2009 Southeast Alaska Purse Seine Fishery Management Plan

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and

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Alaska Department of Fish and Game



Division of Commercial Fisheries

Symbols and Abbreviations

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

Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mideye-to-fork	MEF
gram	g	all commonly accepted		mideye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs.,	standard length	SL
kilogram	kg		AM, PM, etc.	total length	TL
kilometer	km	all commonly accepted		5	
liter	L	professional titles	e.g., Dr., Ph.D.,	Mathematics, statistics	
meter	m	-	R.N., etc.	all standard mathematical	
milliliter	mL	at	(a)	signs, symbols and	
millimeter	mm	compass directions:	0	abbreviations	
		east	Е	alternate hypothesis	H _A
Weights and measures (English)		north	Ν	base of natural logarithm	e
cubic feet per second	ft ³ /s	south	S	catch per unit effort	CPUE
foot	ft	west	W	coefficient of variation	CV
gallon	gal	copyright	©	common test statistics	(F, t, χ^2 , etc.)
inch	in	corporate suffixes:		confidence interval	CI
mile	mi	Company	Co.	correlation coefficient	01
nautical mile	nmi	Corporation	Corp.	(multiple)	R
ounce	oz	Incorporated	Inc.	correlation coefficient	
pound	lb	Limited	Ltd.	(simple)	r
quart	qt	District of Columbia	D.C.	covariance	cov
yard	yd	et alii (and others)	et al.	degree (angular)	0
Juiu	Ju	et cetera (and so forth)	etc.	degrees of freedom	df
Time and temperature		exempli gratia		expected value	Ē
day	d	(for example)	e.g.	greater than	>
degrees Celsius	°C	Federal Information	-	greater than or equal to	≥
degrees Fahrenheit	°F	Code	FIC	harvest per unit effort	HPUE
degrees kelvin	K	id est (that is)	i.e.	less than	<
hour	h	latitude or longitude	lat. or long.	less than or equal to	\leq
minute	min	monetary symbols		logarithm (natural)	ln
second	S	(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log ₂ etc.
Physics and chemistry		figures): first three		minute (angular)	,
all atomic symbols		letters	Jan,,Dec	not significant	NS
alternating current	AC	registered trademark	®	null hypothesis	Ho
ampere	А	trademark	тм	percent	%
calorie	cal	United States		probability	Р
direct current	DC	(adjective)	U.S.	probability of a type I error	
hertz	Hz	United States of		(rejection of the null	
horsepower	hp	America (noun)	USA	hypothesis when true)	α
hydrogen ion activity	pH	U.S.C.	United States	probability of a type II error	
(negative log of)			Code	(acceptance of the null	
parts per million	ppm	U.S. state	use two-letter	hypothesis when false)	β
parts per thousand	ppt,		abbreviations	second (angular)	"
	‰		(e.g., AK, WA)	standard deviation	SD
volts	V			standard error	SE
watts	W			variance	
				population	Var
				sample	var

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2009 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 harvest of 41 million pink salmon for 2009. 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 2009 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, Chinook salmon

INTRODUCTION

This plan describes how the Southeast Alaska salmon purse seine fishery will be managed during the 2009 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) 2009 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 1998 through 2007 the species composition of the purse seine harvest has included 87% pink salmon, 11% chum salmon, 1.4% sockeye salmon *O. nerka*, and 0.7% coho salmon *O. kisutch*. Chinook 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.

NEW REGULATIONS

The Alaska Board of Fisheries met February 17–26 in Sitka and adopted several new regulations which affect the Southeast Alaska purse seine fishery. These regulations will become effective on May 31, 2009–in time for all but the early portion of terminal area fishery seasons and prior to the general purse seine fishery opening on June 21, 2009. Exact regulatory language has been finalized and interested persons can pick up copies showing new regulatory language at area offices throughout the Southeast region. This section is intended to briefly summarize the changes made. In addition to new regulations, the Board identified McDonald Lake sockeye salmon as a stock of management concern and adopted the McDonald Lake Sockeye Salmon Action Plan, 2009, (Bergman, W.R., et al 2009).

GEAR AND MANAGEMENT

5 AAC 39.222 POLICY FOR THE MANAGEMENT OF SUSTAINABLE SALMON FISHERIES was applied and McDonald Lake sockeye salmon have been identified by the Board as a stock of management concern. Based on department recommendations the Board of Fisheries adopted the McDonald Lake Sockeye Salmon Action Plan, 2009. Management action to reduce the harvest of these fish in the District 6 drift gillnet fishery will limit openings to 2 days during statistical weeks 29, 30, and 31. Purse seine fisheries will be also restricted in Districts 1, 2, 5, 6, and 7. In addition to these fishery management actions, restrictions are also in place in the Yes Bay personal use fishery and the District 6 gillnet fishery. Research programs are being implemented to evaluate returns and to further refine future management actions to rebuild the run.

5 AAC 33.332 SEINE SPECIFICATIONS AND OPERATION was amended, with the addition of a new subsection, (i) to allow a vessel to have both troll and purse seine gear aboard at the same time. This regulation will allow fishing of multiple gear types from a vessel more easily without complete removal of either gear type between fisheries, provided specific provisions are followed. One or more persons aboard must have current CFEC permits for each gear type on board, and make those permits readily available to the department employees or peace officers. Each permit holder must ensure that fish harvested by either gear type must be offloaded and recorded on fish tickets before operating another gear type. Purse seines must be removed from the vessel or stowed below deck before and during operation of troll gear or when troll caught fish are on board the vessel. Trolling cannon balls or other weights must be removed from trolling wires and stored below deck before or during operation of gillnet gear and when seine caught fish are on board the vessel.

NEETS BAY, DEEP INLET, AND ANITA BAY TERMINAL HARVEST AREAS

Regulations for Neets Bay Hatchery, Deep Inlet THA, and Anita Bay THA were modified based on the 5 AAC 33.364 SOUTHEASTERN ALASKA AREA ENHANCED SALMON ALLOCATION MANAGEMENT PLAN and the joint Regional Planning Team consensus on how enhanced salmon allocation issues could be addressed.

5 AAC 33.370 DISTRICT 1: NEETS BAY HATCHERY SALMON MANAGEMENT PLAN (b) (2) (B) was amended so that after June 20 the time ratio for gillnet openings to seine openings is one to one.

5 AAC 33.376 DISTRICT 13: DEEP INLET TERMINAL HARVEST AREA SALMON MANAGEMENT PLAN (b) (1) (B) was amended so the time ratio for gillnet openings to seine

openings is two to one; except that beginning with the first emergency order of the 2009 season through the last emergency order of the 2011 season, the time ratio for gillnet openings to seine openings is one to one after the third Sunday in June.

