

Regional Information Report No. 1J14-05

2014 Southeast Alaska Purse Seine Fishery Management Plan

by

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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Weights and measures (metric)		General	Mathematics, statistics
centimeter	cm	Alaska Administrative Code	<i>all standard mathematical signs, symbols and abbreviations</i>
deciliter	dL	all commonly accepted abbreviations	alternate hypothesis
gram	g	e.g., Mr., Mrs., AM, PM, etc.	base of natural logarithm
hectare	ha		catch per unit effort
kilogram	kg		coefficient of variation
kilometer	km		common test statistics
liter	L	e.g., Dr., Ph.D., R.N., etc.	(F, t, χ^2 , etc.)
meter	m		confidence interval
milliliter	mL	at	correlation coefficient
millimeter	mm	compass directions:	(multiple)
		east	R
		north	correlation coefficient
		south	(simple)
		west	covariance
		copyright	degree (angular)
		corporate suffixes:	degrees of freedom
		Company	expected value
		Corporation	greater than
		Incorporated	greater than or equal to
		Limited	harvest per unit effort
		District of Columbia	less than
		et alii (and others)	less than or equal to
		et cetera (and so forth)	logarithm (natural)
		exempli gratia	logarithm (base 10)
		(for example)	logarithm (specify base)
		Federal Information Code	minute (angular)
day	d	id est (that is)	not significant
degrees Celsius	°C	latitude or longitude	null hypothesis
degrees Fahrenheit	°F	monetary symbols	percent
degrees kelvin	K	(U.S.)	probability
hour	h	months (tables and figures): first three letters	probability of a type I error
minute	min	Jan,...,Dec	(rejection of the null hypothesis when true)
second	s	registered trademark	probability of a type II error
		trademark	(acceptance of the null hypothesis when false)
		United States	second (angular)
		(adjective)	standard deviation
		United States of America (noun)	standard error
		U.S.C.	variance
		U.S. state	population sample
		use two-letter abbreviations (e.g., AK, WA)	Var var
Physics and chemistry			
all atomic symbols			
alternating current	AC		
ampere	A		
calorie	cal		
direct current	DC		
hertz	Hz		
horsepower	hp		
hydrogen ion activity (negative log of)	pH		
parts per million	ppm		
parts per thousand	ppt, ‰		
volts	V		
watts	W		

REGIONAL INFORMATION REPORT NO. 1J14-05

**2014 SOUTHEAST ALASKA PURSE SEINE FISHERY MANAGEMENT
PLAN**

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ABSTRACT

The Southeast Alaska purse seine fishery is managed according to statute, regulations, emergency order authority, and in consultation with the public and industry through the Purse Seine Management Task Force process. The Alaska Department of Fish and Game issued a preseason forecast for a harvest of 22 million pink salmon for 2014. This forecast for pink salmon, together with historical escapement estimates, fishery performance data, private non-profit hatchery forecasts for chum salmon and other species, are used to establish the management plan. The management plan for the 2014 Southeast Alaska salmon purse seine fishery is described in detail, along with expected run sizes, harvest strategies, and related management issues.

Key words: purse seine, management, pink salmon, chum salmon, coho salmon, sockeye salmon, king salmon, Fishery Management Plan

INTRODUCTION

This plan describes how the Southeast Alaska salmon purse seine fishery will be managed during the 2014 season and includes expected run sizes, harvest strategies, and related management issues. The plan is based on the Alaska Department of Fish and Game (ADF&G) 2014 preseason pink salmon forecast, historical escapement data, fishery performance data, private non-profit hatchery forecasts, and input through the Purse Seine Management Task Force process. ADF&G area management biologists listed at the end of this document can provide further details regarding the implementation of the plan in their respective areas.

Regulations allow purse seine fishing in Districts 1 (Sections 1-C, 1-D, 1-E, and 1-F only), 2, 3, 4, 5, 6 (Sections 6-C and 6-D only), 7, 9, 10, 11 (Sections 11-A and 11-D only), 12, 13, and 14. Purse seine fishing is also allowed in hatchery terminal harvest areas (THA) at Neets Bay, Kendrick Bay, Anita Bay, Deep Inlet, and Hidden Falls. Although the areas specified above are designated seine fishing areas, specific open areas and fishing times are established inseason by emergency order.

Since statehood, 77% of the salmon harvested in Southeast Alaska commercial fisheries have been caught with purse seine gear. Pink salmon (*Oncorhynchus gorbuscha*) is the primary species targeted by the seine fleet, therefore most management actions are based on the abundance of pink salmon stocks. Chum salmon (*O. keta*) are targeted in or near hatchery terminal areas and the majority of the chum salmon harvest originates from hatchery production. Other species of salmon are harvested incidentally to pink and chum salmon. Over the recent 10-year period from 2004 through 2013, the species composition of the purse seine harvest has included 89% pink salmon, 9% chum salmon, 1% sockeye salmon (*O. nerka*), and 1% coho salmon (*O. kisutch*). King salmon (*O. tshawytscha*) harvest percentages are insignificant compared with other species.

Tagging studies of adult pink salmon have demonstrated that the stocks in Southeast Alaska exhibit a distinct separation between the northern and southern portions of the region. For purposes of catch tabulation and management, Districts 1–8 are grouped as “Southern Southeast” and Districts 9–14 as “Northern Southeast.”

Inseason assessments of pink salmon run strength are determined primarily from spawning escapement information obtained from aerial surveys of terminal areas and streams, and from fishery performance data (catch and catch per unit effort, or CPUE). ADF&G staff use fishery performance data and associated information to make inseason evaluations of pink salmon harvests to Northern and Southern Southeast Alaska. ADF&G also charters purse seine vessels to conduct test fishing assessments of run strength in selected index areas and monitors pink salmon sex ratios in the commercial harvest to evaluate run timing.

2014 PINK SALMON FORECAST

The Southeast Alaska pink salmon harvest in 2014 is predicted to be in the *average* range, with a point estimate of **22 million fish (80% confidence interval: 8–36 million fish)**. The categorical ranges of pink salmon harvest in Southeast Alaska were formulated from the 20th, 40th, 60th, and 80th percentiles of historical harvest over the 51-year period 1960 to 2010:

Category	Range (millions)	Percentile
Poor	Less than 11	Less than 20 th
Weak	11 to 19	20 th to 40 th
Average	19 to 29	40 th to 60 th
Strong	29 to 48	60 th to 80 th
Excellent	Greater than 48	Greater than 80 th

The 2014 forecast was produced in two steps: 1) a forecast of the trend in the harvest using a time-series technique called exponential smoothing, and 2) the forecast trend adjusted using 2013 juvenile pink salmon abundance data. Juvenile pink salmon abundance data were provided by the National Oceanographic Atmospheric Administration (NOAA) Fisheries, Alaska Fisheries Science Center, Auke Bay Laboratories (Joe Orsi, Auke Bay Laboratories, personal communication). These data were obtained from systematic surveys conducted annually in upper Chatham and Icy straits, in conjunction with NOAA's Southeast Coastal Monitoring Project, and are highly correlated with the harvest of adult pink salmon in the following year (Wertheimer et al. 2011¹). This is the 8th year that the ADF&G forecast was adjusted using these data.

The 2014 harvest forecast of 22 million pink salmon is well below the recent 10-year average harvest of 41 million pink salmon, but is close to the average harvest over the past five even years. The primary reason to expect that the harvest in 2014 will be below the recent 10-year average is that biological escapement goals (BEG) were met in only two of three subregions in the 2012 parent year. The Northern Southeast Inside Subregion escapement index was below goal and management targets were not met in 12 of this subregion's 21 stock groups. Overall, management targets for pink salmon were not met in 5 of 15 districts, and at a finer scale, 15 of 46 pink salmon stock groups. However, the NOAA Auke Bay Lab's 2013 peak June–July juvenile pink salmon catch per distance trawled statistic from upper Chatham and Icy straits in northern Southeast Alaska ranked 10th out of the 17 years that they have collected juvenile salmon abundance information. This may indicate good freshwater and early marine survival for pink salmon set to return in 2014 and perhaps an increase in abundance over recent even-year returns. Pink salmon harvests associated with juvenile indices similar to the 2013 index ranged from 24–52 million fish. The department will manage the commercial purse seine fisheries *inseason* based on the strength of salmon runs. Aerial escapement surveys and fishery

¹ We gratefully acknowledge the assistance and advice of Joe Orsi and Alex Wertheimer (retired) and their colleagues at the NOAA Auke Bay Laboratories. However, we accept responsibility for this forecast, and we accept sole responsibility for this use of their data.

performance data will continue, as always, to be essential in making inseason management decisions.

The statewide harvest forecast, including a complete description of the Southeast Alaska pink salmon forecast, can be found online at:

<http://www.adfg.alaska.gov/FedAidPDFs/SP14-10.pdf>

The 2014 NOAA pink salmon forecast can be found online at:

