay, at 57° 06.76' N. latitude, 134° 47.50' W. longitude.

This will be the second season NSRAA intends to use a tax assessment on the common property harvest of chum salmon to provide for cost recovery needs. For the 2013 season, the NSRAA Board has recommended to the Department of Revenue an assessment rate of 20% of the ex-vessel value of chum salmon. The Alaska Board of Fisheries adopted regulations during the 2012 meeting in Ketchikan which provides that the department may, by emergency order, open a joint common property/cost recovery special assessment fishery for chum within an **area defined as the waters of Section 12-A south of 57° 27.00' N. latitude, north of 57° 01.00' N. latitude and west of a line from 57° 27.00' N. latitude, 134° 45.50' W. long. to 57° 01.00' N. latitude, 134° 41.50' W. long.** from June 15 through July 31. This means that all chum salmon landed from a vessel that reports on the fish ticket all or a portion of the harvest from Subsection 112-11, 112-21, or 112-22 during the period of June 15 through July 31 will be assessed the tax. Fish ticket reporting requirements will be strictly monitored and enforced to ensure compliance with the tax assessment program. NSRAA will be deploying observers on the grounds to document participating vessels to further facilitate enforcement.

SITKA SOUND

NSRAA has projected a return of approximately 1.37 million chum salmon to the Deep Inlet THA and Medvejie Hatchery in 2013, an increase of 88% over the 2012 projected return of 730,000. The Deep Inlet THA rotational fishing schedule began on May 26 to intercept Medvejie hatchery Chinook salmon. The THA is open to trolling one day per week, each Saturday, between May 27 and September 29, unless changed by a subsequent announcement. The department issued a news release on April 18 describing common property net and troll fisheries in the Deep Inlet THA.

Troll harvest of returning chum salmon typically takes place in Eastern Channel and in Sitka Sound from the last week of July through the mid-August troll closure. An area has been established in Sitka Sound where trollers may target chum salmon during the troll coho closure in August. During the coho closure, trollers may not have coho salmon onboard while fishing for chum salmon [5AAC 29.112].

CHOLMONDELEY SOUND

Some watersheds along the eastern shoreline of Prince of Wales Island in District 2 produce late run chum salmon that have traditionally supported fall purse seine fisheries, including a directed fishery inside of Cholmondeley Sound. The Cholmondeley Sound fishery is supported by major runs of fall chum salmon at Disappearance and Lagoon creeks, as well as several smaller creeks distributed throughout the sound. No formal forecasts are made for these stocks, and parent-year escapements do not always provide an indication of potential run strength. The total escapement to Disappearance Creek was approximately 61,500 in 2009 (Piston and Heintz 2010b), 85,600 in 2010 (Piston and Brunette 2011), 93,000 in 2011, and 54,000 in 2012. The large 2011 escapement (second highest index since 1980) was dominated by 4-year-old chum salmon that were produced by an escapement in 2007 that failed to meet the escapement goal.

The department instituted a general management plan for the fall chum salmon fishery in District 2 for 2012. The sustainable escapement goal range for the Cholmondeley Sound fall chum salmon is 30,000–48,000 fish, based on aggregate peak aerial survey counts for Disappearance and Lagoon creeks. The department will keep Cholmondeley Sound closed to the harvest of chum salmon for all gear groups until a determination has been made that the return for 2013 will provide a harvestable surplus of chum salmon returning to Cholmondeley Sound.

Waters of Cholmondeley Sound south of 55° 15.47 N. latitude (just south of Chasina Island) will be closed to seining, and closed to the retention of chum salmon by trollers from August 15 until on or around September 8 when the first fall chum opening occurs. If pink salmon or chum salmon surpluses occur that would otherwise not be harvested, openings prior to September 8 will occur. In both 2011 and 2012, the first opening occurred before September 8 because surplus chum salmon returned to Cholmondeley Sound earlier than anticipated.

Chum salmon harvests by the purse seine and troll fleet in District 2 during late August pink salmon openings will be closely monitored as an early indication of run strength. Initial aerial surveys of Cholmondeley Sound chum salmon will begin around the end of August.

Approximately 10 days after closure of the directed pink salmon purse seine fishery in District 2, the department will provide a seine opening for chum salmon in waters of Clarence Strait outside of Cholmondeley Sound. This initial opening is expected to occur on or around September 8, unless aerial observations warrant an earlier opening. The opening is expected to be 15 hours or 39 hours in duration. The area that will be open to the purse seine fleet is open continuously for the troll fleet under summer troll regulations.

Additional openings will likely be one or two days in length, depending upon the strength of the run and expected effort levels. Waters inside Cholmondeley Sound will be opened for both gear groups provided adequate numbers of chum salmon are observed in the South Arm and West Arm of Cholmondeley Sound. When Cholmondeley Sound is opened, Sunny Cove and waters of Cholmondeley Sound proper will be closed south of Hump Island. These closures are needed to protect chum salmon escapements in Lancaster, Dora Bay and Kitkun systems, and closure lines may be moved further north than the closures listed in regulations.