5 AAC 33.383 DISTRICT 7: ANITA BAY TERMINAL HARVEST AREA SALMON MANAGEMENT PLAN (d) (3) was amended so that beginning with the first emergency order of the 2009 season through the last emergency order of the 2011 season the time ratio for gillnet openings to seine openings is one to one.

OTHER TERMINAL HARVEST AREAS

5 AAC 33.372 DISTRICT 1: NAKAT INLET TERMINAL HARVEST AREA SALMON MANAGEMENT PLAN (a) was amended to not include purse seine gear in the harvest distribution between fleets, (b) was amended to specify the THA, and (f) and (g) were repealed.

5 AAC 33.377 DISTRICT 2: KENDRICK BAY TERMINAL HARVEST AREA SALMON MANAGEMENT PLAN (b) was amended so that the Kendrick Bay THA (west of 131° 59' W. long.) is open from June 15 through September 30, unless closed earlier by emergency order. (The department will no longer need to write E.O.s to open and close this area each week).

2009 PINK SALMON FORECAST

The Southeast Alaska pink salmon harvest in 2009 is predicted to be in the *Strong* category, with a point estimate of **41 million fish (80% confidence interval: 30–53 million fish).** The categorical ranges of pink salmon harvest in Southeast Alaska were formulated from the 20^{th} , 40^{th} , 60^{th} , and 80^{th} percentiles of historical harvest from 1960 to 2008:

Category	Range (millions)	Percentile	
Disaster	Less than 11	Less than 20th	
Weak	11 to 16	21st to 40th	
Average	16 to 28	41st to 60th	
Strong	28 to 50	61st to 80th	
Excellent	Greater than 50	Greater than 80th	

The 2009 forecast was produced in two steps: 1) a forecast of the trend in the harvest using a time-series method called exponential smoothing, and 2) the forecast trend adjusted using 2008 pink salmon fry abundance data (Figure 1). Fry 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 (Orsi et al. 2006¹). This is the 3rd year that the ADF&G forecast was adjusted using these data.

The 2009 forecast of 41 million pink salmon is slightly below the recent 10-year average harvest of 44 million pink salmon. The parent-year escapement in 2007 appears to have been ample to provide a strong total return in 2009 if marine conditions were favorable for pink salmon (Table 1). The brood-year escapement indices for the Southern Southeast sub-region and the Northern Southeast Outside sub-region exceeded the biological escapement goal ranges. In contrast, however, while the escapement index for the Northern Southeast Inside sub-region fell within the escapement goal range, it was the smallest odd-year index since the mid-1990s. In addition, the NOAA Auke Bay Lab's 2008 peak June–July juvenile pink salmon CPUE statistic from upper Chatham and Icy straits in northern Southeast Alaska was just below the average of the 11 previous years that NOAA has collected that information (and the smallest yet for an odd year).

The department will manage the commercial purse seine fisheries *inseason* based on the strength of salmon runs. Aerial escapement surveys and fishery performance data will continue, as always, to be essential in making inseason management decisions.

A complete description of the Southeast Alaska pink salmon harvest forecast can be found online at: www.cf.adfg.state.ak.us/region1/pdfs/salmon/2009 se pink salmon harvest forecast.pdf.

The statewide harvest forecast can be found online at:

www.sf.adfg.state.ak.us/FedAidPDFs/sp09-07.pdf.

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



Figure 1.—Annual harvest of pink salmon in Southeast Alaska, 1998–2008, compared to the exponential smoothed hindcast predictions of the harvest adjusted using NOAA Auke Bay Laboratory pink salmon fry data.

Note: The 2007 ADF&G harvest forecast of 47 million pink salmon was very close to the actual harvest of 45 million. The 2008 forecast of 19 million pink salmon was also very close to the actual harvest of 16 million. The 2009 forecast is for a harvest of 41 million pink salmon.

Table 1.–2007, parent-year, 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.

			Lower	Upper
Subregion	District	2007 Index	Management Target	Management Target
Southern	101	3.98	1.02	2.71
Southern	102	1.42	0.29	0.77
Southern	103	3.48	0.95	2.54
Southern	105	0.45	0.25	0.66
Southern	106	0.54	0.21	0.57
Southern	107	0.67	0.26	0.69
Southern	108	0.05	0.02	0.06
Northern Inside	109	1.04	0.63	1.5
Northern Inside	110	0.84	0.59	1.41
Northern Inside	111	0.44	0.27	0.65
Northern Inside	112	1.20	0.53	1.26
Northern Inside	Inside 113	0.79	0.32	0.76
Northern Inside	114	0.39	0.15	0.35
Northern Inside	115	0.06	0.03	0.07
Northern Outside	Outside 113	2.31	0.75	2.5
Biological Escapement Goals		Total	Lower	Upper
by Subregion		2007 Index	Escapement Goal	Escapement Goal
Southern		10.59	3.00	8.00
Northern Inside		4.74	2.50	6.00
Northern Outside		2.31	0.75	2.50

GENERAL MANAGEMENT GOALS

The primary management goals for the 2009 Southeast Alaska purse seine fishery are as follows:

- 1. Obtain overall pink salmon spawning biological escapement goals 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 interceptions 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 Chinook salmon (28 inches or larger) no more than 4.3% of the all-gear Chinook salmon catch ceiling established for the 2008/2009 season. Based on the 2009 Chinook salmon preseason abundance index of 1.33, the purse seine fishery allocation for the season is 9,408 Chinook 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 Purse Seine Management Plan (5 AAC 33.366).

REGIONAL MANAGEMENT PLAN

EXPECTED FISHING REGIME

ADF&G will manage the 2009 purse seine fishery inseason based on aerial survey observations and fishery performance data. Initial 15-hour openings will occur on Sunday, June 21 at Hidden Falls, Point Augusta, Tenakee Inlet, and District 2 near Kendrick Bay. These areas along with portions of District 10 and Section 13-C will likely reopen on Sunday, June 28. Other areas around the region will open as described in this plan, subject to inseason information. In consideration of the ADF&G pink salmon harvest forecast of 41 million, with a range of 30–53 million, and as supported by the NOAA harvest forecast of 44 million, with a range of 36–52 million, the department will carefully monitor inseason information, and will manage to ensure that escapement goals are met, that district and stock group escapement targets are obtained, and that escapements are well distributed.

During 2007, the pink salmon parent year, the common property purse seine harvest of 42.1 million pink salmon was about average, but the lowest odd-year harvest since 1997. Escapements in 2007 were within or above biological goals for the three sub-regions, and escapement management targets were met for all 46 pink salmon stock groups. Recent pink

salmon harvests in 2006 and 2008 were both well below average and escapements in some areas have been below goal and variable. Even if returns in 2009 are similar to 2007 a cautious approach is warranted to ensure escapement goals are met and well-distributed. However, the department is also 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, to a 5-day fishing cycle as run strength allows.