http://www.afsc.noaa.gov/ABL/MSI/msi_sae_psf.htm

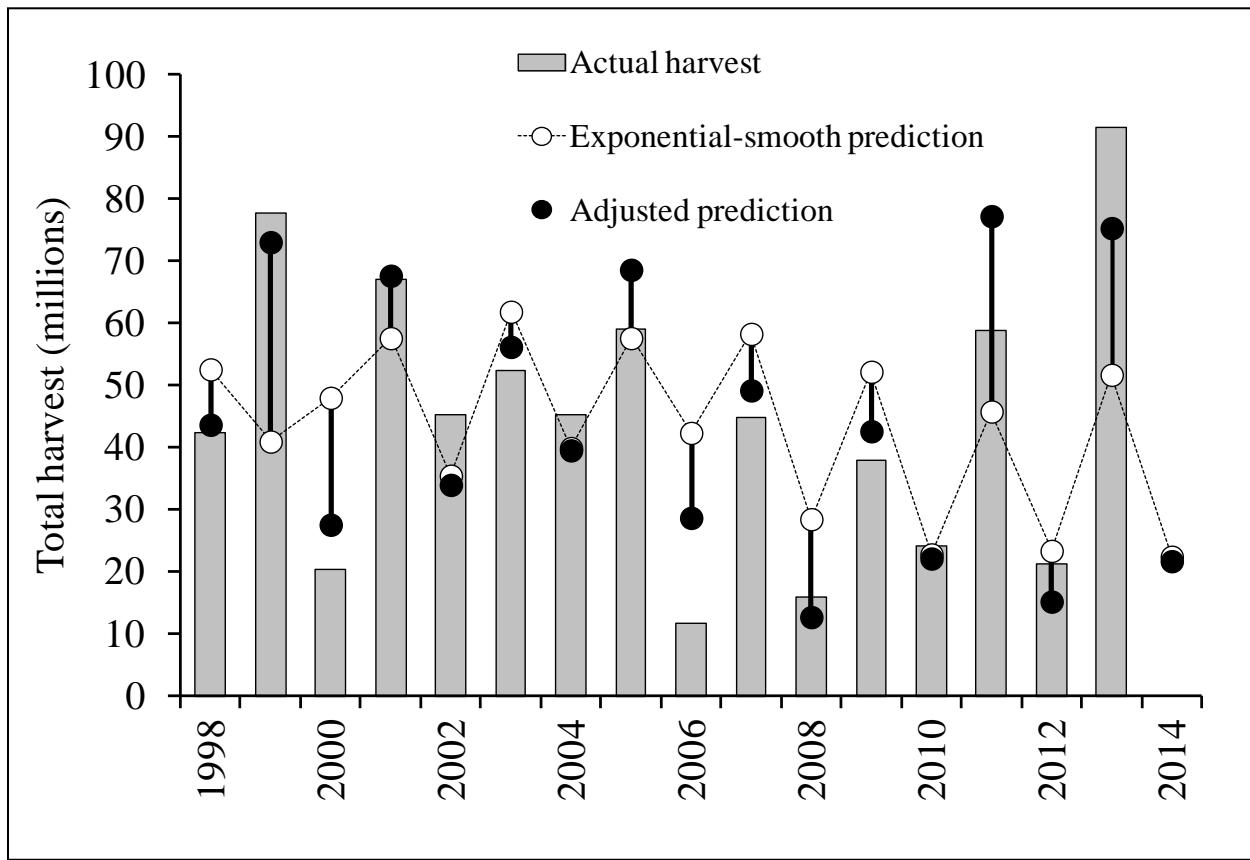


Figure 1.—Annual harvest of pink salmon in Southeast Alaska, 1998–2013, compared to the exponential smoothed hindcast predictions of the harvest adjusted using NOAA Auke Bay Laboratory juvenile pink salmon data.

Table 1.—Southeast Alaska pink salmon escapement indices (in millions) by district and subregion, compared to management target ranges by district, and biological escapement goal ranges by subregion for the 2014 parent-year of 2012.

Subregion	District	2012 Index	Lower Management Target	Upper Management Target
Southern	101	2.90	1.02	2.71
Southern	102	0.83	0.29	0.77
Southern	103	1.72	0.95	2.54
Southern	105	0.29	0.25	0.66
Southern	106	0.28	0.21	0.57
Southern	107	0.42	0.26	0.69
Southern	108	0.02	0.02	0.06
Northern Inside	109	0.55	0.63	1.50
Northern Inside	110	0.52	0.59	1.41
Northern Inside	111	0.25	0.27	0.65
Northern Inside	112	0.46	0.53	1.26
Northern Inside	Inside 113	0.07	0.32	0.76
Northern Inside	114	0.19	0.15	0.35
Northern Inside	115	0.07	0.03	0.07
Northern Outside	Outside 113	2.47	0.75	2.50
Biological Escapement Goals by Subregion		Total 2012 Index	Lower Escapement Goal	Upper Escapement Goal
Southern		6.5	3.00	8.00
Northern Inside		2.1	2.50	6.00
Northern Outside		2.5	0.75	2.50

GENERAL MANAGEMENT GOALS

The primary management goals for the 2014 Southeast Alaska purse seine fishery are as follows:

1. Obtain overall pink salmon spawning BEGs by subregion, and within subregions; obtain escapements consistent with district and stock group management targets to ensure that spawning escapements are well distributed.
2. Obtain overall adequate chum salmon spawning escapements and ensure that spawning escapements are well distributed.
3. Provide for an orderly fishery while harvesting fish in excess of spawning escapement needs.
4. Minimize, to the extent possible, the harvest of salmon destined for fishing districts where weak returns are expected.
5. Promote a harvest of good quality fish within constraints dictated by run size and timing.
6. Manage the District 4 purse seine fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty.
7. Restrict the total purse seine harvest of Treaty king salmon (28 inches or larger) to no more than 4.3% of the all-gear Treaty king salmon catch ceiling established for the 2014

season. Based on the 2014 king salmon preseason abundance index of 2.57, the purse seine fishery allocation for the season is 18,894 Treaty king salmon.

8. Manage the seine fishery in the waters of District 12, north of Point Marsden (along the Hawk Inlet Shore), and in Section 14-C north of the latitude of Porpoise Islands, consistent with the *Northern Southeast Seine Salmon Fishery Management Plans* (5 AAC 33.366).

REGIONAL MANAGEMENT PLAN

EXPECTED FISHING REGIME

ADF&G will manage the 2014 purse seine fishery inseason based on aerial survey observations and fishery performance data. The first opening will be on June 15 and will consist of a portion of lower District 2 along the Prince of Wales Island shoreline near Kendrick Bay from McLean Point Light to Polk Island and will open for four days. The first 15-hour openings will occur on Sunday, June 15, at Hidden Falls and Point Augusta. The first opening in District 10 will occur Sunday, June 29. Initial openings in Districts 1 and 4 can be expected on Sunday, July 6. Section 7-A may also have an initial opening on Sunday, July 6 if observations indicate normal pink salmon run timing and abundance to Anan Creek. Other areas around the region will open as described in this plan, subject to inseason information. The ADF&G pink salmon harvest forecast is 22 million fish, with an 80% confidence interval range of 8–36 million. This forecast is lower than the NOAA harvest forecast of 29 million, with an 80% confidence interval range of 26–38 million. As always, the department will carefully monitor inseason information and will manage the fishery to ensure escapement goals are met, district and stock group escapement targets are obtained, and escapements are well distributed.

During 2012, the pink salmon parent year, the common property purse seine harvest of 19.2 million pink salmon was below the long-term average (1960–2011) of 26.3 million and the recent 10-year average (2002–2011) of 34.5 million. Escapements in 2012 were within the BEG ranges in Southern Southeast and Northern Southeast Outside Sub-regions but below the goal in the Northern Southeast Inside Sub-region. Management targets were met or exceeded in 10 of 14 districts, with districts 9–12 below management targets. Escapements were below management targets for 15 of 46 stock groups, within management targets for 23 stock groups, and above management targets for 8 stock groups. The department is prepared to provide additional fishing opportunity when appropriate to harvest surplus returns. The department may expand fishing opportunity from one to two 15-hour periods per week, to 39-hour periods, to 2-days-on/2-days-off, or even to a 5-day fishing cycle as run strength allows.

Although a 5-day fishing cycle remains in the department's suite of options for the fishery, before implementing a 5-day fishing cycle in 2014, the department will consider whether the benefits of an expanded fishing regime are likely to be achieved and therefore benefit the fishery as a whole. The purpose of expanded fishing remains to: 1) supply processing plants with consistent deliveries of fresh-caught fish to maximize flesh quality, 2) increase roe recovery, and 3) maximize the overall value of production.

Some considerations on use of the 5-day option are as follows:

- It is generally recognized that processing capacity has increased and fishing effort has been consistently higher since 4:1 was initially implemented in 2002.
- In addition to increased effort and processing capacity, it is also recognized that the overall fishing power of the fleet has increased through changes in fishing net technology and vessel size.
- To fully harvest surplus returns at the peak of the season during large runs, there could be a need for an accelerated fishing schedule.
- Following early season management, a 2-days-on/ 2-days-off schedule would be implemented; when the harvest is more certain to reach 43 million or larger, a 5-day fishing rotation might be implemented.
- The department will have the flexibility to manage areas using different fishing schedules based on geographical differences in run strength, timing, effort, and escapements.
- Five-day fishing schedules of 5:0, 4:1, 3:2, 2:3, or 1:4 may be utilized during the peak of the run.
- The regional closure day should be synchronized regionwide, except in areas that are opened continuously to attract effort.
- If necessary, line changes for specific areas could be announced on 24-hour notice in the middle of a 5-day fishing period, however the department should try to announce that there is a potential for a line change in a prior announcement.

EFFORT LEVELS

The size of the purse seine fleet will have some impact on management decisions as the season progresses. Effort in 2014 is expected to decrease due to the low pink salmon forecast. In 2012, 233 permits were fished out of 315 permits issued by CFEC. In 2013, 277 permits were fished out of 315 permits issued by CFEC. The number of permits issued dropped in 2012 due to a permit buy-back program, and a similar number are eligible to fish during the 2014 season. The recent 10-year average effort in the purse seine fishery from 2004–2013 is 235 permits.

DAILY START TIMES

For the 2014 season the fishery opening and closing times will be as follows:

1. From the start of the seine season (June 15) through approximately August 15: 5:00 a.m. to 8:00 p.m.
2. From approximately August 16 through the end of the pink salmon season: 6:00 a.m. to 9:00 p.m.
3. From the start of the chum salmon season until the season closes: 7:00 a.m. to 7:00 p.m.

REGULATION MARKERS

Closed waters, stream markers defining closures around salmon streams, and salmon streams (that may not have markers) have been a topic at Purse Seine Task Force meetings over the years and were again discussed at the most recent meeting. Fish and Game Regulation 5 AAC 33.350 lists all closed waters in Southeast Alaska. Statewide regulation 5 AAC 39.290 was amended at the 2013 statewide meeting of the Alaska Board of Fisheries (BOF) to read:

- (a) Except as otherwise provided in this title, commercial fishing for salmon is prohibited at all times in the waters of Alaska that are**
- (1) within the streams and rivers of this state;**
 - (2) within 500 yards of the fresh waters of any salmon stream; and**
 - (3) over the beds or channels of streams and rivers of this state during all stages of the tide.**

Also in this regulation the following was adopted:

- (e) The points established for stream mouths listed in the *Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes* under 5 AAC 95.011 do not apply to enforcement of this section or other regulations limiting the distance that commercial fishing may occur from the fresh waters of any salmon stream.**

The regulation in (e) above was added to clarify that fishing is prohibited within 500 yards of fresh water of salmon streams, and not 500 yards from the midpoint of the rivermouth as listed in the *Anadromous Waters Catalog*.