Once the purse seine fleet is provided an opening inside Cholmondeley Sound, a rotation will be instituted that will include both gear groups. When the purse seine fleet is allowed to fish for one day, the troll fleet will be given one day. If the purse seine fleet is given two days, the troll fleet will be given two days. On or around September 12, a second opening will occur if aerial

surveys indicate that chum salmon run strength is sufficient to allow harvest in excess to escapement needs. On or around September 19, a third opening will occur if aerial surveys indicate that chum salmon run strength is sufficient.

The summer troll fishing season may be extended from September 21 through September 30, based on coho salmon abundance. During any troll fishery extension in District 2, trolling inside of Cholmondeley Sound will be limited to the same number of days as provided for the seine fishery.

REGULATIONS PERTAINING TO COMMERCIAL TROLL BYCATCH OF GROUND FISH AND HALIBUT

For information on Southeast Alaska Groundfish regulations, refer to the 2012–2013 Statewide Commercial Groundfish Fishing Regulations booklet available at Alaska Department of Fish and Game area offices. For details on groundfish bycatch allowances in the troll fishery refer to the “Groundfish Bycatch in the 2013 Commercial Salmon Troll Fishery” news release, issued on January 2, 2013.

In the state waters portion of the Eastern Gulf of Alaska, commercial salmon trollers operating hand or power troll gear during an open commercial salmon fishing period may legally retain and possess incidentally-taken groundfish in unlimited amounts, with the exception of the species listed below. The bycatch allowance for each species or species group reflects the percentage that may be retained and sold and is based on the round weight of salmon on board. These percentages are listed in table 1.

Table 1.–Bycatch Provisions for the Salmon Troll Fishery in State Waters

Species	Bycatch Allowance
Lingcod	40% CSEO, NSEI and SSEIW* 30% IBS, EYKT and SSEOC 5% NSEO
Demersal Shelf Rockfish (DSR)	10%
Other rockfish	No limit on incidental harvest
Spiny dogfish	35%
Sablefish	0%
Other groundfish	No limit on incidental harvest

Lingcod bycatch allowances in the salmon troll fishery vary by Lingcod Management Area (Figure 7). Lingcod Management Areas include: Icy Bay Subdistrict (IBS), East Yakutat (EYKT) Section, Northern Southeast Outside (NSEO) Section, Central Southeast Outside (CSEO) Section, Southern Southeast Outer Coast (SSEOC) Sector, Northern Southeast Inside (NSEI) Subdistrict and Southern Southeast Internal Waters (SSEIW) Sector. Lingcod taken in excess of bycatch allowances shall be forfeited to the State.

Lingcod may be taken as bycatch in the commercial salmon troll fishery only from May 16 through November 30 [5AAC 28.113 (c)]. Lingcod must measure at least 27 inches from the tip of the snout to the tip of the tail, or 20.5 inches from the front of the dorsal fin to the tip of the tail.

The retention of lingcod is prohibited in the troll fishery in the waters of Sitka Sound [5AAC 28.150(a)]. The Sitka Sound lingcod closure is defined as the waters that are enclosed on the north by lines from Kruzof Island at 57°20.50' N. lat., 135°45.17' W. long. to Chichagof Island at 57°22.05' N. lat., 135°43.00' W. long., and from Chichagof Island at 57°22.58' N. lat., 135°41.30' W. long. to Baranof Island at 57°22.28' N. lat., 135°40.95' W. long., and on the south and west by a line running from the southernmost tip of Sitka Point at 56°59.38' N. lat., 135°49.57' W. long. to Hanus Point at 56°51.92' N. lat., 135°30.50' W. long. to the green day marker in Dorothy Narrows at 56°49.28' N. lat., 135°22.75' W. long. to Baranof Island at 56°49.28' N. lat., 135°22.60' W. long.

Lingcod harvest allocations for the troll fishery are set by area and area closures will occur as allocations are taken. In-season closures will be announced by department news release, the United States Coast Guard "Notice to Mariners" report, and the National Weather Service broadcast. For updates on lingcod area closures, call the Groundfish Hotline at (907) 747-4882 or contact the Groundfish staff in Sitka at (907) 747-6688.

All DSR in excess of 10% must be weighed and reported as bycatch overage on a department fish ticket. All proceeds from the sale of excess DSR bycatch taken in state waters shall be surrendered to the state [5AAC 28.171 (a)]. DSR bycatch overages must be reported on fish tickets but may be retained for a person's own use. The seven species of rockfish in the DSR assemblage are yelloweye, quillback, canary, copper, china, tiger and rosethorn rockfish.

The DSR troll bycatch allowance in federal waters east of 140° W. long (Southeast Outside District) is 10%. The federal DSR bycatch allowance in waters west of 140° W. long. is limited to 5% in aggregate with all other rockfish, excluding black, blue and dark rockfish. DSR overage from federal waters may not be sold or enter commerce.