In November of 2007 the Southeast Alaska Purse Seine Task Force met and consensus was reached to re-define plans for peak-season expanded fishing regimes. The purpose of expanded fishing remains to: 1) supply processing plants with more consistent deliveries of fresh-caught fish to maximize flesh quality, 2) increase roe recovery and, therefore, 3) maximize the value of final products. Following is a summary of the main consensus points reached:

- It is generally recognized that processing capacity and fishing effort have increased since 4:1 was initially implemented in 2002.
- To fully harvest surplus returns at the peak of the season during large runs there is a need for an accelerated fishing schedule.
- Following early season management, a 2-days-on/ 2-days-off schedule is anticipated until the harvest is expected to reach 38 million or larger, then a 5-day fishing rotation would be implemented.
- A 5-day rotation is based on fewer than 260 boats fishing.
- 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 the management decisions the ADF&G makes as the season progresses. Effort levels in 2008 decreased from 242 permits that fished in 2007 to 213 permits that fished in 2008. The total number of permits issued in 2008 was 380, down from 2007 due to a buy-back program. 167 permits that were eligible to fish in 2008 did not fish. The 2008 effort decreased to 74% of the recent 10-year average of effort of 287 permits for the purse seine fishery.

DAILY START TIMES

For the 2009 season the fishery opening and closing times will be as follows:

- 1. From the start of the seine season (June 21) 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. A suggestion was made at the December 2, 2008 Purse Seine Task Force

meeting to reconsider the approximate date for changing the start time to 6:00 a.m., but this issue was not resolved. As always, any change will be announced by news release.

3. From the start of the chum salmon season until the season closes: 7:00 a.m. to 7:00 p.m.

REGULATION MARKERS

At the November 2006 Purse Seine Task Force meeting, the department was asked to clarify the definition of closed waters near a salmon stream. Fish and Game Regulation 5AAC 33.350 lists all closed waters in Southeast Alaska. Regulation 5AAC 39.290(a) prohibits fishing within 500 vards of any salmon stream or river or any stream or river bed or channel at all stages of the tide. This means that fishing is prohibited within 500 yards of where the stream channel exists including where it ends at low tide. 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 low tide 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 low tide 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 low tide 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 low tide. 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

The department 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 of shorter duration is needed to prevent the loss of a fishery. 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 Chinook 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 2009 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.

MATURE 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 directed at harvesting the roe or ikura of the pink salmon, as long as the salmon harvested were utilized. Funding to support additional costs to the department were generated by proceeds from test fishing. Additional terminal area fisheries took place in 2003, 2005, and 2007. Harvests from the terminal area salmon roe fisheries has ranged from 70,000 to 2,400,000 pounds per year.

No terminal area pink salmon fisheries have occurred during the 2002, 2004, 2006 or 2008 evenyear seasons. However, if areas are identified where escapement needs are exceeded and ikura fisheries would be appropriate, the department will announce those opportunities by news release.

ADF&G will continue to look for opportunities to continue the terminal area pink salmon fisheries in 2009 if there is an expressed interest and a market. A key requirement for mature salmon fisheries is that such fisheries must adhere with provisions of 5AAC 93.310 WASTE OF SALMON, which provides that salmon are not wasted, certain disposals must be authorized, and logbooks may be required. The department will continue to open fisheries so all of the fish can be harvested in the best possible quality in the existing traditional fisheries. However, if certain systems end up with significant numbers of pink salmon that are in excess to all expected spawning needs, openings to target mature fish may occur. It is anticipated that this type of fishery, if it occurs, would primarily be in late August and early September. Since this is a relatively new method of management, it is anticipated that several types of openings may occur to determine what works best for the industry while insuring needed escapement is not jeopardized. Openings of this nature will be announced via standard news releases and will be clearly differentiated from traditional openings. If these fisheries are to continue, test fisheries may be required to cover additional aerial surveys and personnel costs. Before such test fisheries are allowed, the department will also need to evaluate if any planned test fisheries can be accomplished within the Region 1 authorized test fishing receipt authority without compromising existing programs or other fisheries.

CHINOOK 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 Chinook salmon catch ceiling determined under the terms of the Pacific Salmon Treaty [5AAC 29.060 (b)(1)]. Prior to 1997, the purse seine fishery was limited to a fixed quota of 11,400 Chinook salmon (not including Alaska hatchery-produced fish). The purpose of the 1997 regulation was to make management of the purse seine harvest of Chinook salmon more consistent with the abundance-based management approach. The Chinook salmon all-gear catch ceiling is driven by the preseason abundance index that is determined by the Chinook Technical Committee. For 2009, the abundance index is 1.33 and the corresponding purse seine Chinook salmon allocation will be 9,408 fish.

The Alaska Board of Fisheries (BOF) has adopted size limits [5AAC 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 Chinook salmon are as follows:

- 1. Chinook 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 Chinook salmon harvest quota.
- 2. Chinook salmon greater than 21 and less than 28 inches in length may be harvested by purse seine fishers but not sold.
- 3. Purse seine fishers may possess and sell Chinook salmon that are less than 21 inches (approximately 5 pounds or less).

CHINOOK SALMON IMPLEMENTATION PLAN

Non-retention of 28-inch and larger Chinook salmon has been the primary management measure for maintaining the catch limit. Because the Chinook salmon seine allocation for 2009 is only 9,408 fish, retention of Chinook salmon will not be permitted from the beginning of the season until the time period when the catch rate for other species is high. If the quota is reached, non-retention regulations will also be implemented by emergency order late in the season.

There may be specific terminal areas in which all Chinook salmon may be, or must be, retained. ADF&G intends to implement full retention (5AAC 39.265) from the beginning of the season for net fisheries in the Deep Inlet THA. Due to high expectation of enhanced Chinook 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 releases.

During periods of non-retention, purse seine fishers are encouraged to avoid fishing in areas with high concentrations of Chinook salmon and to quickly release those caught in a manner that minimizes mortality. To ensure small (less than 21 inches) Chinook salmon are not counted against the quota, ADF&G needs the cooperation of the fishing industry. To accomplish this, all Chinook 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. Chinook 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.

SOUTHERN DISTRICTS PURSE SEINE FISHERY

2009 PINK SALMON RETURNS

The Southern Southeast sub-region includes all of the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The escapement index value of 10.6 million in 2007 exceeded the escapement goal range of 3.0 to 8.0 million index fish. Escapement indices were 23% above the recent 10-year average in the Southern Southeast sub-region, and were strongest to the Ketchikan management area in Districts 1–3 (Table 1).

