

SOUTHEAST ALASKA PURSE SEINE FISHERY
2003 MANAGEMENT PLAN



by

Region I Staff

Regional Information Report No.¹ 1J03-27

Alaska Department of Fish and Game
Division of Commercial Fisheries
Southeast Region
Juneau, Alaska

May 2003

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INTRODUCTION

This plan describes how the Southeast Alaska salmon purse seine fishery will be managed during the 2003 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) 2003 preseason pink salmon forecast, historical escapement, and fishery performance data. The 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 seining is also allowed in terminal hatchery fishing areas at Nakat Inlet, Neets Bay, Kendrick Bay, Eastern Passage, Anita Bay, Deep Inlet, Silver Bay, and Hidden Falls. Although the areas specified above are designated seine fishing areas, specific open areas and fishing periods are established by emergency order.

On average, purse seiners harvest 70 to 90% of the salmon caught in all Southeast Alaska commercial fisheries. Because pink salmon is the primary species targeted by the seine fleet, most management actions are based on the abundance of pink salmon stocks. Other species are generally harvested incidental to pink salmon. On average, sockeye and coho salmon account for approximately 2%, chum salmon 12%, and chinook salmon less than 1% of the total purse seine salmon harvest.

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). Department staff and researchers at the University of Alaska Fairbanks, Juneau Center for Fisheries and Ocean Sciences, use fishery performance data and associated information to make inseason forecasts of pink salmon returns to northern and southern Southeast Alaska. The department 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.

2003 Pink Salmon Forecast

The total pink salmon return in 2003 is predicted to be very strong with total returns somewhere in the 57 to 87 million fish range. The pink salmon harvest in 2003 is predicted to be very strong to excellent with a potential total Southeast Alaska harvest of 32 to 55 million fish.

Southeast Alaska is divided into three sub-regions:

1. Southern (SSE) Districts 1–8
2. Northern Inside (NSEI) Districts 9–15 except the majority of District 13
3. Northern Outside (NSEO) Only District 13 except Hoonah Sound and Peril Strait

Estimated distributions of the total SE harvest by the three areas in 2003 are:

Southern SE	61%
Northern SE Inside	28%
Northern SE Outside	11%

Past results have shown that it is nearly impossible to predict harvest rates, especially on strong return years. The department cannot predict inseason management actions, fishing conditions, harvest and processing capacity, or product demand that drives the harvest each year or what any of these factors have on the subsequent escapement influencing future run strengths.

This preliminary prediction is based on the following considerations:

- 1) Two statistical models (Ricker spawner-recruit relationship and a “generalized Ricker” fit) were used.
- 2) Brood year escapements in 2001 were 3rd highest on record for the region: the 4th highest in Southern (SSE); the 5th highest in Northern Inside (NSEI); and the 4th highest in Northern Outside (NSEO) for years 1960–2002).
- 3) Winter incubation temperatures throughout Southeast Alaska during November 2001 through February 2002 were at or above the 40-year average and should not produce any significant causes for mortality for the 2003 return.
- 4) No early marine fry surveys were conducted in Southeast Alaska in 2002 to indicate fry abundance. However, anecdotal observations throughout Southeast indicated fry abundance was very high in relation to other years.
- 5) Regardless of modeling, the results demonstrate that as we venture into recent high escapements, the range of returns actually increase on a magnitudinal scale. Any detrimental effect that happens during the life span can cause catastrophic declines in the adult return similar to 1987 and 1988. Or if all life stages experience excellent conditions, we could see very large returns similar to 1996 and 1999. Preseason forecasting since 1994 has erred on the conservative side in most cases except for 2000 (Table 1). Even with this conservative approach, the preseason forecast has provided a general indication of either high or low abundance.

We note that there is substantial uncertainty in the forecasting procedures the department has relied upon. Actual harvests could be substantially higher than those we have forecasted.

Table 1. Pink salmon preseason forecast versus actual harvests for SE Alaska, 1994–2002 (millions of fish).

Year	Preseason Estimate			Post-Season		
	Category	Harvest	Total Return	Harvest	Total Return	Category
1994	Strong	47	78.0	57.6	91.0	Excellent
1995	Average	21.2	52.4	47.9	83.4	Strong
1996	Excellent	62	93.2	64.6	124.8	Excellent
1997	Strong	37	68.2	28.9	65.2	Strong
1998	Strong	31-51	55-84	42.4	82.3	Strong
1999	Strong	31-51	55-84	74.6	150.6	Excellent
2000	Strong	31-51	55-84	20.3	50.4	Average
2001	Strong	31-50	55-85	67.0	115.0	Excellent
2002	Strong	30-52	57-87	45.3	88.8	Excellent
2003	Strong	32-55	57-87	?	?	?