Black, blue, and dark rockfish are state managed species and all incidental troll bycatch of these species may be retained in federal waters. In federal waters of the Southeast Outside District, the rockfish bycatch allowance for species other than DSR, black, blue, and dark rockfish is 5% in aggregate. Note: Vessels trolling for salmon in federal waters of the EEZ in the Gulf of Alaska that retain groundfish bycatch must have a Federal Fisheries Permit (FFP) endorsed for troll gear. For information on FFP requirements and bycatch allowances in federal waters contact NOAA Fisheries at (907) 586-7225 (Juneau), (907) 747-6940 (Sitka), (907) 772-2285 (Petersburg) or (907) 247-5804 (Ketchikan).

Groundfish and halibut may not be taken in the waters off Cape Edgecumbe (Edgecumbe Pinnacles Marine Reserve) enclosed by a boxed-in area within 56° 55.50' N. lat., 56° 57.00' N. lat., 135° 54.00' W. long., and 135° 57.00' W. long. [5AAC 28.150(c)].

Halibut incidentally taken during an open commercial halibut season by power and hand troll gear operated for salmon consistent with applicable state laws and regulations are legally taken and possessed [5AAC 28.133(c)]. Commercial halibut may be legally retained only by Individual Fishing Quota (IFQ) permit holders during the open season for halibut. Trollers making an IFQ halibut landing of 500 lbs. or less of IFQ weight as determined pursuant to 50 CFR 679.42(h) are exempted from the three hours prior notice of landing (PNOL) if landed concurrently with a legal landing of salmon [50 CFR 679.5(l)(1)(iv)(A)]. Halibut taken incidentally during the troll fishery shall be reported on the troll fish ticket documenting the salmon landing. For information on regulations and landing requirements for the federal IFQ halibut fishery contact NOAA Fisheries.

A person aboard a vessel may not fish for groundfish with dinglebar troll or mechanical jig gear if salmon are on board. A vessel fishing for groundfish with dinglebar troll gear must display the letter “D” and a vessel fishing for groundfish with mechanical jigging machines must display the letter “M” at all times when fishing with or transporting fish taken with dinglebar troll gear or mechanical jigging machines [5AAC 28.135 (a)(4)]. A person may not operate a vessel that is displaying one of these letters when the vessel is being used to fish for salmon [5AAC 28.135 (c)].