The *Anadromous Waters Catalog* has maps identifying the locations of salmon streams and is available online on the department's web site at: <http://www.adfg.alaska.gov/sf/SARR/AWC/>, and copies are available for reviewing at ADF&G area offices.

An additional measure adopted at the 2013 statewide Board of Fisheries meeting was amendment of the definition of a salmon stream in 5 AAC 39.975. Definitions:

- (1) "salmon stream" means any stream used by salmon, at any stage of life, for spawning, rearing, presence, or migration.**

5 AAC 39.290(b) provides that the department may post closed areas by appropriate markers. If posted, the department shall place appropriate markers for any stream as close as practically possible to the distance or location specified by the applicable regulation or emergency order. Often these markers will be more than 500 yards from the mouth of the stream at mean lower low water (MLLW) in order to provide additional protection to fish accumulated near streams or because markers are placed where they can be seen and where they can be attached to a tree. Each stream has a different shoreline configuration. Some streams are in bays and the 500-yard markers can be connected by a straight line between the two markers because the location where the stream channel ends at MLLW is 500 yards or more from the straight line between the two markers. Other streams are located along straight shorelines and 500 yards from the stream channel at MLLW is defined by an "arc" or half of a circle originating from the two regulation markers with the arc being at least 500 yards from any part of the stream channel at MLLW. The most important thing to remember is the shoreline around every stream, and the stream channel at low tide in every stream, is different. Fishermen must always fish outside the markers, despite their distance from the stream and must always fish 500 yards from where the stream channel ends at low tide, they should fish outside of the arc defined by the two stream markers. This will ensure that they are outside of the 500-yard stream closure.

NEWS RELEASE INFORMATION

ADF&G will announce each fishery opening by news release. Announcements, in general, will be made more than one full day in advance of the opening to provide a fair start, unless an announcement with a shorter notice is needed to prevent the loss of a fishery. In the uncommon situation where the department has announced a fishery inside normal markers and additional line changes are needed during an opening, the department can make those additional changes but has agreed to notify processors and fishermen in the vicinity of further line adjustments with less than 24 hours of notice. Line changes and time changes differing from prior announcements will be indicated in bold type to highlight those changes. News releases will be available at ADF&G offices throughout Southeast Alaska, posted on the ADF&G web site, and will be available at fish buying locations or other prominent locations throughout the region. ADF&G contact numbers as well as telephone message recordings of the most recent news releases will be listed in the footer at the bottom of each news release.

News releases are organized in numerical order by district, then within a district from the shortest duration opening to the longest duration opening, followed by the current king landing restrictions, information and comments, and a harvest report from the prior fishing period.

At the request of the purse seine task force a single telephone recording of the entire news release broken down into a menu of openings by management area was first implemented in 2007. This system will again be in place for the 2014 season. Fishermen can access this recording by calling (907) 747-8522 and can hear lines and times for the different management areas by dialing 1, 2, 3, or 4 at any time during the call.

TERMINAL PINK SALMON FISHERIES

At the request of several processors in 2001, terminal area fisheries were initiated inseason to harvest mature pink salmon in locations where escapement needs had been exceeded and harvestable surpluses were available. These fisheries were intended to harvest the roe or ikura of pink salmon, as long as the salmon harvested were utilized. A key requirement for mature salmon fisheries is that they must adhere to provisions of 5 AAC 93.310 *Waste of Salmon*, which requires that salmon are not wasted, certain disposals must be authorized, and logbooks may be required. Similar terminal area fisheries took place in 2003, 2005, and 2007. Funding to support additional costs associated with the management of these fisheries was generated by proceeds from test fishing. Since 2007, no processors have requested terminal area pink salmon fisheries for the specific intent of harvesting roe or ikura.

If terminal area fisheries are requested that may require additional aerial surveys and personnel costs, test fisheries may be required to cover costs. Before such test fisheries are allowed, the department will first determine if the proceeds from test fisheries can be utilized within the department's authorized test fishing receipt authority without compromising existing programs or other fisheries.

In recent years, terminal fisheries have been opened inside normal markers or stream markers at various locations throughout the region. These areas were opened to harvest buildups of pink salmon in excess of escapement needs, not at the request of processors as prior fisheries were. These fisheries were conducted at the discretion of the Area Management Biologists in consideration of providing an orderly harvest that does not compromise escapement needs and budgetary constraints.

ADF&G will strive to open fisheries so that fish of the best possible quality can be harvested in existing traditional fisheries. If substantial buildups of pink salmon occur inside stream markers, in excess of spawning needs, openings to target these fish may occur, most likely in late August and early September. Openings of this nature will be announced via standard news releases.

KING SALMON HARVEST

ADF&G is required to manage the Southeast Alaska purse seine fishery for a maximum harvest of 4.3% of the annual all-gear king salmon catch ceiling determined under the terms of the Pacific Salmon Treaty [5 AAC 29.060 (b)(1)]. Prior to 1997, the purse seine fishery was limited to a fixed quota of 11,400 king salmon (not including Alaska hatchery-produced fish). The purpose of the 1997 regulation was to make management of the purse seine harvest of king salmon more consistent with the abundance-based management approach. The king salmon all-gear catch ceiling is driven by the preseason abundance index that is determined by the Chinook Technical Committee. For 2014, the abundance index is 2.57 and the corresponding purse seine king salmon allocation will be **18,894 fish**.

The BOF has adopted size limits [5 AAC 33.392] and directed ADF&G to manage the purse seine fishery such that incidental mortality from catch and release is minimized. The specific provisions for management of the seine fishery harvest of king salmon are as follows:

1. King salmon taken in the purse seine fishery that are less than 28 inches in length (as measured from the tip of the snout to the tip of the tail) will not be counted against the king salmon harvest quota.
2. King salmon greater than 21 and less than 28 inches in length may be harvested by purse seine fishermen but not sold.
3. Purse seine fishermen may possess and sell king salmon that are less than 21 inches (approximately 5 pounds or less).

KING SALMON IMPLEMENTATION PLAN

Non-retention of 28-inch and larger king salmon has been the primary management measure for maintaining the catch limit. With the large purse seine allocation in 2014 of 18,894 Treaty king salmon, fishermen may retain king salmon from the beginning of the season. If the harvest of Treaty king salmon approaches the quota inseason, non-retention regulations will be implemented by emergency order.

There may be specific terminal areas in which all king salmon may be, or must be, retained. ADF&G intends to implement full retention (5 AAC 39.265) from the beginning of the season for net fisheries in the Deep Inlet THA. Due to expectations of high enhanced king salmon harvests from the Hidden Falls THA, retention will be allowed during the initial openings of the Hidden Falls THA until mid-late July when chum harvests in the THA generally decline. Specific retention and non-retention periods will be announced in each seine fishery news release. Additional areas may also be announced via news release.

During periods of non-retention, purse seine fishermen are encouraged to avoid fishing in areas with high concentrations of king salmon and to quickly release those caught in a manner that minimizes mortality. To ensure small (less than 21 inches) king salmon are not counted against the quota, ADF&G needs the cooperation of the fishing industry. To accomplish this, all king salmon sold that are 28 inches or longer must be specified on fish tickets as species code 410;

this is pre-printed on each fish ticket. King salmon 21 inches or less should be indicated on fish tickets as species code 411. This code will need to be handwritten on the fish ticket at the time of sale if it is not pre-printed.

REPORTING OF PERSONAL USE HARVEST

Fishermen and processors should be aware that all salmon commercially harvested but retained for personal use and not sold must be reported on fish tickets at the time other fish from an opening are delivered. At the 2012 meeting, the BOF repealed regulations for Southeast Alaska that provided for reporting of king salmon and steelhead by emergency order. The statewide regulation (5 AAC 39.130(c)(10)), requiring reporting of all commercially harvested salmon retained for personal use, will be in effect for the 2014 season.

SEASON END

Concern has been expressed at past purse seine task force meetings regarding the potential loss of fishing opportunity after the department has announced the closure of the purse seine fishing season. The department agreed that the end of the season would be announced following review of catch and escapement data from the final opening. If there are areas needing additional escapement adjacent to areas with adequate escapement, the department could consider closure lines, if appropriate, as a means to provide harvest opportunities on fish returning to areas where escapements have been met. The department did caution fishermen regarding implementation of this plan that the season closure is based on several factors including providing good overall distribution of escapements, higher concentrations of females at the end of the run, incomplete escapement information at the end of the season, and consideration for harvest rates of other species.

SOUTHERN DISTRICTS PURSE SEINE FISHERY

2012 PINK SALMON RETURNS

The Southern Southeast subregion includes all of the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The escapement index value of 6.5 million in 2012 fell within the escapement goal range of 3.0 to 8.0 million index fish. Escapement indices met management targets for all districts, and for 15 of 18 pink salmon stock groups in this sub-region. The Shipley Bay, Totem Bay, and Whale Pass stock groups were below lower management targets in 2012.

MANAGEMENT CONCERNS

Implementation of the 5-day rotation fishing regime strategy that started in 2002 may be used in some locations in southern southeast fishing districts if fish returns are at or above forecast. However, uncertainties about fleet size, distribution, and the department's reaction to those can only be addressed inseason. ADF&G and the fishing industry will have to be flexible and be able to react quickly to changes from historical fishing patterns. Above all, meeting escapement goals will continue to be the primary objective of the department. Within that conservation mandate, the department will attempt to meet the objective of the modified fishing strategy and provide a more stable supply of fresher fish.

McDonald Lake Sockeye Salmon

McDonald Lake sockeye salmon were designated a stock of management concern by the BOF in February, 2009 due to a long-term decline in escapements. In February 2012, this stock of

concern status was removed due to improved adult escapements and rearing fall fry estimates. The escapement of 72,000 sockeye salmon in 2010 was the largest escapement since 2003, and was followed by escapements of 113,000 sockeye salmon in 2011, 57,000 sockeye salmon in 2012, and 15,400 sockeye salmon in 2013. Although the escapement goal of 55,000 to 120,000 fish has been reached in three of the last four years, the department will closely monitor the run in 2014.