Total Return = (harvest + (escapement index * 2.5))

Department staff thoroughly reviewed the pink salmon escapement goals for Southeast Alaska in the winter of 2002–2003 (Zadina et al. 2003). Based on that review the department established *biological escapement goals* for the Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside sub regions and management targets by district and stock group (Tables 2 and 3). The stock-group target ranges are more meaningful because they represent managed units of production. To be clear, the department considers the recommended escapement goals by sub-region (the sub-district totals in Table 2) to be *biological escapement goals*, and we consider our recommended escapement targets, by district and by stock group (Tables 2 and 3), to be an aid to management in achieving these sub-region goals. In other words, we do not consider the district or stock-group management targets to be escapement goals, under the definition of the Statewide Salmon Escapement Goal Policy (5 AAC 39.223).

Table 2. Management target ranges by district, in units of escapement index (the sum of the peak, bias-adjusted, aerial observations in streams in the index sample, in millions), for Southeast Alaska pink salmon.

District	Lower Target	Upper Target
101	1.33	3.00
102	0.40	1.10
103	1.13	2.55
104	No Escapement Target	
105	0.33	0.65
106	0.40	0.85
107	0.40	0.85
108	No Escapement Target	
SSE Total	4.00	9.00
109	0.40	0.85
110	0.65	1.45
111	0.32	0.73
112	0.40	0.85
113 Inside	0.40	0.90
114	0.32	0.73
115	No Escapement Target	
NSE Inside Total	2.50	5.50
113 Outside	0.75	1.75
NSE Outside Total	0.75	1.75
NSE Total	3.25	7.25
SE Total	7.25	16.25

Table 3. Recommended pink salmon management targets for Southeast Alaska, by stock group, in relation to district and the sub-region biological escapement goals, with redistribution based on 1960–2001 median count for each group in units of escapement index (the sum of the peak aerial observations in streams in the index sample, in millions).

Sub-region	District	Stock Group	Median ^a (60-01)	Percent of District ^b	Lower Target	Upper Target
SSE	101	Portland	197,995	12.4%	0.17	0.37
SSE	101	E Behm	1,003,782	62.9%	0.84	1.89
SSE	101	W Behm	394,896	24.7%	0.33	0.74
SSE	102	Moira	78,202	15.4%	0.06	0.17
SSE	102	Kasaan	427,988	84.6%	0.34	0.93
SSE	103	E Dall	190,985	14.3%	0.16	0.36
SSE	103	Hetta	356,054	26.7%	0.30	0.68
SSE	103	Klawock	614,668	46.0%	0.52	1.17
SSE	103	Sea Otter Sound	173,780	13.0%	0.15	0.33
SSE	105	Shipley Bay	72,269	41.2%	0.14	0.27
SSE	105	Affleck Canal	103,293	58.8%	0.20	0.38
SSE	106	Burnett	45,556	24.1%	0.10	0.20
SSE	106	Ratz Harbor	46,501	24.6%	0.10	0.21
SSE	106	Totem Bay	34,418	18.2%	0.07	0.15
SSE	106	Whale Pass	62,514	33.1%	0.13	0.28
SSE	107	Union Bay	61,063	19.7%	0.08	0.17
SSE	107	Anan	248,680	80.3%	0.32	0.68
SSE	108	Stikine	14,639	No Escapement Target		
NSEI	109	SE Baranof	46,050	12.5%	0.05	0.11
NSEI	109	E Baranof	60,995	16.5%	0.07	0.14
NSEI	109	Tebenkof	119,521	32.4%	0.13	0.27
NSEI	109	Saginaw Bay	66,570	18.0%	0.07	0.15
NSEI	109	Eliza Harbor	76,285	20.6%	0.08	0.18
NSEI	110	Portage Bay	16,329	5.6%	0.04	0.08
NSEI	110	Farragut Bay	5,661	2.0%	0.01	0.03
NSEI	110	Houghton	177,603	61.2%	0.40	0.89
NSEI	110	Pybus/Gambier	90,384	31.2%	0.20	0.45
NSEI	111	Seymour Canal	139,528	56.3%	0.18	0.41
NSEI	111	Stephens	108,201	43.7%	0.14	0.32
NSEI	112	SW Admiralty	113,635	19.8%	0.08	0.17
NSEI	112	W Admiralty	55,286	9.7%	0.04	0.08
NSEI	112	Tenakee	250,237	43.7%	0.18	0.37
NSEI	112	Freshwater Bay	87,700	15.3%	0.06	0.13
NSEI	112	Kelp Bay	37,446	6.5%	0.03	0.06
NSEI	112	Lynn Canal ^c	28,393	5.0%	0.02	0.04
NSEI	113	Hoonah Sound	216,374	100.0%	0.40	0.90
NSEO	113	Whale Bay	24,272	7.0%	0.05	0.12
NSEO	113	W Crawfish	6,909	2.0%	0.01	0.03
NSEO	113	Sitka Sound	98,759	28.5%	0.21	0.50
NSEO	113	Salisbury Sound	71,685	20.7%	0.16	0.36
NSEO	113	Slocum Arm	94,743	27.3%	0.21	0.48
NSEO	113	Portlock	15,781	4.6%	0.03	0.08
NSEO	113	Lisianski	34,329	9.9%	0.07	0.17
NSEI	114	Homeshore	22,709	14.2%	0.05	0.10
NSEI	114	N Chichagof	136,691	85.8%	0.28	0.62
NSEI	115	Lynn Canal ^c	28,637	No Escapement Target		

^a The column labeled “Median (60-01)” provides the median escapement index value for years between 1960 and 2001.