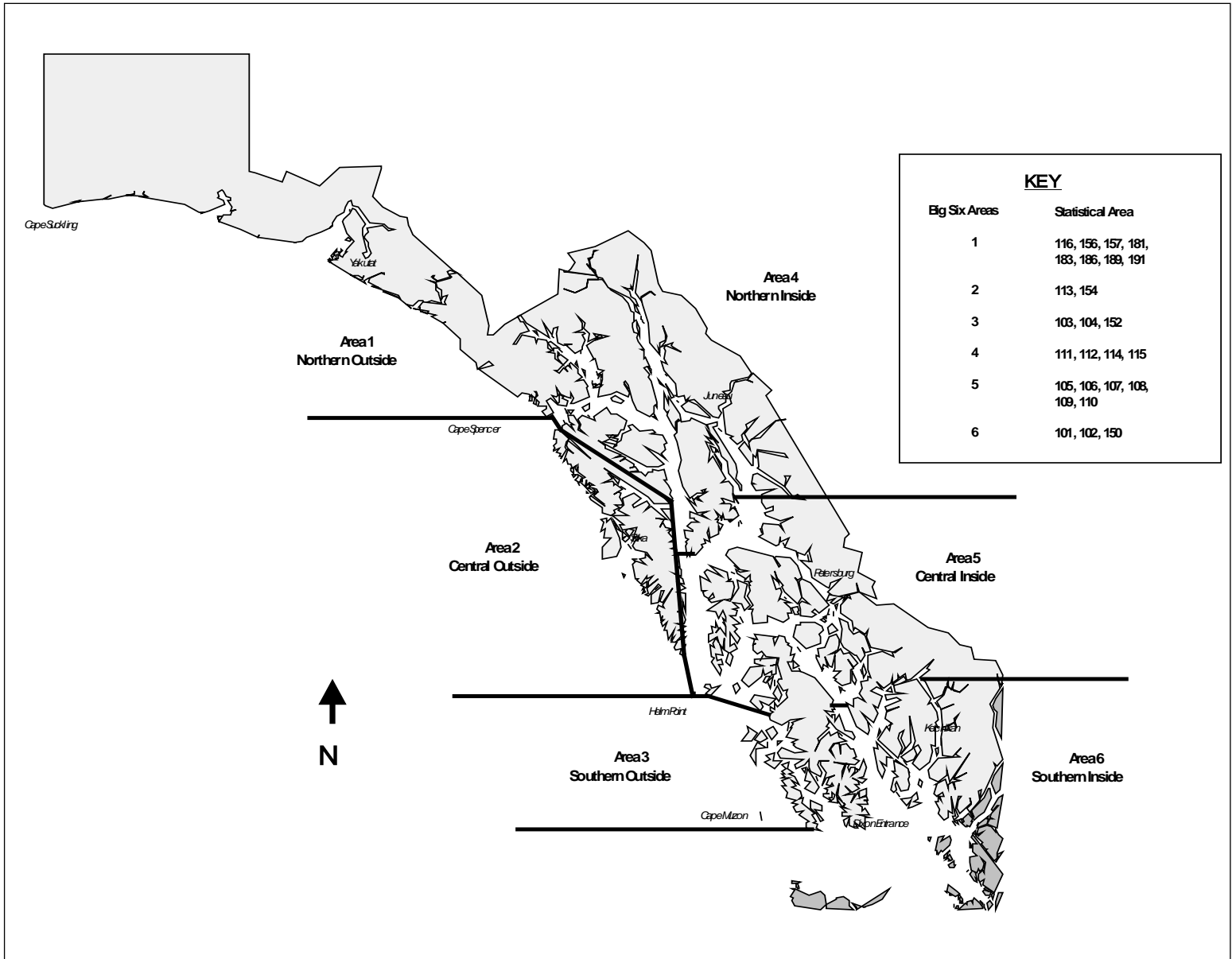


Figure 1.—Fisheries Performance Data program reporting areas in Southeast Alaska.

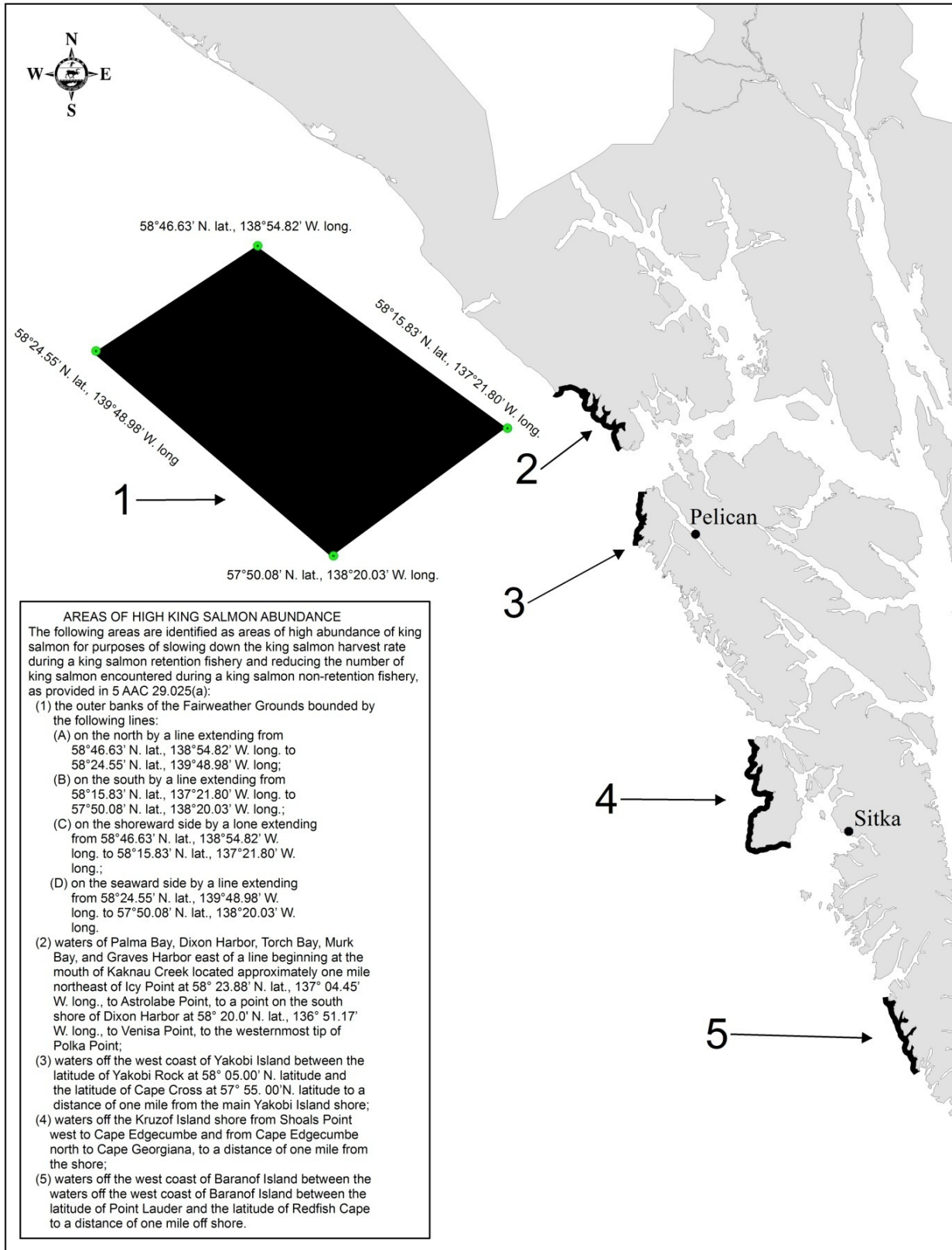


Figure 2.—Southeast Alaska areas closed to trolling for all species following the initial Chinook salmon opening in the Southeast Alaska summer troll season.