In 2014, the department will begin a long-term project to count the annual sockeye salmon escapement at McDonald Lake through a video camera/net weir installed at the outlet of the lake. This project will provide improved estimates of the escapement and, over time, may provide useful inseason information regarding run strength; however, very little inseason information will be available in 2014 to indicate the strength of the McDonald Lake sockeye salmon run. In the case of severely depressed sockeye salmon harvest rates in Districts 1, 2, 5, 6, and 7, the department may consider restrictions to the Southern Southeast purse seine, gillnet, and personal use fisheries in an effort to meet the McDonald Lake sockeye salmon escapement goal of 55,000–120,000 sockeye salmon. Specific management actions for the seine fishery would be similar to actions taken during the 2009 through 2011 fisheries in Districts 1, 2, 5, 6, and 7.

Management actions that *may be* instituted consist of the following:

- The Gravina Island shoreline may be closed north of the latitude of Cone Island during statistical weeks 29, 30, and 31;
- Seine fisheries in West Behm Canal, which have not been significant in recent years, may be limited in 2014;
- The District 6 gillnet fishery may be limited to a maximum fishing time of two days per week during statistical weeks 29, 30, and 31;
- The District 2, 5, 6, and 7 seine fisheries may have reduced fishing time during key weeks of the McDonald Lake sockeye salmon run.

In addition to the camera/net weir, ADF&G will continue to estimate the sockeye salmon escapement at McDonald Lake through extensive surveys of the spawning grounds from late August through mid-October along with a mark-recapture study.

Hugh Smith Lake Sockeye Salmon

ADF&G may take management action if projected escapement levels are below that needed to reach the lower end of the escapement goal range of 8,000 sockeye salmon.

Summer Chum Salmon

In 2009, ADF&G adopted a lower-bound sustainable escapement goal (SEG) of 68,000 index spawners for summer chum salmon in the Southern Southeast subregion. This goal was based on aggregate peak aerial survey counts for 13 index streams in southern Southeast Alaska (Eggers and Heinl 2008). Escapements of summer chum salmon were below this newly adopted escapement goal from 2008 to 2010 and were particularly poor in 2008 when the escapement index was only 19% of the goal. The poor 2008 summer chum salmon run may have been related to extreme environmental conditions, which included very warm, dry conditions in spawning streams for parent-year spawners in 2004, and warm ocean temperatures in 2004 and 2005. Other species of salmon also appeared to be affected by these conditions, for example, sockeye salmon

escapements to Southeast Alaska were extremely poor in 2008 and the regionwide harvest of sockeye salmon was the lowest since Alaska statehood (Eggers et al. 2008)—many of these fish also went to sea in 2005. Escapements of summer chum salmon in southern Southeast Alaska improved in 2009 and 2010, but were still below the escapement goal. In 2011, escapements of summer chum salmon increased dramatically and the index value was the fourth highest since 1960. In 2012, the escapement goal was revised downward, based on an analysis that incorporated two decades of additional data, to 54,000 index spawners (Piston and Heinl 2011). The department plans to monitor summer chum salmon closely in 2014, but at this time there are no plans for directed management actions to reduce the harvest of wild chum salmon.

MANAGEMENT PLAN

The Southern Southeast Alaska purse seine management plan consists of separate segments which include the District 4 fishery, the inside districts pink salmon fishery, the fall chum salmon fishery in Cholmondeley Sound, and the THA fisheries.

District 4

The early portion of the District 4 purse seine fishery will be managed to comply with the Pacific Salmon Treaty. The agreement calls for managing the Alaskan District 4 purse seine fishery before statistical week 31 to:

1. Achieve an annual harvest share of the Nass and Skeena Rivers sockeye salmon of 2.45% of the Annual Allowable Harvest (AAH) of the Nass and Skeena Rivers sockeye salmon stocks in that year.
2. Carry forward from year to year annual deviations from the harvest share arrangement.

The AAH each year will be calculated as the combined total run of adult Nass and Skeena Rivers sockeye salmon in that year less the combined Nass and Skeena escapement target of 1.1 million fish. In the event the actual Nass and Skeena spawning escapement for the season is below the target level, the actual spawning escapement will be used in the AAH calculation.

The total run calculation includes the harvests of Nass River and Skeena Rivers sockeye salmon in the principal boundary area fisheries and the spawning escapements to the Nass and Skeena watersheds. This includes the harvest of Nass and Skeena sockeye salmon in Alaska Districts 1, 2, 3, 4, and 6 net fisheries, Canadian Areas 1, 3, 4, and 5 net fisheries, and Canadian Nass and Skeena in-river fisheries. Harvests in other boundary area fisheries may be included as jointly agreed by the Northern Boundary Technical Committee (NBTC).

Although the management intent shall be to harvest salmon at the AAH, it is recognized that overages and underages will occur and an accounting mechanism is required. The management intent for each fishery shall be to return any overages to a neutral or negative balance as soon as possible. After five years of consecutive overages, a management plan must be provided to the Northern Panel with specific management actions that will eliminate the overage. The accrual of underages is not intended to allow either Alaska or Canada to modify its fishing behavior in any given year to harvest the accrued underage.

Over past years, the bilateral NBTC has worked to finalize the total run reconstructions for the Nass and Skeena Rivers. In January of 2014, the bilateral Northern Panel accepted the work of the Technical Committee for the 2012 run reconstructions of the Nass and Skeena. Information in

Table 2 reflects the performance of the District 4 fishery from 1999 through 2012, preliminary numbers for the 2013 season, and a 2014 forecast.

The Canadian Department of Fisheries and Oceans (DFO) has a preseason expectation of approximately 2,942,000 sockeye salmon to the Nass/Skeena Rivers in 2014. This is a combined forecast of 2,300,000 Skeena River sockeye and 642,000 Nass River sockeye. If the 2014 forecast is accurate, the AAH for District 4 will be approximately 45,129 Nass/Skeena sockeye salmon (Table 2).

Table 2.—Sockeye salmon allocations for the District 4 purse seine fishery based on Nass and Skeena Rivers allocation calculations, 1999 to 2014.

Year	Nass/Skeena Total Return	Nass/Skeena Escapement	Allowable Nass/ Skeena AAH	Allowable D4 Harvest (2.45%)	Total Pre-Week 31 Sockeye Harvest	Actual Nass/Skeena Harvest	Overage/ Underage Per Year	Cumulative Overage/ Underage
1999	1,771,048	936,705	834,343	20,441	7,664	3,232	-17,209	-17,209
2000	5,318,228	1,100,000	4,218,228	103,347	48,969	29,221	-74,126	-91,335
2001	4,965,291	1,100,000	3,865,291	94,700	203,090	167,854	73,154	-18,180
2002	2,776,502	1,051,333	1,725,169	42,267	26,554	18,627	-23,640	-41,820
2003	3,306,520	1,100,000	2,206,520	54,060	84,742	44,258	-9,802	-51,622
2004	2,621,000	1,100,000	1,521,000	37,265	30,758	19,233	-18,032	-69,653
2005	1,770,474	1,000,144	770,330	18,873	35,690	19,442	569	-69,084
2006	3,650,525	1,100,000	2,550,525	62,488	89,615	68,940	6,452	-62,632
2007	2,752,074	1,100,000	1,652,074	40,476	112,135	75,615	35,139	-27,493
2008	2,531,701	1,100,000	1,431,701	35,077	6,262	4,880	-30,197	-57,690
2009	1,602,959	1,053,858	549,101	13,453	15,971	10,128	-3,325	-61,015
2010	1,395,616	956,954	438,662	10,747	4,617	1,091	-9,656	-70,671
2011	2,487,985	1,100,000	1,387,985	34,006	25,280	16,599	-17,407	-88,077
2012	2,737,173	1,100,000	1,637,173	40,111	18,300	9,598	-30,513	-118,811
2013 ¹	984,441	611,000	373,441	9,149	13,102	9,171	22	-118,568
2014 ²	2,942,000	1,100,000	1,842,000	45,129				

¹ Data for 2013 is preliminary

² 2014 is based on forecasted returns.

In 2014, the District 4 purse seine fishery will start on Sunday, July 6 by regulation. District 4 will be managed under the Pacific Salmon Treaty annex through July 26, 2014 (statistical weeks 28, 29, and 30). It is anticipated that the initial opening on July 6 will be 15 hours in length. The duration of following openings will be based on sockeye abundance and pink salmon run strength. The amount of effort in the district will also be monitored to stay within Pacific Salmon Treaty sockeye allocations. ADF&G will communicate with DFO on a weekly basis to follow the returns to the Skeena and Nass Rivers so inseason adjustments can be made to the sockeye cap. Starting on Sunday, July 27, 2014 the district will be managed on the strength of returning Southern Southeast Alaska wild salmon.

If the management regime increases to a 5-day cycle due to strong returns of pink salmon after statistical week 30, it is the department's intent to manage the district, in terms of boat-days of overall effort, similarly to levels since the signing of the Pacific Salmon Treaty. Weekly fishing periods in August will be decided only after the department assesses the distribution of the fleet and the run size of pink salmon. In recent years, District 4 was opened for the same amount of time as inside waters after the treaty period; however, that may not be the case in 2014.

Inside Fishing Areas

As in past years, aerial surveys of early-run pink salmon producing areas, primarily Boca de Quadra, East Behm Canal, and Ernest Sound, will begin in late June. Seining is expected to begin initially in a portion of District 2 on Sunday, June 15 to target returning enhanced chum salmon to the Kendrick Bay THA.

Kendrick Bay Spring Fishery

ADF&G will open a portion of lower District 2 outside of the Kendrick Bay THA to target Kendrick Bay summer chum salmon at a time when few wild stock chum salmon are available, and to maximize the quality of Kendrick Bay terminal chum salmon. This preseason fishery is timed to occur prior to the return of pink salmon to the area.

The department will be modifying the open area and fishing time in 2014 due to an increase in the harvest of wild chum, sockeye, and coho salmon during the 2012 and 2013 seasons. This bycatch has become a concern due to the large increase in effort during the last two years forcing boats to fish further offshore. For 2014, the department will modify the open area to include those waters within two nautical miles of the shoreline. The first week (statistical week 25) will be open for 4 days. The department will monitor effort levels and wild chum, sockeye, and coho salmon harvests to minimize harvest of these species by adjusting fishing time. The department's response may include fishing 2 to 3 days each week and not fishing during July 6 through July 12 (statistical week 28) in District 2 except for the traditional openings on Sunday and Thursday.

Traditional Fishery Openings

The traditional purse seine fishery will begin on Sunday, July 6 (statistical week 28). The initial fishing period will be for 15 hours and will be confined to the southeast portion of Section 1-F, the southern portion of District 2, and possibly, portions of Section 7-A (Anan).