MANAGEMENT CONCERNS

Implementation of the 5 day rotation schedule fishing regime strategy that started in 2002 might also be used in 2009 due to the potential of a strong return of pink salmon. However, uncertainties about fleet size and distribution and the department's reaction to those can only be

answered inseason. ADF&G and the fishing industry will have to be flexible and be able to react quickly inseason to changes from historical fishing patterns. Above all, meeting escapement goals will continue to be the number-one 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

In 2009, there will be continued restrictions to the Southern Southeast purse seine, gillnet and personal use fisheries in an effort to meet the McDonald Lake sockeye salmon escapement goal. The escapement goal was recently revised to 55,000–120,000 sockeye. Sockeye escapements have been below this new goal in four out of the last five years and are not anticipated to meet the escapement goal in upcoming years. As result, the McDonald Lake sockeye were designated a management stock of concern by the Board of Fisheries during the February 2009 Board of Fish Meeting.

Conservation measures were taken in the District 6 seine and gillnet fisheries in 2005–2008. Restrictions were also in place for the District 1 seine fishery in 2007 and 2008. In addition to these measures for sockeye salmon conservation, overall purse seine fishing time in Southern Southeast was very limited during the 2006 season because of the poor run of pink salmon. An action plan was developed that includes fisheries management actions and improved stock assessment measures for the intent of rebuilding the McDonald Lake sockeye run. The department will follow the management actions defined in the plan. Specific management actions for the seine fishery will be similar to actions taken during the 2008 fishery in Districts 1, 2, 5, 6 and 7.

Most of the harvest of McDonald Lake sockeye salmon by the purse seine fleet probably occurs along the Gravina Island shoreline. In order to pass McDonald Lake sockeye salmon, the Gravina Island shoreline will 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, will be limited in 2009, and the Yes Bay terminal area will again be closed. The District 6 gillnet fishery, the major harvest area of McDonald Lake sockeye salmon, will be limited to a maximum fishing time of two days a week for three weeks during statistical weeks 29, 30, and 31. The District 5, 6, and 7 seine fisheries will have reduced fishing time during these key weeks of the McDonald Lake sockeye salmon run. Finally, the McDonald Lake Personal Use fishery harvest limits, and seasons were reduced beginning in 2007 from previous years.

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. In addition, the department will conduct genetic sampling of the sockeye salmon harvested in the fisheries that occur in Clarence Strait and Sumner Strait. This sampling will update information about the time and area distribution of McDonald Lake sockeye salmon in those fisheries.

Hugh Smith Lake Sockeye Salmon

During the 2006 meeting in Ketchikan, the BOF de-listed the Hugh Smith Lake sockeye stock as a stock of concern at the recommendation of ADF&G. This means the Hugh Smith Lake Sockeye Action Plan is no longer in effect. However, ADF&G will continue to closely monitor the system and, if escapement levels are below that needed to reach the lower end of the escapement goal of 8,000 the department intends to take the following actions:

- 1. In Statistical Weeks 29 and 30 the department will close that portion of the District 1 purse seine fishery east of a line from Quadra Point to Slate Island Light to Black Rock Light to a point on the mainland shore at 55°01.40' N. latitude, 131°00.20' W. longitude.
- 2. In Statistical Weeks 31, 32, and 33 the department will close that portion of the District 1 purse seine fishery east of a line from Foggy Point Light to Black Rock Light to the southernmost tip of Black Island and close the northern portion of the Section 1-B drift gillnet fishery to one nautical mile south of the latitude of Foggy Point Light.

MANAGEMENT PLAN

The Southern Southeast Alaska area 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 catch 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 catch 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 catches 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 catch 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. Catches 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 the past three years the bilateral NBTC has worked to finalize the total run reconstructions for the Nass and Skeena Rivers. In January 2009 the bilateral Northern Panel accepted the work of the Technical Committee for the run reconstructions of the Nass and Skeena Rivers for the 2007 season. Information in Table 2 reflects the performance of the District 4 fishery for 1999

through 2007, preliminary numbers for the 2008 season and a 2009 forecast. The final bi-lateral stock identification work will not be completed until February 2010.

The Canadian Department of Fisheries and Oceans (DFO) has a preseason expectation of approximately 2,815,000 sockeye salmon to the Nass/Skeena Rivers in 2009 (Table 2). If the 2009 forecast is accurate and escapement goals are achieved, then the AAH for District 4 will be approximately 42,000 Nass/Skeena sockeye salmon (Table 2).

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	1,777,048	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	-18,181
2002	2,776,502	1,051,533	1,725,169	42,267	26,554	18,627	-23,640	-41,820
2003	3,313,785	1,100,000	2,213,785	54,238	84,742	44,258	-9,980	-51,800
2004	2,621,000	1,100,000	1,521,000	37,265	30,758	19,233	-18,032	-69,831
2005	1,770,494	1,100,000	670,494	16,427	35,690	19,442	3,015	-66,816
2006	3,650,525	1,100,000	1,850,000	62,488	89,615	68,940	6,452	-60,364
2007	2,752,074	1,100,000	1,327,349	40,476	112,135	75,615	35,139	-25,224
2008 ¹	2,417,209	1,100,000	1,317,209	32,272	6,262	4,388	-27,888	-53,113
2009^{2}	2,815,000	1,100,000	1,715,000	42,018				

Table 2.–Sockeye salmon allocations for the District 4 purse seine fishery based on Nass and Skeena Rivers allocation calculations, 1999 to 2008.

Note: Underages are shown as negative numbers in this table.

¹Data for 2008 is preliminary

²2009 is based on forecasted returns.

In 2009, the District 4 purse seine fishery will start on Sunday, July 5 by regulation. District 4 will be managed under the Pacific Salmon Treaty annex through July 25, 2009 (Statistical weeks 28, 29, and 30). It is anticipated that the initial opening on July 5 will be 10 to 12 hours in length. The duration of openings following the initial opening will be based on sockeye abundance and pink salmon run strength. The amount of effort in the district will also be closely monitored to stay within Pacific Salmon Treaty sockeye allocations. The department will communicate with the 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 26, 2009 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 return of pink salmon after Statistical Week 30, it is ADF&G's intent to manage the district similarly in terms of boat-days of overall effort to that 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 past 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 2009.

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 on Sunday, July 5 (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 portions of Section 7-A (Anan).

Fishing time will likely begin with a series of 15-hour openings. If run strengths are strong enough to warrant additional fishing time, the fisheries will go from 15-hour to 39-hour openings to 2-on/2-off or more continuous openings. 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 escapement of salmon into the back Behm Canal systems.

In District 2, ADF&G will open a portion of the lower district outside of the Kendrick Bay THA on Sunday, June 21. This will be done 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 additional fishing area is timed to occur prior to the return of pink salmon to the area.

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 is 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 and back 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 will also open. Under the fishing periods expected during August it is possible that portions of District 3 may have longer fishing periods than inside districts if there is less effort in some of the more remote areas of the district. Alternately, if there is increased effort and catches and aerial surveys indicate poor run strength fishing time and area may be reduced.