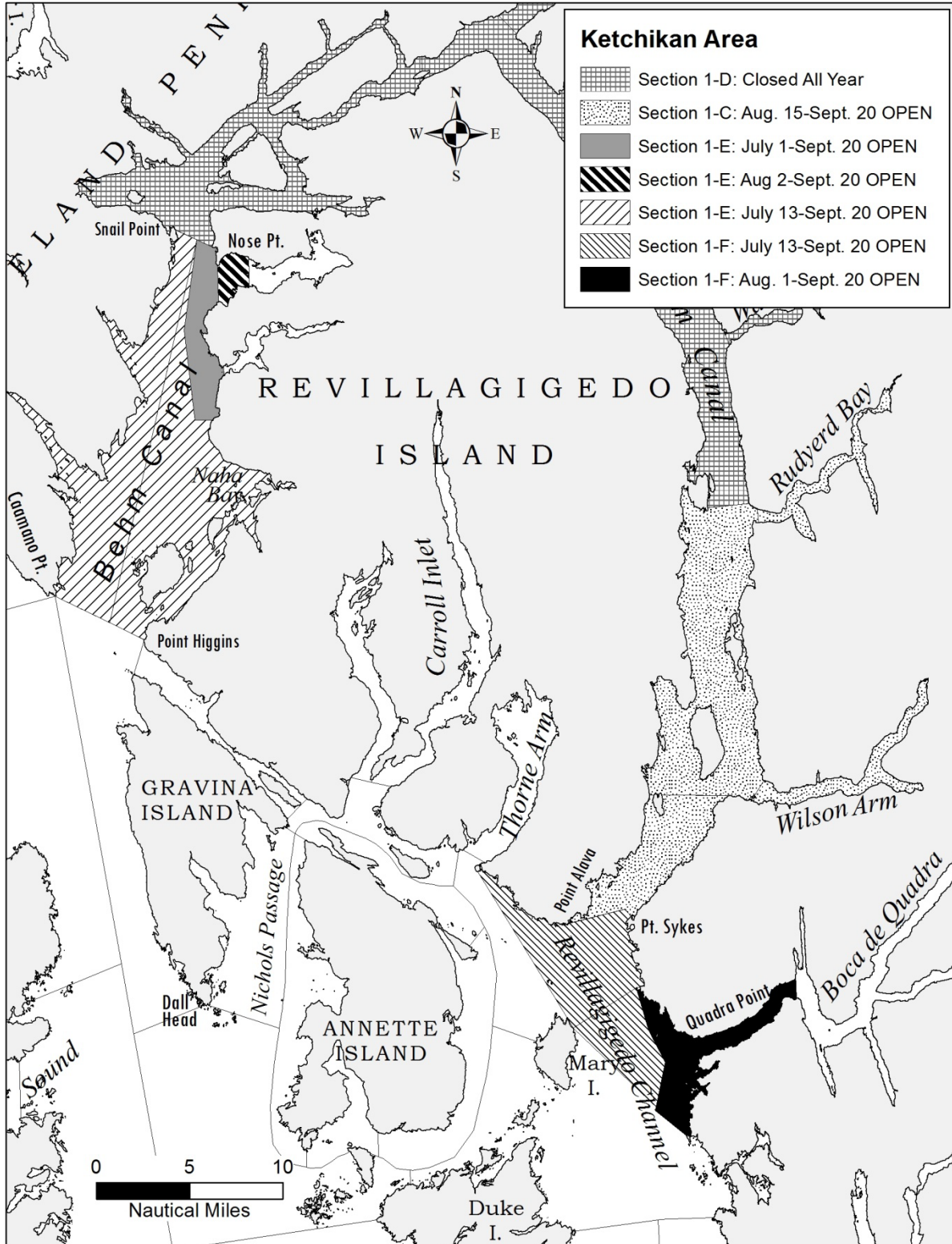


Figure 3.—Ketchikan area general summer trolling areas and seasons.

Note: This map is for general information only and does not exempt trollers from provisions in 5AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by the Department of Fish and Game. The general summer troll fishing season applies to those areas not specified in the key or in 5AAC 29.150.



Figure 4.–District 8 summer troll closed waters.