Fishing time will likely begin with a series of 15-hour openings. If runs are strong enough to warrant additional fishing time, the fisheries will go from 15-hour to 39-hour openings on a 2-days-on/2-days-off, or a more continuous opening schedule. However, extensive openings will not occur if the pink salmon returns are weak. Areas may be opened and closed where additional fishing time is warranted or where a more conservative management strategy is needed.

In District 1, the area from Boca de Quadra to Foggy Point will be managed to reflect recent harvest patterns, effort levels, returns to Boca de Quadra river systems, and fishing time. Other areas in District 1, such as the Gravina Island shoreline, will also be managed to take into account other user groups, McDonald Lake sockeye salmon concerns, and the need to achieve evenly distributed escapement of salmon into the Back Behm and West Behm Canal systems.

In District 2, purse seining will be limited to the southern portion of District 2 until escapements of pink salmon to northern Clarence Strait, Ernest Sound, Cholmondeley Sound, and Kasaan Bay can be adequately assessed. Additionally, no purse seining should be expected in middle Clarence Strait, along the Ship Island and Tolstoi Bay shorelines, until run strength of pink salmon returns to West Behm Canal, Thorne Bay, District 6, and Section 7-B are determined. Also, in District 2, the fishing pattern along the Ship Island shore and near Thorne Bay will be managed to reflect historical fishing patterns to take into account other user groups and the need

to achieve escapement to Thorne River, McDonald Lake (sockeye salmon), and back Behm and West Behm Canal systems.

Returns of pink salmon to District 3 are expected to be average based on parent-year escapements. Portions of Section 3-A will open in mid to late July if pink salmon harvest in the early District 4 fishery indicates run strength is sufficient. By late July or early August, Sections 3-B and 3-C may also open. Due to several years of below average returns in portions of Section 3-C, initial fishing will most likely be delayed and will occur on the eastern portion of the section until the run strength can be determined.

Districts 5, 6, and 7

Parent-year pink salmon escapements were within the districtwide management targets in all three districts; however, escapements were highly variable. In District 5 (Sumner Strait), seine openings can be expected to occur starting around August 6. Parent-year escapements were poor to the western portion of District 5, but were generally good to Kuiu systems in the eastern portion. In District 6, the parent-year escapements were mixed; two of the four stock groups were within management targets and two were below. The two stock groups that were below were near the lower management targets. Openings in District 6 are not expected to begin until the first week of August and more extensive openings are not expected until the second week of August. The pink salmon return to Section 7-A is expected to be mixed. Despite the parent-year escapements being within management targets in 2012, they were highly variable and a few of the primary systems received escapements below desired levels. In particular, escapement to Anan Creek was below the desired level despite the opening of the fish ladder to allow better passage of fish upstream. Anan is the primary driver for early openings in Section 7-A. Therefore, openings will be dependent on observations of pink salmon escapement to Anan Creek and are not expected to occur before July 6. Openings in the northern portion of Section 7-B may begin during the last week of July only if the pink salmon return is strong. The lower area of Section 7-B, Union Bay, will likely not open prior to August 2. If pink salmon returns are strong, every effort will be made to begin more extensive openings as soon as possible to give industry maximum flexibility for harvesting any surplus.

Fall Chum Salmon Fisheries

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 SEG 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. Escapements have declined in recent years and the escapement goal was not met in 2013. ADF&G 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 2014 will provide a harvestable surplus.

Waters of Cholmondeley Sound south of 55°15.47' N. latitude (located immediately 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 10 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 10 may occur.

Chum salmon harvests by the purse seine and troll fleets 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 10, unless aerial observations warrant an earlier opening. The opening is expected to be 12 or 24 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 it is appropriate to initiate fishing 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 17, a second opening will occur if aerial surveys indicate that chum salmon run strength is sufficient to allow harvest. On or around September 24, 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.

Terminal Hatchery Fisheries

For the 2014 season, THA purse seine fisheries will occur at Neets Bay, Anita Bay, and Kendrick Bay to harvest fish returning to Southern Southeast Regional Aquaculture Association (SSRAA) enhancement facilities. These THA fisheries will be managed jointly with SSRAA, and in accordance with existing BOF approved management plans. Details regarding the open fishing periods by gear type in each area will be announced via commercial fishery news releases. Table 3 summarizes the expected returns to each SSRAA release location.

Fishermen are requested to ensure fish caught in THAs are reported correctly on the fish tickets. This will enable accurate otolith-mark sampling and documentation of fish taken from THAs.

Terminal Area—Neets Bay [5 AAC 33.370]

ADF&G, in consultation with SSRAA, will manage Neets Bay to include those waters of Neets Bay from the easternmost point of Bug Island to the closed waters at the head of the bay. From the second Sunday in June (June 8) through August 1, the Neets Bay THA will be expanded to

include those waters of Neets Bay east of the longitude of Chin Point to the closed waters at the head of the bay. On August 2, the Neets Bay THA will consist of those waters east of the longitude of the easternmost tip of Bug Island to the closed waters at the head of the bay.

In 2014, SSRAA is expecting total returns of 1,800,000 summer chum, 140,000 fall chum, 296,000 coho, and 18,100 king salmon to Neets Bay.

Neets Bay will be open continuously to troll, purse seine, and drift gillnet from May 1 to June 10 at noon unless closed by emergency order. There will be a rotational fishery for purse seine and gillnet gear from June 11 at noon through July 2 at noon. Troll gear will be allowed continuously during this period. From July 3 at noon to November 15 no gillnet or purse seine openings are scheduled so that cost recovery can take place. If openings can be scheduled they will be announced by news release in September or once cost recovery has been completed.

Neets Bay THA Calendar

May 1–June 10, 2014

Open continuously to troll, purse seine, and drift gillnet unless closed by emergency order.

June 11–July 2, 2014

Rotational fishery for drift gillnet and purse seine. Troll open continuously.

July 3–November 15, 2014

No gillnet or purse seine openings are scheduled during this time so that cost recovery can take place. If openings can be scheduled they will be announced by News Release in September or once cost recovery has been completed.

Terminal Area—Anita Bay [5 AAC 33.383]

The Anita Bay THA in District 7 consists of those waters of Anita Bay west of a line from Anita Point at 56°13.67' N. latitude, 132°22.49' W. longitude to 56°14.26' N. latitude, 132°23.92' W. longitude.

As amended during the 2012 BOF meeting, from June 15 through July 10, the waters within one-quarter mile of the northern shoreline of Anita Bay west of a line from 56°12.31' N. latitude, 132°26.22' W. longitude to 56°12.06' N. latitude, 132°26.22' W. longitude and east of a line from 56°11.96' N. latitude, 132°29.58' W. longitude to 56°11.73' N. latitude, 132°29.36' W. longitude will be open.

Waters south and west of the waters specified in the above description will be closed to the harvest of salmon as follows:

- (1) From June 15 through June 25, waters of the Anita Bay THA that are west of 132°26.22' W. longitude will be closed to the harvest of salmon;
- (2) From June 26 through July 1, waters of the Anita Bay THA that are west of 132°26.98' W. longitude will be closed to the harvest of salmon;
- (3) From July 2 through July 10, waters of the Anita Bay THA that are west of 132°28.00' W. longitude will be closed to the harvest of salmon.

In 2014, SSRAA is expecting total returns of 501,000 summer chum, 15,400 king, and 15,500 coho salmon to Anita Bay. It is anticipated that approximately 250,500 chum, 10,800 king, and 2,300 coho salmon will return to the terminal area and be available for harvesting in the rotational fisheries.

Details of the Anita Bay THA rotational gear fisheries are provided in a news release issued April 23, 2014.

Anita Bay THA Calendar

May 1–June 12, 2014

Beginning 12:01 a.m., Thursday, May 1 through 12:00 noon Thursday, June 12: open continuously to purse seine, drift gillnet, and troll unless closed by emergency order.

June 13–August 31, 2014

Rotational fisheries for drift gillnet and purse seine.

September 1–November 10, 2014

Beginning 12:01 a.m. Monday, September 1, the Anita Bay THA will be open to the harvesting of salmon concurrently by drift gillnet, purse seine, and troll gear. The Anita Bay THA will close for the season at 12:00 noon Monday, November 10.

Kendrick Bay THA-[5 AAC 33.377]

The Kendrick Bay THA, which includes the waters of Kendrick Bay west of 131°59.00' W. longitude, and the waters of McLean Arm west of 131°57.80' W. longitude, will be open on a continual basis beginning June 15 through September 30, 2014. For 2014, SSRAA is expecting a return of 700,000 summer chum salmon. Peak catches are expected to occur during statistical weeks 27–29.

Table 3.—Expected 2014 returns to SSRAA enhancement projects by release location.

Species/Run	Release Location	Common property Harvest	Terminal	Total Return
Coho	Herring Cove/Whitman	17,700	5,900	23,600
Coho	Nakat Inlet	21,600	2,400	24,000
Coho	Anita Bay	13,200	2,300	15,500
Coho	Neets Bay	207,200	88,800	296,000
Coho	Crystal Lake	5,300	3,600	8,900
Summer Coho	Burnett Inlet	10,300	12,700	23,000
Summer Coho	Neck Lake	34,000	34,000	68,000
King	Whitman Lake	3,690	8,610	12,300
King	Anita Bay	4,620	10,780	15,400
King	Neets Bay	5,430	12,470	18,100
King	Crystal Lake	1,650	1,650	3,300
Summer Chum	Neets Bay	486,000	1,314,000	1,800,000
Summer Chum	Anita Bay	250,500	250,500	501,000
Summer Chum	Kendrick Bay	490,000	210,000	700,000
Summer Chum	Nakat Inlet	140,000	140,000	280,000
Fall Chum	Nakat Inlet	3,500	6,500	10,000
Fall Chum	Neets Bay	35,000	105,000	140,000

NORTHERN DISTRICTS PURSE SEINE FISHERY

2012 PINK SALMON RETURNS

Parent-year pink salmon escapements were below the recommended BEG range for the Northern Southeast Inside Subregion as a whole. Escapement indices for Districts 9–12 were below management targets, Districts 114 and 115 were within or above management targets, and Section 13-C was well below the management target (Table 1). In the Northern Southeast Inside Subregion, pink salmon escapements in the 2012 parent year were below management target ranges for 12 of the 21 stock groups, and within or above management target ranges for 9 stock groups. For the Northern Southeast Outside Subregion, which includes Sections 13-A and 13-B, escapements were above the BEG range and all 7 stock groups were within or above management target ranges.