Districts 5, 6, and 7

Parent-year pink salmon escapements were within the management targets in Districts 5, 6 and 7. In District 5 (Sumner Strait) limited area seine openings can be expected to occur during the last week of July or the first week of August. As specified by the McDonald Lake Action Plan, openings along the Northwest corner of Prince of Wales Island will not occur prior to Statistical Week 32 (August 2–August 8). Escapements in District 6 were within management targets in all but the Sumner Straits area. Openings in the Mosman and Burnett Inlets area can be expected during the last week of July and first week of August. Openings along the Ratz Harbor and Screen Island shorelines will not occur until after August 1 (SW 31) due to conservation actions for McDonald Lake sockeye. Openings in the northern portion of Section 7-B may begin during the last week of July only if the pink salmon runs are extremely strong. The lower area of

Section 7-B, Union Bay, will not open prior to August 1. If pink salmon returns are stronger than expected, every effort will be made to begin more extensive openings as soon as possible to give industry maximum flexibility for harvesting large returns.

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. Although no formal forecasts are made for these stocks, some expectations can be based on parent-year escapements. In Disappearance Creek and Lagoon Creek, the primary chum salmon spawning systems in Cholmondeley Sound, the majority of the 2004, 2005, and 2006 parent-year chum salmon escapements were average to below average. The first opening for fall-run chum salmon can be expected about September 6. In 2008, approximately 4,000 chum salmon were caught in the District 2 fall chum fishery. ADF&G will monitor this fishery closely in 2009 to ensure sufficient escapement to Cholmondeley Sound systems. If fishery performance data and escapement information indicate a weak run of fall chum salmon, the fishery will be closed to ensure adequate escapements.

ADF&G has opened portions of Section 3-A (Cordova Bay) in recent years to target fall chum salmon. However, there has been little or no effort and limited harvest. The department will again open portions of Section 3-A in 2009 if there is a surplus of chum salmon. Open areas and fishing times will be similar to the 2008 season.

Terminal Hatchery Fisheries

For the 2009 season, THA purse seine 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 details the expected return to each SSRAA release location.

Fishers 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 [5AAC 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 14) 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 2009, SSRAA is expecting a total return of 1,615,000 summer chum, 255,000 fall chum, 183,000 coho, and 19,000 Chinook salmon to Neets Bay.

Neets Bay will be open continuously to troll from May 1 to June 10 and to purse seine and drift gillnet from May 15 to June 10 unless closed by emergency order. The rotational fishery from June 11 through June 24 according to 5 AAC 33.370 was announced on a separate Neets Bay THA news release on April 28, 2009. From June 25 to November 14 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, 2009

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

June 11–June 24, 2009

Rotational fishery for drift gillnet and purse seine.

June 25-November 14, 2009

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 [5AAC 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.

By regulation portions of the Anita Bay THA will be closed to the harvest of salmon as follows:

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

In 2009, approximately 425,000 chum, 9,700 Chinook and 17,500 coho salmon are expected to be returning in total. It is anticipated that approximately 127,500 chum, 3,800 Chinook and 3,500 coho salmon will return to the terminal area and be available for harvesting in the rotational fisheries.

Anita Bay THA Calendar

May 1–June 12, 2009

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

June 13-September 28, 2009

Rotational fishery for drift gillnet and purse seine

September 29–November 10, 2009

Beginning 12:01 a.m. Tuesday, September 29, 2009, 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 Tuesday, November 10, 2009.

Kendrick Bay THA-[5AAC 33.377]

The Kendrick Bay THA, which includes the waters of Kendrick Bay west of 131° 59.00' W. longitude, will be open on a continual basis beginning Sunday, June 15, 2009, Statistical Week 25, and will remain open until further notice. For 2009 SSRAA is expecting a return of 544,000 summer chum salmon. Peak catches are expected to occur during statistical weeks 27–29. As in recent years, additional area outside of the THA will be open to target returning hatchery chum salmon at a time when few wild stock salmon are available for harvest. ADF&G will consider additional fishing time and area in District 2 during these early weeks if wild salmon run strength, effort, and other pertinent considerations allow.

Species/Run	Release Location	Common property Harvest	Terminal	Total Return
Coho	Herring Cove	17,500	7,500	25,000
Coho	Nakat Inlet	22,000	2,000	24,000
Coho	Anita Bay	14,000	3,500	17,500
Coho	Neets Bay	119,000	64,000	183,000
Coho	Bakewell	24,000	10,000	34,000
Coho	Crystal Lake	1,200	1,200	2,400
Summer Coho	Burnett Inlet	7,500	9,000	16,500
Summer Coho	Neck Lake	26,000	26,000	52,000
Chinook	Whitman Lake	6,900	10,300	17,200
Chinook	Anita Bay	5,820	3,880	9,700
Chinook	Neets Bay	5,000	14,000	19,000
Chinook	Crystal Lake	5,250	2,250	7,500
Summer Chum	Neets Bay	323,000	1,292,000	1,615,000
Summer Chum	Anita Bay	297,500	127,500	425,000
Summer Chum	Kendrick Bay	380,800	163,200	544,000
Summer Chum	Nakat Inlet	208,000	117,000	325,000
Fall Chum	Nakat Inlet	12,000	2,000	14,000
Fall Chum	Neets Bay	51,000	204,000	255,000

Table 3.-Expected 2009 Returns to SSRAA enhancement projects by release location.

NORTHERN DISTRICTS PURSE SEINE FISHERY

2009 PINK SALMON RETURNS

Pink salmon escapement goals were met or exceeded in the 2007 parent year for Districts 9–15 in Northern Southeast Alaska (Table 1.). Overall, escapement indices were about 18% below the 10-year average; however, pink salmon runs had been at the highest levels since statehood over the previous 10 years, and ADF&G expects a fair return from the good parent year escapements observed in all of the northern districts.

MANAGEMENT CONCERNS

Pink salmon escapements to Northern Southeast Alaska during the 2007 parent years were within or above the management target range in all districts. However, pink salmon runs to the inside waters of Northern Southeast were slightly below average in 2007 and extremely poor in 2008. ADF&G and the fishing industry will have to be flexible and be able to react quickly in season to changes from historical fishing patterns. Above all, meeting escapement goals will continue to be the number-one 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. An early-season management concern will be to prevent excessive interception of weak salmon stocks in mixed stock fishing corridors (e.g., Icy Strait and West Admiralty) until run strengths to near-terminal and terminal areas can be adequately assessed.

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, and the Hidden Falls and Deep Inlet Hatchery terminal fisheries.

Fishing Regime Implementation

If run strengths are strong enough to warrant additional fishing time, the fisheries will go from 15-hour and 39-hour openings to 2-on/2-off or more continuous openings. However, extensive openings will not occur if the pink salmon returns are weak.

Inside Fishing Areas, Early Runs

The 2009 seining season will begin on Sunday, June 21, with initial open periods of 15 hours to harvest expected surplus summer chum and early pink salmon returns. During the first open period, seining will be allowed in portions of District 12 in Tenakee Inlet and Point Augusta in Chatham Strait; the opening will be in conjunction with the first opening at the Hidden Falls Terminal Harvest Area. Very few pink salmon have been harvested in District 10 and Section 13-C during previous mid-June openings so the first openings in these areas will occur on Sunday, June 28.