Note: This map is for general information only and does not exempt trollers from provisions in (5AAC 29.150 (CLOSED WATERS)) or Emergency Orders issued by the Department of Fish and Game. The general summer troll fishing season applies to those areas not specified in the key or in 5AAC 29.150

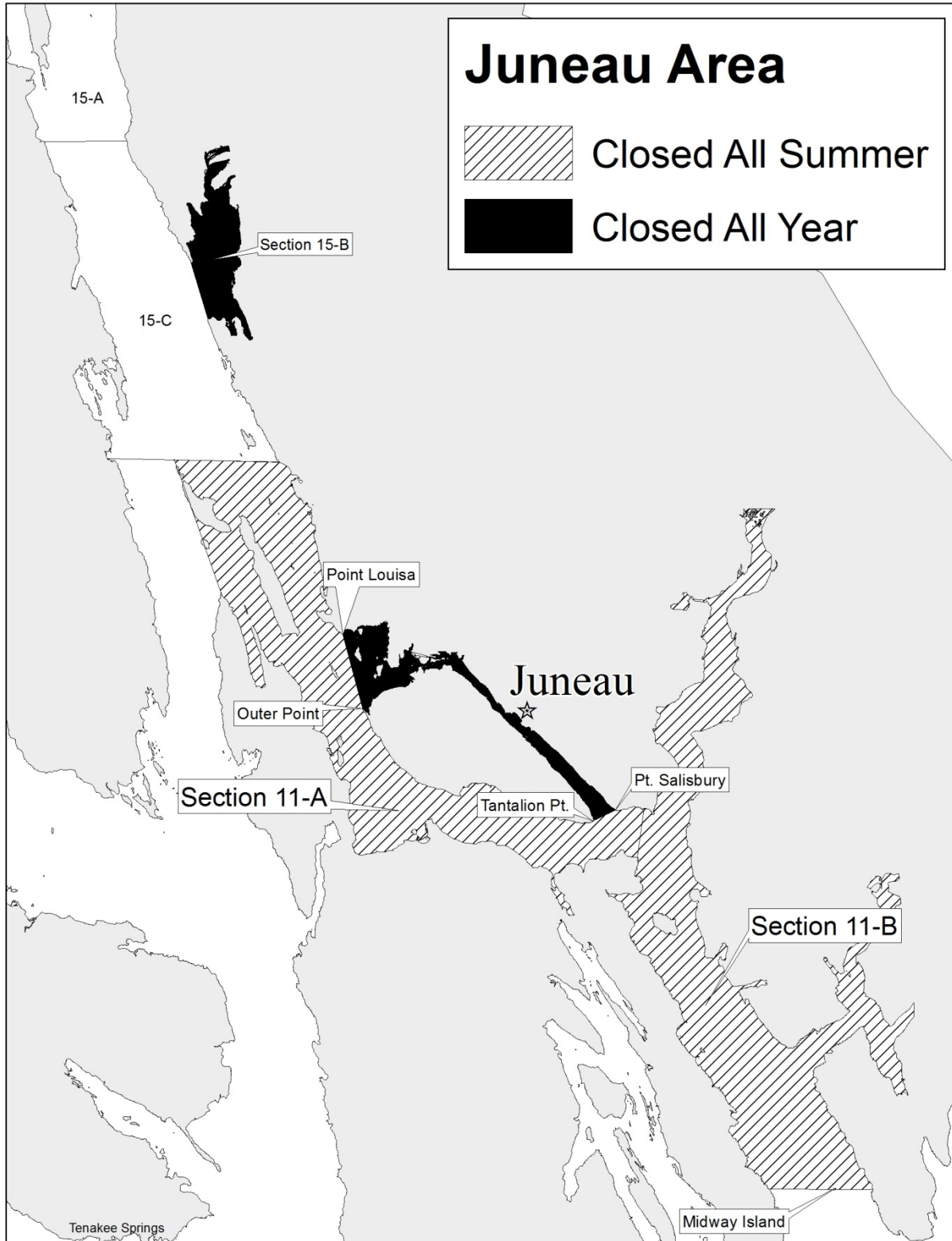


Figure 5.–Juneau area summer troll closed waters.

Note: This map is for general information only and does not exempt trollers from provisions in (5AAC 29.150 (CLOSED WATERS)) or Emergency Orders issued by the Department of Fish and Game. The general summer troll fishing season applies to those areas not specified in the key or in 5AAC 29.150.