MANAGEMENT CONCERNS

Pink salmon escapements to northern Southeast Alaska during the 2012 parent year were below the management target range in 4 of the 7 districts. An early-season management concern will be to prevent excessive harvest of salmon stocks in mixed stock fishing corridors (e.g., Icy Strait and West Admiralty), especially those bound for Districts 9–12 and Section 13-C, until run strengths to near-terminal and terminal areas can be adequately assessed. ADF&G and the fishing industry will have to be flexible and be able to react quickly inseason to changes from historical fishing patterns. Meeting escapement goals will continue to be the primary objective of the department. Within that mandate, the department will attempt to meet the objective of the modified fishing strategy and provide a more stable supply of fresher fish.

Summer Chum Salmon

In 2009, ADF&G adopted a lower-bound SEG of 149,000 index spawners for summer chum salmon in the Northern Southeast Inside Subregion. This goal was based on aggregate peak aerial survey counts for 63 index streams in northern Southeast Alaska inside waters. Escapements of summer chum salmon were below this escapement goal threshold from 2008 to 2011. In 2012, the escapement goal was revised downward, based on an analysis that incorporated two decades of additional data, to 119,000 index spawners (Piston and Heinl 2011). The 2011 escapement was slightly above the revised goal, primarily due to a record count of 23,000 chum salmon at the Endicott River in Lynn Canal. In 2012, chum salmon escapements improved with an index of 177,000, and the trend continued in 2013 with an escapement index of 278,000, exceeding the escapement goal by a wide margin. The department plans to monitor summer chum salmon closely in 2014, but at this time there are no plans for directed management actions to reduce the harvest of wild chum salmon.

MANAGEMENT PLAN

The Northern Southeast Alaska purse seine fishery management plan consists of separate segments for the outside areas (Sections 13-A and 13-B), the inside areas, the fall chum salmon fishery, the Hidden Falls and Deep Inlet Hatchery THAs, and the Amalga Harbor Special Harvest Area (SHA) fisheries.

Fishing Regime Implementation

If run strengths are sufficient to warrant additional fishing time, the fisheries will go from 15-hour and 39-hour openings to 2-days-on/2-days-off or more continuous openings. Implementation of a five-day fishing regime will depend on the inseason regionwide projection of total harvest exceeding 43 million pink salmon and area specific run strength and effort levels. If a five-day schedule is implemented, managers will adopt the five-day fishing schedule to the needs of meeting escapement goals in specific areas that might include a fishing schedule of 5:0, 4:1, 3:2, 2:3, and 1:4.

Inside Fishing Areas, Early Runs

The 2014 seining season will begin on Sunday, June 15, with initial open periods of 15 hours to harvest hatchery summer chum and to index the strength of early pink salmon returns. During the first open period, seining will be allowed in the Point Augusta Index area in District 12 in Chatham Strait; the opening will be in conjunction with the first opening at the Hidden Falls Terminal Harvest Area.

Escapements of summer chum salmon for the 2009 and 2010 parent years in Tenakee Inlet were below average. Although no formal forecasts are made for these stocks, some expectations can be based on parent-year escapements. Escapements in 2009 were generally stronger than the main parent year of 2010, and were 23% and 18% respectively of the previous ten-year average.

The 2012 parent-year pink salmon escapement index for Tenakee Inlet of 0.19 million fish is below the lower management target of 0.21 million, and slightly above the even-year average index count of 0.20 million fish. In 2014, purse seine opportunity in Tenakee Inlet will depend on the observed development of escapements to local streams. Portions of the Basket Bay shoreline may be opened to harvest pink salmon returns to Tenakee Inlet and Peril Strait if escapements to local streams are adequate, including escapement of Kook Lake sockeye. Commercial seining has routinely been closed within 4 nautical miles of state marine waters around the entrance to Basket Bay to manage for sockeye escapement to Kook Lake and for the Basket Bay subsistence fishery.

The 2012 parent-year escapement index for Section 13-C was 0.07 million, well below the lower management target of 0.32 million. Due to weak pink escapements to a number of systems in Section 13-C in 2012, no openings are scheduled in 2014. Openings in Section 13-C will occur only if inseason assessment indicates a surplus. If openings occur at all, they will most likely be in small areas targeted at specific systems where abundance has been observed. Parent-year summer chum salmon escapements to Saook Bay and Rodman Bay were below recent 10-year averages. Seine openings to target chum salmon will be based on inseason assessment of abundance. Chum salmon openings will likely be very restrictive in time and area, and will occur only if pink salmon escapements will not be negatively impacted.

The parent-year escapement index for District 10 was 0.52 million pink salmon, below the management target range of 0.59–1.45 million fish. Escapement was variable throughout the district with 3 of the 4 stock groups being within their respective target ranges. The mainland portion of District 10 is scheduled to open on Sunday, June 29. The parent-year escapement index for Seymour Canal (Section 11-D) of 0.31 million pink salmon is within the management target range of 0.16–0.40 million, and above average. Openings in lower Seymour Canal may occur depending on the development of escapements to local streams.

Commercial seining directed on early-run pink salmon returns will be based upon aerial survey and fishery performance assessments of run strength. Aerial surveys to evaluate run strength will begin in late June for the northern inside fishing districts. To provide an additional assessment of incoming run strength of early-run pink salmon, the department will open a one-mile area along the Point Augusta shoreline in District 12 in conjunction with other weekly openings. Test fishing will be conducted at Point Gardner and Kingsmill Point to assess the strength and timing of the pink salmon returns entering Frederick Sound. The Point Gardner test fishery will start on or about June 25 and the Kingsmill Point test fishery will start on or about July 2. Both test fisheries are scheduled to occur weekly through the month of July. Test fishing will also occur along the Hawk Inlet Shoreline beginning on or about June 27 to assess the strength of pink salmon returns entering the northern inside waters of Districts 11 and 15. Incidental harvest of pink salmon at the Hidden Falls Hatchery terminal fishery during the first three weeks of the season will also be monitored as an indicator of pink salmon run strength.

In District 12, based on a well-defined evaluation of run strength and timing, the Hawk Inlet shoreline fishery may be opened in July to provide access to harvestable surpluses of northbound pink salmon stocks that would otherwise not be harvested. This fishery is managed according to the *Northern Southeast Seine Salmon Fishery Management Plans* (5 AAC 33.366) and is described in detail in a subsequent section of this plan.

Inside Fishing Areas—Middle and Late Runs

Middle-run pink salmon should begin entering the inside waters of the northern districts during July. Seining in District 12 along the west Admiralty Island shoreline typically expands in late July, depending on the observed run strength of pink salmon stocks in Districts 10 and 11, and continues as long as Chatham Strait and Fredrick Sound escapements develop satisfactorily. Southern boundaries for the fishery are typically extended into statistical area 112-17, from Point Hepburn to Fishery Point and then to Parker Point, in either the last week of July or in early August. Because Kanalku sockeye salmon transit through this area in June and July, and because the Kanalku sockeye stock is an important subsistence salmon resource, the department consistently closes an area of approximately nine nautical miles along the west Admiralty shoreline from Parker Point to Point Samuel for an extended period into early August. Parent-year pink salmon escapements were below management target ranges for streams on the northern Chatham Strait shoreline of Chichagof Island and the west Admiralty shoreline. Openings along these shorelines will depend on developing returns of local stocks as well as Peril Strait and Tenakee Inlet stocks. Fishing may begin in this area in mid to late July depending on the observed run strength.

In Section 9-A, seine openings can occur along the Baranof Island shoreline north of Red Bluff Bay beginning in mid to late July and along southeastern Baranof Island south of Patterson Point beginning mid to late August. Parent-year pink salmon escapement to Red Bluff Bay was below the lower management target and the Southeast Baranof Island pink salmon stock group escapement was well below the lower management target. Conservative management can be expected in Section 9-A, and seine openings will be based on inseason assessment of run strength. July openings near Red Bluff Bay will include only the shoreline north of Red Bluff Bay in order to provide for escapement needs as well as subsistence uses at Falls Lake. Openings to the south of Red Bluff Bay may begin in early August, depending upon pink salmon abundance. If pink salmon escapements into Red Bluff Bay are sufficient, openings inside the bay may occur to harvest surplus pink salmon.

Parent-year escapements of pink salmon were generally poor throughout Section 9-B with only one stock group within management targets. Parent-year escapements were mediocre to the lower Kuiu Island systems including Tebenkof Bay, poor to the upper Kuiu Island systems, and poor to the southeast Admiralty Island systems. Limited openings can be expected to start around August 6 and will likely be focused in lower Section 9-B. The escapement index for District 9 was 0.88 million fish and within the 0.63 to 1.50 million management target range.

Pink salmon escapements in District 14 were within the management target range in 2012. As a result, openings to harvest local stocks at Idaho Inlet and Port Althorp are expected to occur in late July or early August. To try to attract effort to these remote areas, fishery openings in these locations may be announced out of cycle, before or after regionwide openings. The decision when these remote areas will be open will be based on inseason information. The Whitestone shoreline area in District 14 may be open in late July or early August with fishing times and areas dependent upon observed strengths of local pink salmon stocks. ADF&G will also monitor pink salmon escapements in streams adjacent to Porpoise Islands along Homeshore, and will consider seine openings in this area if there are harvestable pink salmon, surplus to escapement needs.

Openings in District 12 along the Catherine Island shoreline, and in portions of Kelp Bay, may occur from mid-July to early August to harvest surplus pink or chum salmon returning to Kelp Bay streams or to harvest surplus chum salmon returning to Hidden Falls if wild chum and pink salmon escapements are being met. The parent-year escapement index of pink salmon to Kelp Bay streams was 0.02 million, well below the 0.06 million lower management target. Also, parent-year chum salmon escapements to Kelp Bay streams were about one-half the 10-year average. Given poor parent-year escapements of both pink and chum salmon, fishermen can expect conservative management in Kelp Bay and adjacent areas. Openings to harvest surplus pink and chum salmon will be based on inseason assessment of run strength.