Escapements of summer chum salmon in the 2004–2005 parent years in Tenakee Inlet were variable. Although no formal forecasts are made for these stocks, some expectations can be based on parent-year escapements. The 2004 chum salmon escapement was near the long term average escapement. However the 2005 chum salmon escapement was only 50% of the long term average and will be the dominate brood year contributing to this years escapement. The 2007 parent-year pink salmon escapement index for Tenakee Inlet of 0.36 million fish was

within the management target range of 0.21 to 0.51 million pink salmon. The upper portion of Tenakee Inlet may be opened and fishing will continue as long as escapement continues to build adequately. Portions of the Basket Bay shoreline may also 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. The commercial seine fishery 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.

Parent-year pink salmon escapements were good in Peril Strait and Hoonah Sound with a 2007 escapement index of 790,000, slightly above the upper end of the management target of 320,000–760,000 pink salmon. Parent-year chum salmon escapements to Saook Bay and Rodman Bay were fair to good in 2004 and poor in 2005. Beginning June 28, portions of Section 13-C will be open to harvest surplus salmon and to assess run strength of pink and chum salmon returning to Hoonah Sound streams. Further openings in 13-C will be determined inseason based on catch and observations of escapement. In the event that chum salmon returns provide for sufficient escapement, ADF&G may adjust open area in the associated bays for limited times to provide for harvest opportunities. In mid-July, the west boundary of the fishing area in Peril Strait may be moved towards Chatham Strait to improve the quality of the harvest and to ensure pink salmon escapements for Hoonah Sound and Peril Strait streams are obtained. Portions of Section 13-C, west of the Duffield Peninsula, and Section 13-A in lower Peril Strait, may remain open to provide fishing opportunity on pink salmon migrating through Salisbury Sound and western Peril Strait to Hoonah Sound streams.

The parent-year escapement index for District 10 was 1.04 million pink salmon, near the middle of the management range of 0.65–1.45 million fish. Escapements were uniformly good throughout the district. Extensive fisheries are expected in District 10 if survival from the 2007 spawning cycle is good. The parent-year escapement index for Seymour Canal (Section 11D) was 0.27 million pink salmon; equal to the midpoint of escapement target range of 0.16 to 0.40 million fish. Escapements were not consistent to Seymour Canal streams so openings to access these fish may be limited along the Big Bend shoreline in District 10 and in lower Seymour Canal. It is anticipated that the portion of District 10 south of Gambier Island Light will open no later than July 16.

Subsequent seining for 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 starting in early July to assess the strength and timing of the pink salmon returns entering Frederick Sound. Test fishing will also occur along the Hawk Inlet Shoreline beginning June 26 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 is 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 Fishery Management Plan (5AAC 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 returns should begin entering the inside waters of the northern districts during July. Seining in District 12 along the west Admiralty Island shoreline may expand in late July, depending on the observed run strength of pink salmon stocks in District 10 and 11, and continue as long as Chatham 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 to the community of Angoon, the department will close 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 within management target ranges for streams on the northern Chatham Strait shoreline of Chichagof Island and the west Admiralty shoreline. Southwest Admiralty Island stream parent year escapements were above the upper managent target. Openings along these shorelines will depend on developing returns of local stocks as well as Peril Strait and Tenakee stocks. Fishing may begin in this area in late July depending on the observed run strength.

Seining is expected to begin in District 9 during mid to late July near Red Bluff Bay in Section 9-A, in mid to late July along the Admiralty Island shore in Section 9-B, and in early August in Section 9-A near Little Port Walter north of Armstrong Point. Parent-year escapements of pink salmon to Red Bluff Bay were within the management target range and openings can be expected. July openings 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 occur beginning in early August, depending upon pink salmon abundance. If pink salmon escapements into Red Bluff Bay are sufficient, openings inside of the bay may occur to harvest pink salmon surplus to escapements. In Section 9-A south of Patterson Point, parent-year pink salmon escapements were within the management target range. Openings can be expected beginning early to mid-August, depending upon inseason observations of pink salmon abundance. Parent-year escapements of pink salmon were good to excellent in all of Section 9-B. The escapement index for all of District 9 was 1.04 million fish, above the upper end of the 0.4 to 0.85 million management target range.

Pink salmon escapement in District 14 was good in 2007. 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 made based on inseason information. The Whitestone shoreline area in District 14 may open in late July or early August with fishing times and areas dependent upon observed strengths of local pink salmon stocks. The department will also monitor pink salmon escapements in streams adjacent to Porpoise Islands along Homeshore and will consider seine openings in this area if there is a harvestable pink salmon surplus to escapement needs.

Every effort will be made to begin more continuous openings as soon as possible in District 9. That should give industry maximum flexibility for harvesting large returns. If run strengths are uniformly strong, the present plan is to have both Districts 9 and 10 open together even if it is with

less area in each district. If that is not possible due to the distribution of effort or run strength, openings would rotate between the two districts.

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 salmon returning to Kelp Bay or to harvest surplus chum salmon returning to the Hidden Falls hatchery if wild chum and pink salmon escapements are being met. Parent-year escapement of pink salmon to Kelp Bay streams was very good. Openings to harvest surplus pink salmon will be based on inseason assessment of run strength. Parent-year chum salmon escapements to Kelp Bay streams were fair to good. Since 2002, chum salmon escapements to Clear River have been well below historic levels. If chum salmon returns to Middle Arm are in excess to escapement needs then limited area in Kelp Bay and the Catherine Island shoreline may be provided to specifically target Middle Arm chum salmon. The pink salmon return generally occurs following chum salmon returns in Kelp Bay.

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 is 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 Management Plan (5AAC 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 Board of Fisheries 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 stocks 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 will include:

- 1. Parent-year escapements of pink salmon stocks in the Taku River, Stephens Passage, and Lynn Canal. Parent-year pink salmon escapements to Stephens Passage were below average but within the management target range of 0.11 to 0.25 million fish. The 2007 Taku River fish wheel pink salmon catch was 70% of average and the lower Lynn Canal pink salmon escapement index was 50% of the 10-year average.
- 2. Test fishing at designated locations along the Admiralty Island shoreline north of Point Marsden.
- 3. Aerial assessments of pink salmon abundance along the Admiralty Island Shoreline north of Point Marsden.
- 4. Pink salmon catches in the department's Taku River fish wheels.
- 5. Pink salmon marine sport fish catch rates in the Juneau area (lower Lynn Canal and upper Stephens Passage).

6. Fishery performance of District 11 and District 15 drift gillnet fisheries.

In 2003, the Alaska Board of Fisheries 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.