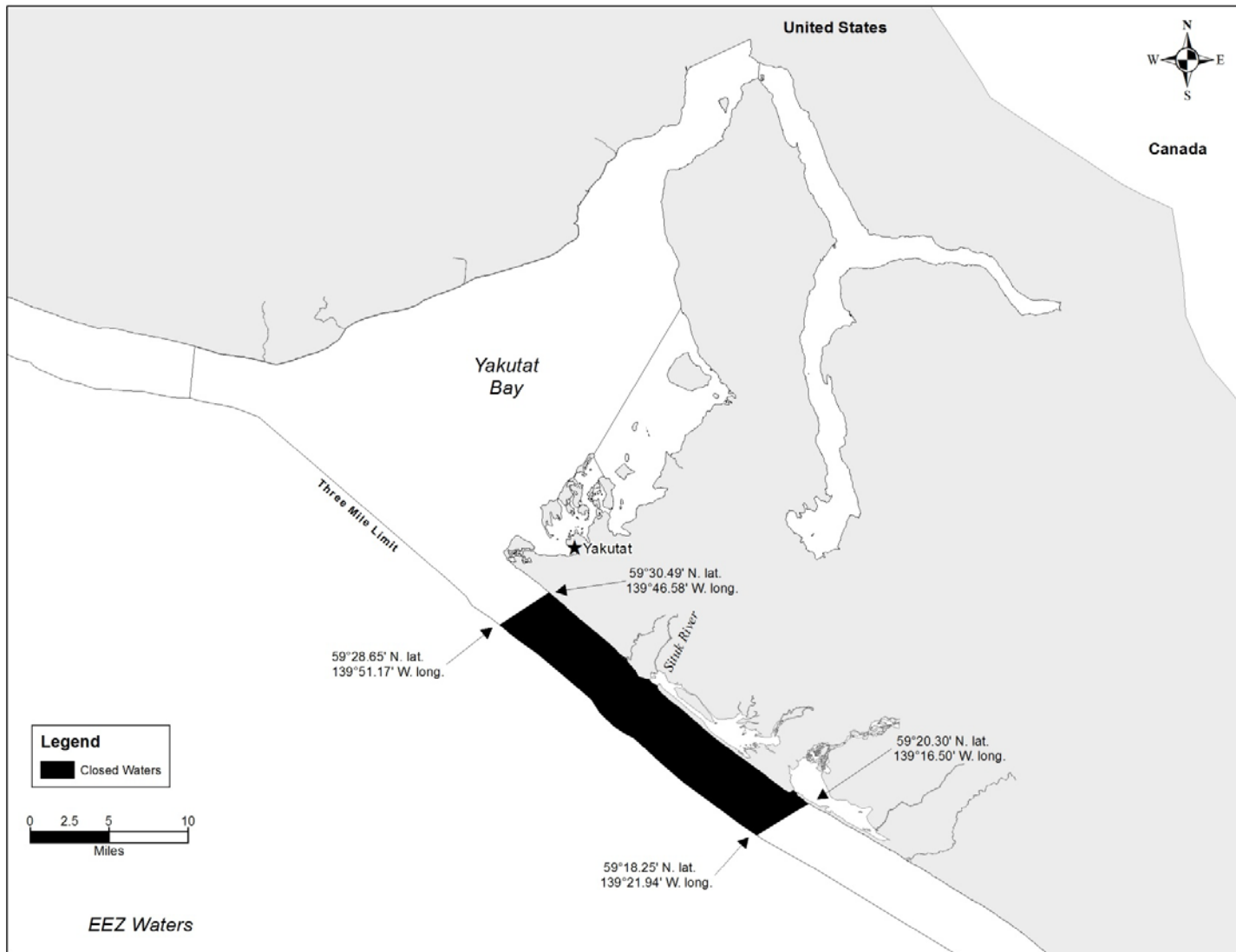


Figure 6.–Yakutat area troll closed waters, beginning July 1.

Note: This map is for general information only and does not exempt trollers from provisions in 5AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by the Department of Fish and Game. The general summer troll fishing season applies to those areas not specified in the key or in 5AAC 29.150.