Hawk Inlet Shore Fishery

The Admiralty Island shoreline between Funter Bay and Point Marsden in Chatham Strait is known as the Hawk Inlet shoreline. Purse seine fishing may be allowed in this area to harvest pink salmon stocks migrating northward to Taku River, Lynn Canal, and Stephens Passage. During July, the department will manage the Hawk Inlet Shore fishery in accordance with the *Northern Southeast Seine Fishery Salmon Management Plans* (5 AAC 33.366). This plan stipulates that any portion of the area north of Point Marsden may be opened when a harvestable surplus of pink salmon is observed. Openings must also consider the conservation of all species, and the area must be closed in July after 15,000 wild sockeye salmon have been harvested. In January 2006, the BOF clarified that only the harvest of wild sockeye salmon would count toward the 15,000 fish cap.

During August, openings along the Hawk Inlet shore may extend northward to the latitude of Hanus Reef Light or Point Couverden if north-migrating pink salmon stocks are strong. If north-migrating salmon returns are poor and south-migrating returns are strong, seining will be allowed only south of Point Marsden.

Openings along the Hawk Inlet shore north of Point Marsden will be based on the observed run strength of north-migrating stocks of pink salmon. The assessment methods used by the department to determine if run strengths are adequate and a harvestable surplus of pink salmon is available for harvest include:

1. Parent-year escapement of pink salmon stocks for Lynn Canal, Stephens Passage, and Taku River. Lower Lynn Canal escapements were above the management target range and Stephens Passage escapements were below the management target range, and both stocks were approximately 70% of the previous even-year average. The Taku River fish wheel pink salmon catch was 59% of the even-year average.
2. Inseason test fishing at designated locations along the Admiralty Island shoreline north of Point Marsden.
3. Inseason aerial assessments of pink salmon abundance along the Admiralty Island Shoreline north of Point Marsden.
4. 2014 pink salmon catches in the department's Taku River fish wheels.
5. 2014 pink salmon marine sport fish catch rates in the Juneau area (lower Lynn Canal and upper Stephens Passage).
6. 2014 fishery performance of District 11 and District 15 drift gillnet fisheries.

In 2003, the BOF adopted a department proposal codifying the sockeye salmon reporting requirements for the Hawk Inlet shoreline fishery. The provisions of that proposal encapsulated the agreement reached between net gear groups during the January 1994 meeting in Ketchikan. The regulation is summarized below:

“All sockeye salmon harvested by any seine boat the department identifies as fishing north of Point Marsden during any July fishing period when other nearby areas (i.e., Point Marsden to Point Hepburn, Whitestone Shore, or the Point Augusta Test Fishery) are open concurrently, will be counted against the 15,000 sockeye salmon quota for the Hawk Inlet fishery north of Point Marsden. During the openings, the department will utilize fishery overflights, on-the-grounds sampling, and interviews to estimate the sockeye salmon harvest north of Point Marsden.”

The purpose of this change was to provide the department with more flexibility to open areas adjacent to the Hawk Inlet shore fishery (e.g., south of Point Marsden, Point Augusta, and Whitestone Shore) when pink salmon run strength warrants. Based on good parent-year escapements to District 15, there may be seine opportunity along this shoreline in 2014 provided the above listed criteria indicate a harvestable surplus in Districts 11 and 15.

Outside Fishing Areas (Sections 13-A and 13-B)

Management of Sections 13-A and 13-B, along the outer coasts of Baranof and Chichagof Islands, is distinct from the management of the northern inside areas. Salmon returning to these areas enter directly from the ocean and do not pass through major inside migration corridors. In Section 13-A, parent-year pink salmon escapement indices were above management target ranges for the Lisianski and Portlock stock groups, and within the management target ranges for the Slocum Arm and Salisbury Sound stock groups. Openings can be expected to begin around the third week in July depending upon observed pink salmon abundance. In Section 13-B, parent-year pink salmon escapement indices for Sitka Sound and West Crawfish Inlet were above the management target range and within the management target range in Whale Bay. Seine fisheries can be expected in all of these areas depending on inseason observations. Purse seine openings could begin as early as mid-July.

Extended or continuous fishing opportunities may be provided on specific stock groups in Sections 13-A and 13-B if run size and fleet distribution allow for it. Consecutive 15-hour openings will also be considered as a management option to 39-hour or continuous openings at intermediate run sizes in order to ensure escapement needs will be met.

Summer chum salmon returns will be monitored to determine run strengths beginning in early July. If harvestable surpluses can be identified, seiners may expect portions of Sections 13-A and 13-B to be open by mid-July. Openings are possible in Whale Bay, West Crawfish Inlet, Slocum Arm, and Portlock Harbor.

Short purse seine openings to harvest sockeye salmon along the outer coast of Baranof Island may occur in early July to target fish returning to Necker Bay, and in early August to target returns to Redfish Bay. Openings will be dependent on inseason observations of run strength and a cautious approach will be used to ensure that escapement needs and subsistence fishery needs are met. Targeted sockeye salmon openings are also a possibility at Redoubt Bay between July 15 and August 31 provided that the inseason forecast, based on historic run timing and inseason enumeration of sockeye salmon through a weir operated by the United States Forest Service, indicates that an escapement greater than 40,000 will occur.

Fall Chum Salmon Fisheries

Portions of Northern Southeast Alaska support returns of fall-run chum salmon that are harvested by purse seine gear. Fishing opportunities are not expected in Port Camden due to continued low returns. Fishing in Security Bay usually occurs the first week in September if the observed run strength is good. Escapements in Security Bay were good in both the 2009 and 2010 parent years. Fishing opportunities in Excursion Inlet may occur in late August or early September dependent on run strength. Parent-year escapements to Excursion River were well below the SEG range in 2009 and within the range in 2010. Escapements in 2009 were 18% of average and the primary brood year of 2010 was 131% of the previous 10-year average. Southwest Admiralty streams do not have a good time series of survey data relating to fall chum salmon escapement. Therefore ADF&G may provide some short openings in this area to test the run strength and will monitor fall chum salmon escapements to these systems opportunistically. Targeted seine fisheries will occur if harvestable surpluses are identified. In Section 13-B, targeted fall chum salmon openings may occur in Nakwasina Sound and Katlian Bay, however opportunities are most often concurrent with pink salmon fisheries in Sitka Sound. Fall chum salmon fisheries will be managed based on observations of run strength in the bays beginning in mid-August and continuing through September.

Hidden Falls Terminal Hatchery Fishery

The Hidden Falls Hatchery, operated by the Northern Southeast Regional Aquaculture Association (NSRAA), expects a run of approximately 1,072,000 chum salmon in 2014. NSRAA needs 160,000 chum salmon for broodstock leaving 912,000 chum salmon available for common property harvests. NSRAA intends to use a tax assessment on the common property harvest of chum salmon to satisfy cost recovery needs as provided under AS 16.10.455. For the 2014 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 *Hidden Falls Hatchery Terminal Harvest Area Salmon Management Plan* (5 AAC 33.374(f)) stipulates that the department may, by emergency order, open a joint common property/cost recovery special assessment fishery for chum salmon as specified in AS 16.10.455 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. longitude to 57°01.00' N. latitude, 134°41.50' W. longitude 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 Subsections 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 deploy observers on the grounds to document participating vessels to further facilitate enforcement.

The first seine opening at Hidden Falls is scheduled for June 15. In the event that a large abundance of chum salmon develops early, the Hidden Falls THA may open prior to June 15. As usual, seiners are advised that openings at Hidden Falls during the 2014 season may be announced with a minimum 24-hour notice, if necessary, in order to maximize fish quality. Under the tax assessment plan, mid-week openings can be expected throughout the run unless closures are necessary to meet broodstock requirements.

The *Hidden Falls Hatchery Terminal Harvest Area Salmon Management Plan* (5 AAC 33.374) provides guidelines for allocation of hatchery produced chum and king salmon in the Hidden Falls THA. The management plan describes different management approaches through June 30 and beginning July 1. If it becomes necessary to close a purse seine fishery to chum salmon that is scheduled in this plan in June in order to achieve broodstock goals, then troll retention of chum salmon in the THA will be prohibited as long as at least seven days remain until July 1. Also, provided that some trollers are present, in order to allow increased troll access to king salmon, Kasnyku Bay will be closed to purse seining in June, west of a line from North Point to the westernmost tip of Round Island and north of the latitude of the westernmost tip of Round Island. Beginning July 1, areas within the THA may be closed to protect chum or king salmon broodstock, and trollers may only retain chum salmon in numbers not exceeding the total number of king salmon on board.

The Hidden Falls THA boundary definition has been 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 will also define the outer boundary as a straight line approximately two miles offshore of Baranof Island. The new definition will describe 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. During some years, the boundary of the Hidden Falls THA has been extended north to include Kelp Bay and the Catherine Island shoreline south of the Point Lull light when wild chum salmon escapements to Kelp Bay streams have been strong and there are indications of good pink salmon abundance in the Chatham Strait corridor. A contraction of the offshore boundary of the Hidden Falls THA to less than two miles off the Baranof Island shoreline may occur if pink salmon escapements to neighboring areas are lacking and are unlikely to meet escapement goals. Any boundary expansions or area contractions will be determined based on inseason observations of run strength.

Deep Inlet Terminal Hatchery Fishery

The terminal hatchery fishery at Deep Inlet will be managed jointly with NSRAA and according to regulatory management plans. The open seine and gillnet fishing times and any modifications of the terminal fishing area will be announced by ADF&G news releases prior to, and during the fishing season.

Terminal Area—Deep Inlet [5 AAC 33.376]

NSRAA expects a return of 1,170,000 chum salmon to the Deep Inlet remote release site and the Medvejie Hatchery in 2014. Approximately 70,000 will be needed for broodstock fish allowing for a common property harvest of approximately 1,100,000 chum salmon by purse seine, drift gillnet, and troll gear. No cost recovery harvest is planned in 2014 though chum salmon surplus to broodstock needs at Medvejie Hatchery in Bear Cove will be harvested for cost recovery. The majority of the common property harvest can be expected to occur in the Deep Inlet THA by drift gillnet and purse seine gear, but significant harvest occurs outside the THA in traditional troll and purse seine fisheries as well.

The Deep Inlet THA fishery will be managed jointly with NSRAA and in accordance with the *Deep Inlet Terminal Harvest Area Salmon Management Plan* (5 AAC 33.376). The plan provides for the distribution of the harvest of hatchery-produced salmon between the purse seine and drift gillnet fleets. In 2012, the BOF adopted regulations that maintain the 1:1 ratio of gillnet fishing time to purse seine fishing time beginning the third Sunday in June. The ratio of gillnet fishing time to purse seine fishing time during king salmon management prior to the third Sunday in June will remain 2:1.