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 escapements were uniformly strong in all areas including Salisbury Sound, Slocum Arm, Portlock Harbor and Lisianski Inlet. 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 escapements in Sitka Sound, West Crawfish and Whale Bay were very good and Pink salmon seine fisheries can be expected in all of these areas depending on inseason observations. Purse seine openings could begin as early as mid-July.

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. Aerial observations of Necker Bay sockeye returns during the 2007 and 2008 seasons indicated weak returns during those years. 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.

If the pink salmon returns are strong enough to warrant a 4-on/1-off fishing regime, the fishing patterns in southern Sitka Sound will likely be scheduled as alternating 2-on/3-off and 3-on/2-off due to the expected concentration of effort targeting enhanced chum salmon in the Sitka Sound

area. This will maintain the historic 50% seine fishing opportunity while ensuring adequate pink salmon escapement to southern Sitka Sound streams. This will also prevent changes in the allocation of enhanced chum salmon returning to the Deep Inlet THA that are also targeted by the other gear groups. Extended or continuous fishing opportunities may be provided on specific stock groups in the Sitka Management Area 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.

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 lower than normal escapement during the parent year. 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 the 2004 and poor in the 2005 parent years. Fishing opportunities in Excursion Inlet may occur in late August or early September but are not anticipated. Parent-year escapements to Excursion River were fair in 2004 but poor in 2005. Southwest Admiralty chum salmon parent year escapements (primarily in Hood and Chaik bays) were mixed. The department will monitor fall chum salmon escapements to these systems and open targeted seine fisheries if appropriate. 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 return of approximately 2,208,000 chum salmon in 2009. Of this total return, approximately 1,853,000 will be available for the common property harvest after allowing 225,000 for cost recovery and 130,000 for broodstock requirements. In 2009, cost recovery will be managed by NSRAA to harvest 1.8 million pounds, and the goal in numbers of fish will be adjusted as needed to achieve the goal in pounds. The initial Hidden Falls opening for the 2009 season is scheduled for June 21. As usual, seiners are advised that openings at Hidden Falls during the 2009 season may be announced with a minimum 24-hour notice if necessary in order to maximize fish quality. In the event that a large abundance of chum salmon develops early, the Hidden Falls Terminal Harvest Area may open prior to June 21. NSRAA cost recovery fishing will likely begin around June 23. A mid-week opening on Thursday, June 25 is considered unlikely at this time. Decisions to provide for mid-week openings will depend on both run strength and progress toward cost recovery goals. This year, on news releases announcing fishery openings, ADF&G will coordinate with NSRAA to provide updates including any changes in the seasonal cost recovery goal, progress made toward reaching the cost recovery goal, and other pertinent information such as average weights or sex ratios.

The Hidden Falls Hatchery Terminal Harvest Area Management Plan (5AAC 33.374) provides guidelines for allocation of hatchery produced chum and Chinook salmon in the Hidden Falls THA. The management plan sets forth 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 and cost recovery goals, then troll retention of chum salmon in the THA will be prohibited as long as at least seven days remain

until July 1. Troll non-retention of chum salmon would occur in June in the event that there is no purse seine fishery on June 21. Also, provided that some trollers are present, in order to allow increased troll access to Chinook 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 Chinook salmon broodstock, and trollers may only retain chum salmon in numbers not exceeding the total number of Chinook salmon on board.

The Hidden Falls terminal harvest area boundary definition is being modified to provide for easier enforcement and compliance with the THA boundaries. Rather than the use of range markers at the northern and southern boundaries, these boundaries will be defined by points indicated by markers on the Baranof Island shoreline to offshore coordinates. A line between the two offshore coordinates 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° 06.89' N. latitude, 134° 43.15' W. longitude then due west to a point on the Baranof Island shoreline, approximately 1/2 mile south of Takatz Bay, at 57° 06.89' N. latitude, 134° 47.31' W. longitude. The boundaries may be extended north to include Kelp Bay and the Catherine Island shoreline if wild chum salmon escapements to Kelp Bay streams are being met. The southern boundary may be expanded south to the District 12 boundary near Cascade Bay if the overall strength of pink salmon returns are sufficient to meet escapements in the area and provided that eastern Baranof Island sockeye salmon escapements and subsistence uses are being met. A contraction of the line to less than two miles off of 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 BOF 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 [5AAC 33.376]

NSRAA expects a return of 1,160,000 chum salmon to the Deep Inlet remote release site and the Medvejie Hatchery in 2009. Cost recovery and broodstock goals for the Deep Inlet returns are approximately 130,000 fish and 60,000 fish respectively, allowing for a common property harvest of approximately 970,000 chum salmon by purse seine, drift gillnet, and troll gear. In 2009, cost recovery will be managed by NSRAA to harvest 1,040,000 pounds. Actual numbers of chum salmon harvested for cost recovery will be adjusted to achieve this total weight. 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 also 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 Management Plan (5AAC 33.376). The plan provides for the

distribution of the harvest of hatchery-produced salmon between the purse seine and drift gillnet fleets. The Alaska Board of Fisheries, during it's February, 2009 meeting, adopted a new regulation modifying the time ratio of gillnet fishing time to purse seine fishing time from 2:1 to 1:1 during chum salmon management beginning the third Sunday in June. The time ratio of gillnet fishing time to purse seine fishing time to purse seine fishing time to the third Sunday in June. The time ratio of the third Sunday in June will remain 2:1.

The NSRAA board has requested that the common property rotational fishery begin on Sunday, May 31, in order to provide for common property harvest of hatchery Chinook salmon returning to the Medvejie Hatchery. Beginning on May 31 and continuing through June 20, the schedule will include four days of gillnet and two days of seine per week. Beginning June 21, THA openings will be reduced to two days of seine and two days of gillnet per week and will remain on this schedule through the remainder of the season. Beginning June 27, an area within Deep Inlet will be closed south of a line from 56° 58.50 N. latitude, 135° 16.50' W. longitude to 56° 58.35' N latitude, 135° 17.10' W. longitude in order to help achieve the season's cost recovery goal. NSRAA plans to begin cost recovery fishing in late June or during the first week of July. This closure will remain in effect until cost recovery goals are achieved. The NSRAA board has directed NSRAA staff to manage cost recovery fishing inseason in order to achieve the cost recovery goal. This may include reducing daily fishing hours from the traditional 15-hour period to a 13-hour fishing period if necessary to pass more chum salmon into the closure area of Deep Inlet. If necessary, the THA rotational gear fisheries may be fully closed in order to achieve the cost recovery goal.

The NSRAA Board has requested that the re-opening schedule after cost recovery is complete occur as follows: If only the inner inlet is closed, the inner inlet will remain closed until Saturday when the entire inlet will be opened, allowing troll fishermen first access to chum salmon buildup in the inner inlet. If the entire THA is closed, the outer THA will be opened to net fisheries as scheduled on the second day following the completion of cost recovery, however, the inner inlet will remain closed until Saturday following completion of cost recovery.