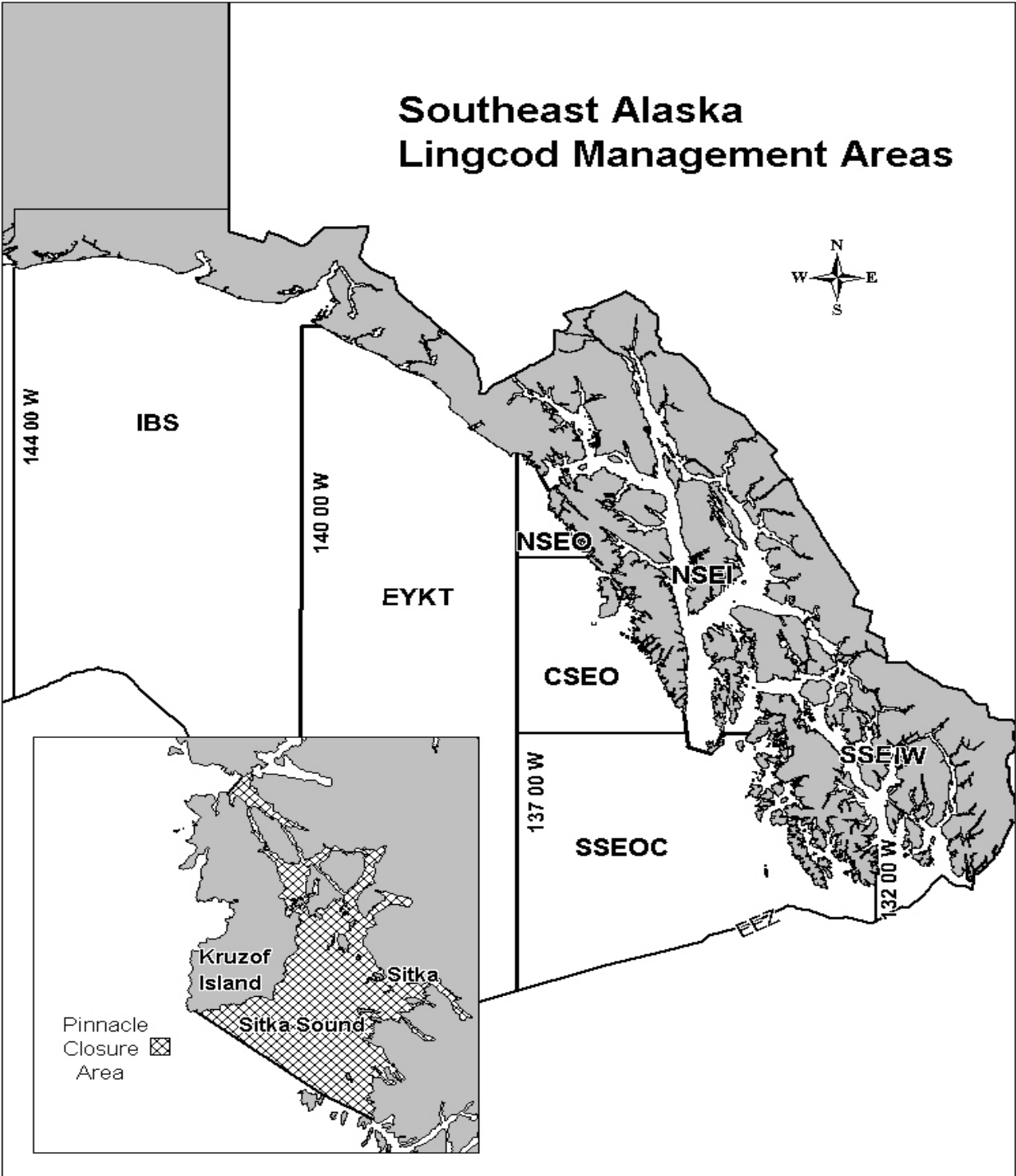


Figure 7.–Southeast Alaska lingcod management areas and Sitka area closed waters.

FISHERY CONTACTS

The following are commercial fisheries division contacts regarding this management plan:

Pattie Skannes
Troll Management Biologist
304 Lake Street, #103
Sitka, Alaska 99835
(907) 747-6688

Grant Hagerman
Assistant Troll Management Biologist
304 Lake Street, #103
Sitka, Alaska 99835
(907) 747-6688

Bill Davidson/Dan Gray
Regional Management Coordinator
304 Lake Street, # 103
Sitka, Alaska 99835
(907) 747-6688

Scott Kelley
Regional Supervisor
P. O. Box 240020
Douglas, Alaska 99824-0020
(907) 465-4250

Troy Thynes and Kevin Clark
Management Biologists
P. O. Box 667
Petersburg, Alaska 99833
(907) 747-6688

Dave Gordon and Eric Coonradt
Management Biologists
304 Lake Street, # 103
Sitka, Alaska 99835-7653
(907) 747-6688

Tom Kowalske
Management Biologist
P.O. Box 200
Wrangell, Alaska 99829
(907) 874-3822

Dave Harris and Scott Forbes
Management Biologists
P. O. Box 240020
Douglas, Alaska 99824-0020
(907) 465-4250

Scott Walker, Justin Breese and Bo Meredith
Management Biologists
2030 Sea Level Drive, Suite, 205
Ketchikan, Alaska 99901
(907) 225-5195

Randy Bachman
Management Biologist
P.O. Box 330
Haines, Alaska 99827-0330
(907) 766-2830 or 3124

Gordon Woods
Management Biologist
P. O. Box 49
Yakutat, Alaska 99689-0049
(907) 784-3255

Nicole Zeiser
Assistant Management Biologist
P. O. Box 49
Yakutat, Alaska 99689-0049
(907) 784-3255

For up-to-date troll information, call the 24-hour information line in the Douglas Office at 465-TROL (8765). In addition, the following telephone numbers may be called during the troll fishing season to obtain recorded announcements concerning areas open to trolling.

Ketchikan-(907) 225-6870

Sitka-(907) 747-8765

Petersburg-(907) 772-3700

SOUTHEAST ALASKA TROLL WEBSITE INFORMATION:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareasoutheast.salmon>