The NSRAA board has developed the following schedule for the season. Beginning on June 1 and continuing through June 21, the schedule will include four days of gillnet and two days of seine fishing per week to harvest returning hatchery king salmon. The BOF adopted a regulation closing a portion of the Deep Inlet THA west of 135°20.75' W. longitude to net gear beginning with the first opening of the season through the third Saturday in June to provide access to this area by troll gear. Beginning June 22, the THA will be opened for three days of seine and three days of gillnet fishing per week and will remain on this schedule through July 26. Beginning July 27, seining will be open for 22.5 continuous hours beginning at 5:00 a.m. Sunday and Thursday of each week, and gillnetting will occur for the normal 15-hour periods on Monday, Tuesday, and Saturday of each week. The NSRAA Board provided this schedule which maintains the mandatory 1:1 time ratio between seine and gillnet but has the desired outcome of allowing gillnet gear to have one day per week (Saturdays) when no seine fisheries have been opened the previous day. This schedule will remain in effect through the remainder of the season except that the openings will start at 6:00 a.m. beginning August 17. No closures of the Deep Inlet THA are anticipated and closures will only occur, if necessary, to meet broodstock requirements. If a closure becomes necessary, NSRAA will attempt to schedule the closure after a gillnet day and reopen with a seine day after providing one day of trolling, giving 24-hour notice prior the troll opening.

The following rotational fishing schedule will be in effect for the 2014 season:

June 1–June 21:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	Gillnet	Gillnet	Seine	Gillnet	Gillnet	Troll

From June 22-July 26:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	Gillnet	Gillnet	Gillnet	Seine	Seine	Troll

From July 27 until the end of the season:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine (22.5 hrs)	Gillnet	Gillnet	Troll	Seine (22.5 hrs)	Troll	Gillnet

A detailed initial schedule for common property harvest in the THA is available in a news release issued March 12, 2014. When changes are necessary the revised schedule will be issued in a subsequent news release.

The terminal harvest area during the 2014 season will be as follows:

Deep Inlet THA: Deep Inlet, Aleutkina Bay, and contiguous waters south of a line from a point west of Pirates Cove at 56°59.35' N. latitude, 135°22.63' W. longitude, to the westernmost tip of Long Island to the easternmost tip of Long Island to the westernmost tip of Emgeten Island to the westernmost tip of Error Island to the westernmost tip of Berry Island to the southernmost tip of Berry Island to the westernmost tip of the southernmost island in the Kutchuma Island group to the easternmost tip of the southernmost island in the Kutchuma Island group to the westernmost tip of an unnamed island at 57°00.30' N. latitude, 135°17.67' W. longitude, to a point on the southern side of the unnamed island at 57°00.08' N. latitude, 135°16.78' W. longitude, and then to a point on the Baranof Island Shore at 56°59.93' N. latitude, 135°16.53' W. longitude with the following restrictions:

Sandy Cove: will be closed.

During the 2014 season, the boundaries of the Deep Inlet THA may be changed by NSRAA and ADF&G to help resolve conflicts between fishermen and local private landowners in the area if they occur. Conflicts can be avoided by reducing boat wakes in areas near private docks, by reducing excessive noise and lights prior to openings, and by anchoring well away from private residences.

In order to promote full utilization of salmon, to prevent waste of salmon, to determine harvest patterns of incidentally harvested coho and sockeye salmon, and to allow full and accurate reporting of returns, the Deep Inlet THA fishery will be managed in 2014 by emergency order under authority of 5 AAC 39.265 *Full Retention and Utilization of Salmon*. This requires that all

salmon harvested in net fisheries are retained, utilized, and reported on fish tickets whether they are sold or retained for personal use.

In early September, the Deep Inlet THA boundaries may be adjusted by ADF&G to reduce harvest of wild coho salmon returning to Salmon Lake or hatchery coho salmon returning to Medvejie Hatchery needed for broodstock. THA boundary adjustments to protect coho salmon will be based on historical run timing and inseason observations of abundance. Since voluntary compliance with reporting of coho salmon in the Deep Inlet THA fishery has in the past been poor and the department needs detailed information on coho and sockeye salmon harvest patterns, personnel from ADF&G or Alaska Wildlife Troopers may board some vessels and conduct hold inspections to ensure compliance.

Gunnuk Creek Hatchery Returns

Chum salmon returns to Gunnuk Creek Hatchery at Kake and Southeast Cove on northeast Kuiu Island in Keku Strait have been generally poor in recent years. These returns occur primarily in July and are taken incidentally in seine fisheries in Chatham Strait and western Frederick Sound during that time period. Forecasts of hatchery fish returning to Southeast Cove and Gunnuk Creek have generally been unreliable and runs have been much lower than forecasted. The summer chum forecast for Southeast Cove is 240,000 fish and for Gunnuk Creek is 110,000. In addition, 309,500 pink salmon and 33,500 coho salmon are forecasted to return to Gunnuk Creek. The Gunnuk Creek Hatchery is not expected to operate in 2014. Therefore, 100% of the hatchery produced salmon returning to Southeast Cove and Gunnuk Creek will be harvested for cost recovery in 2014. NSRAA will be assuming responsibilities for releasing chum salmon at Southeast Cove. Currently there are no plans for future salmon releases at Gunnuk Creek.

Amalga Harbor Special Harvest Area Experimental Fishery

In order to increase the common property share of enhanced chum production, Douglas Island Pink and Chum, Inc. (DIPAC) will be continuing with experimental common property purse seine fisheries in the Amalga SHA in 2014. Openings may occur in Section 11-A, and will be limited to a portion of the Amalga Harbor SHA, Subdistrict 111-55. These fisheries may occur in July, will only be on Thursdays, and will be limited to 6 hours (9:00 a.m.–3:00 p.m.). Decisions about these openings will be based on run strength of enhanced chum, progress toward cost recovery goals, expected effort levels, and considerations for nontarget species. If there are conservation concerns for nontarget species in nearby systems, the open area or time may be reduced. Details of the open area and times will be included in the normal purse seine news releases at the appropriate time.

Table 4.—Expected 2014 returns to Northern Southeast Alaska area enhancement projects by hatchery organization and release location.

Species	Release Location	Common Property Harvest	Cost Recovery	Broodstock	Total Return
NSRAA					
Chum	Medvejie/Deep Inlet	1,100,000	0	70,000	1,170,000
Chum	Hidden Falls	912,000	0	160,000	1,072,000
King	Medvejie/Deep Inlet	24,400	7,800	4,000	36,200
King	Hidden Falls	4,100	0	2,000	6,100
Coho	Hidden Falls	74,600	103,400	10,000	188,000
Coho	Deer Lake (Mist Cove)	80,300	65,700	NA	146,000
Coho	Deep Inlet	8,500	1,500	NA	10,000
Armstrong Keta, Inc.					
Pink	Port Armstrong	267,808	220,846	120,000	608,654
Chum	Port Armstrong	69,673	238,690	40,000	348,363
Coho	Port Armstrong	48,645	45,645	3,000	97,290
King	Port Armstrong	1,022	1,786	600	3,480
Sitka Sound Science Center					
Pink	Crescent Bay	36,266	19,034	5,143	60,443
Chum	Crescent Bay	8,872	2,784	3,130	14,786
Chum	Deep Inlet	95,010	63,340	0	158,350
Coho	Crescent Bay	12,541	8,147	214	20,902
Gunnuk Creek Hatchery					
Chum	SE Cove	48,000	192,000	0	240,000
Chum	Kake	22,000	88,000	0	110,000
Pink	Kake	62,000	247,500	0	309,500
Coho	Kake	16,750	16,750	0	33,500
DIPAC					
Chum	Amalga Harbor	1,259,000	673,000	0	1,932,000
Chum	Boat Harbor	537,000	0	0	537,000
Chum	Gastineau Channel	341,000	286,000	140,000	767,000
Chum	Limestone Inlet	102,000	0	0	102,000

(Note: Common property harvest estimates of king and coho salmon include sport harvest).

LIST OF MANAGEMENT CONTACTS

The following ADF&G Division of Commercial Fisheries management staff may be contacted regarding this plan:

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Dave Harris and Scott Forbes Management Biologists 1008 F Street Juneau, AK 99801 (907) 465-4250	Troy Thynes and Kevin Clark Management Biologist P.O. Box 667 Petersburg, AK 99833 (907) 772-3801
Scott Walker, Justin Breese, and Bo Meredith Management Biologists 2030 Sea Level Drive, Suite 205 Ketchikan, AK 99901 (907) 225-5195	Thomas Kowalske Management Biologist Kadin Building, 215 Front Street Wrangell, AK 99929 (907) 874-3822
Dave Gordon and Eric Coonradt Management Biologists 304 Lake Street, Room 103 Sitka, AK 99835 (907) 747-6688	Jim Craig Publications and Information 802 3 rd Street Douglas, AK 99824 (907) 465-4236

The following is a list of telephone numbers that may be called during the fishing season to obtain recorded announcements concerning areas open to purse seine fishing:

Ketchikan	(907) 225-6870
Petersburg	(907) 772-3700
Sitka	(907) 747-1009
Juneau	(907) 465-8905

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- Eggers, D. M., and S. C. Heinl. 2008. Chum salmon stock status and escapement goals in Southeast Alaska. Alaska Department of Fish and Game, Special Publication No. 08-19, Anchorage.
- Eggers, D. M., J. H. Clark, R. L. Bachman, and S. C. Heinl. 2008. Sockeye salmon stock status and escapement goals in Southeast Alaska. Alaska Department of Fish and Game, Special Publication No. 08-17, Anchorage.
- Piston, A. W., and S. C. Heinl. 2011. Chum salmon stock status and escapement goals in Southeast Alaska. Alaska Department of Fish and Game, Special Publication No.11-21, Anchorage.
- Wertheimer, A. C., J. A. Orsi, E. A. Fergusson, and M. V. Sturdevant. 2011. Forecasting pink salmon harvest in Southeast Alaska from juvenile salmon abundance and associated environmental parameters: 2010 returns and 2011 forecast (NPAFC Doc. 1343) Auke Bay Lab., Alaska Fish. Sci. Cen., Nat. Mar. Fish. Serv., NOAA, 17109 Point Lena Loop Road, Juneau, AK 99801-8626, USA, 20 p.; http://www.npacf.org/new/pub_documents.html.es