The following rotational fishing schedule will be in effect for the 2009 season:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	Gillnet	Gillnet	Seine	Gillnet	Gillnet	CR/Troll
From J	une 21 until t	he end of the	e season:			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	CR/Troll	Gillnet	Gillnet	Seine	CR/Troll	CR/Troll

May 31–June 20:

The schedule indicated above is subject to inseason adjustments to ensure that NSRAA cost recovery remains on schedule and the seasonal cost recovery goal is achieved. A detailed initial schedule for common property harvest in the THA will be published in a news release at the outset of the season. When changes are necessary the revised schedule will be issued in a subsequent news release.

Cost recovery management is planned such that NSRAA may conduct cost recovery in the Deep Inlet Special Harvest Area and in the Silver Bay Special Harvest Area. In January of 2006 the BOF implemented changes to Deep Inlet SHA and Silver Bay SHA. The Silver Bay Special Harvest (SHA) area was expanded to include most of Silver Bay and Eastern Channel east of a line from Makhnati Island to Sentinel Rock to Cape Burunof through July 21 and after the troll coho salmon closure in August or August 20 if there is no August coho salmon closure. From July 22 until the end of the August troll coho salmon closure, or August 20 if there is no August coho salmon closure, the Silver Bay SHA includes the waters of Eastern Channel and Silver Bay east of Galankin Island to Silver Point and the waters of Sitka Sound enclosed by a line from the southernmost tip of Galankin Island, to Simpson Rock Light, to the Makhnati Island Buoy, to Black Rock, to the southernmost tip of Neva Island, to the northernmost tip of Sasedni Island and from the southernmost tip of Volga Island to the northernmost tip of Galankin Island. The Deep Inlet SHA is defined in 5AAC 40.042 (a) (7) and includes all the waters of the Deep Inlet THA except that the western boundary of the SHA has now been moved westward to also include the waters enclosed by a line from the westernmost tip of Cape Burunof to a point west of Cape Burunof at 56° 59.11' N. latitude and 135° 23.59' W. longitude, to a point one-mile west of the westernmost tip of Long Island.

The terminal harvest area during the 2009 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 135°22.63' W. longitude, 56°59.35' N. latitude 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 Berry Island to the southernmost tip of Berry Island to the southernmost tip of the southernmost island in the Kutchuma Island group to the westernmost tip of an unnamed island at 135°17.67' W. longitude, 57°00.30' N. latitude to a point on the southern side of the unnamed island at 135°16.78' W. longitude, 57°00.08' N. latitude and then to a point on the Baranof Island Shore at 135°16.53' W. longitude 56°59.93' N. latitude with the following restrictions:

Sandy Cove: will be closed.

<u>Deep Inlet:</u> will be closed south of a line from 56° 58.50 N. latitude, 135° 16.50' W. longitude, to 56° 58.35' N latitude, 135° 17.10' W. longitude from June 27 until cost recovery goals are met.

During the 2009 season, the boundaries of the Deep Inlet THA may be changed by NSRAA and ADF&G to help resolve conflicts between fishers 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 2008 by emergency order under authority of 5AAC 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 interception 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 historic run timing and inseason observations of abundance. Since voluntary compliance with reporting of coho salmon in the Deep Inlet Terminal Harvest Area 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 are forecasted to be very poor. These returns occur primarily in July and are taken incidentally in seine fisheries in Chatham Strait and western Frederick Sound during that time period. A total return of 85,000 chum salmon is expected. In addition to chum salmon, Gunnuk Creek Hatchery is expecting a total return of 58,000 pink salmon and about 650 coho.

Table 4.-Expected 2009 returns to Northern Southeast area enhancement projects by hatchery organization and release location (Note: Common property harvest estimates of Chinook and coho salmon include sport harvest).

NSRAA								
Species	Release Location	Common Property Harvest	Cost Recovery	Broodstock	Total Return			
Chum	Medvejie/Deep Inlet	970,000	130,000	60,000	1,160,000			
Chum	Hidden Falls	1, 853,000	225,000	130,000	2,208,000			
Chinook	Medvejie/Deep Inlet	23,155	14,945	4,000	42,100			
Chinook	Hidden Falls	4,430	170	3,000	7,600			
Coho	Hidden Falls	94,000	76,000	10,000	180,000			
Coho	Deer Lake (Mist Cove)	33,400	20,600	NA	54,000			
Coho	Deep Inlet	9,860	1,740	NA	11,600			

Armstrong Keta, Inc.

Species	Release Location	Common Property Harvest	Cost Recovery	Broodstock	Total Return
Pink	Port Armstrong	543,000	541,000	150,000	1,234,000
Chum	Port Armstrong	12,600	10,700	40,000	63,300
Coho	Port Armstrong	96,600	92,600	4,000	193,200
Chinook	Port Armstrong	1,000	600	900	2,500

-Continued-

Table 4.-continued (page 2 of 2)

Sheldon Jackson College						
Species	Release Location	Common Property Harvest	Cost Recovery	Broodstock	Total Return	
Pink	Crescent Bay	18,300	20,900	1,500	40,700	
Chum	Crescent Bay	6,700	5,700	1,000	13,400	
Coho	Crescent Bay	6,400	7,700	70	14,200	
Chinook	Crescent Bay	200	200	50	450	
		Gunnuck Creek Hate	chery			
Species	Release Location	Common Property Harvest	Cost Recovery	Broodstock	Total Return	
Chum	SE Cove	unknown	0	43.400	43,400	
Chum	Kake	unknown	0	41,500	41,500	
Pink	SE Cove	unknown	43,000	15,000	58,000	
Coho	Kake	unknown	0	80	650	

LIST OF MANAGEMENT CONTACTS

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

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2030 Sea Level Drive, Suite 205	P.O. Box 200		
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David Gordon and Eric Coonradt	Jim Craig		
Management Biologists	Publications and Information		
304 Lake Street, Room 103	P.O. Box 110024		
Sitka, AK 99835	Douglas, AK 99811		
(907) 747-6688	(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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- Bergmann, W.R., S.N. Forbes, S.C. Heinl, B.L. Meredith, A.W. Piston, and S.B. Walker, 2009. McDonald Lake sockeye salmon action plan, 2009. Alaska Department of Fish and Game, Regional Information Report Series No. 1J09-03, Douglas, Alaska.
- Orsi, J.A., E.A. Fergussion, M.V. Sturdevant, B.L. Wing, A.C. Wertheimer, and W.R. Heard, 2006. Annual survey of juvenile salmon and ecologically related species and environmental factors in the marine waters of Southeastern Alaska, May–August 2005. (NPAFC Doc. 955) Auke Bay Lab., Alaska Fish. Sci. Cen., Nat. Mar. Fish. Serv., NOAA, 11303 Glacier Highway, Juneau, AK 99801-8626, USA, 108 p.