^b The column labeled “Percent of District” denotes the percent each stock group contributes to the sum of all stock group medians, for each specific district. Except for Hoonah Sound that is the only NSEI stock group in District 113.

^c Lynn Canal stock group consists of streams in both Districts 112 and 115. This table breaks them out by district but District 115 streams in the Lynn Canal stock group have no escapement goal.

Regardless of the actual returns of pink salmon to Southeast Alaska in 2003 the department will continue to manage fisheries inseason based on the strength of salmon runs. Data from aerial escapement surveys and fishery performance data will continue to be essential in making inseason management decisions.

The strength of the pink salmon return will be monitored on a weekly basis through two inseason prediction programs. In southern Southeast, inseason estimates of run strength will be calculated from weekly purse seine catch, CPUE, and pink salmon sex ratio data. Pink salmon CPUE from the Icy Strait commercial troll fishery will be used to estimate run strength in northern Southeast Alaska. Run strength of individual stocks and stock groups will also be intensively monitored via aerial, boat, and foot surveys.

GENERAL MANAGEMENT GOALS

The primary management goals for the 2003 Southeast Alaska purse seine fishery are as follows:

1. Obtain overall pink salmon spawning biological escapement goals by sub region and within sub regions 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) to no more than 4.3% of the all-gear chinook salmon catch ceiling established for the 2002/2003 season.
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).
9. Manage the seine fishery in the waters of District 1 consistent with the Hugh Smith Lake sockeye salmon Action Plan adopted by the Alaska Board of Fisheries in February 2003.

GENERAL MANAGEMENT PROBLEMS

The department will strive to maintain and improve the high quality of the harvest achieved in recent years. This will mean an aggressive fishing schedule early in the season in areas where strong returns are expected.

At the timing of the writing of this plan there was still ongoing discussion about the size of the purse seine fleet for the 2003 season. In 2002 approximately 280 boats made a landing, this was down from the 2001 season when approximately 360 boats made at least one landing. The size of the purse seine fleet will have some impact on the decision making process of the department as the season progresses.

Also at this time it is not known at what level the two canneries that closed (Wards Cove plants in Ketchikan and Excursion Inlet) during the winter of 2002/2003 will operate, or whether large floating processors will operate in Southeast Alaska. Changes in either of these situations will influence the management of the purse seine fishery.

Summary Notes From Purse Seine Task Force Meeting
Petersburg, Alaska City Council Chambers
October 28–29, 2002

Consensus Points of Agreement

- Conservation will continue to be the primary focus of management.
- Status quo management early in the season (late June through mid to late July).
- During years of high abundance and times where limits are in effect, go to extended fishing periods as run strength allows.
- Changes from past management strategies would occur only when the size of the harvest looks to be over 30 million pink salmon. Harvest below 30 million would dictate that the department would need to manage more conservatively.
- Allocation was a recognized concern. This plan was directed at pink salmon and improving the value of that resource. Any changes should have little, if any, effect on the existing allocation guidelines set forth by the Alaska Board of Fisheries.
- Any changes to the purse seine fishery management regime implemented in 2003 will be on a trial basis and will be fully evaluated at the fall 2003 Purse Seine Task Force meeting.

Implementation Details

- Prior to committing to 4/1 or an otherwise extended fishing regime the department may have to initiate some limited number of 39-hour openings as we have in the past and as in 2002.
- Openings during the transition period, which roughly takes place during the last week or two of July and the first week of August, will be initiated as in the past. Openings during this period may include 2-day openings with undetermined, 2-, 3-, or 4-day, closures as run strength dictates. One of the key indicators for the strength of the run at this time period is the strength of the day-2 harvests. If in a 39-hour opening catches fall off on the second day the department may, and has, reduced fishing time to 15 hours in subsequent openings. Alternatively, if during the first 39-hour fishery, day-2 catches remain strong the department may wish to have additional 39-hour openings to verify run strength before committing to a 4-on and 1-off fishing period.
- Daily fishing time will change as run strength and fleet distribution becomes apparent.
- The department agreed to restructure purse seine fishery news releases. In the past the department has listed the areas that were opened for the shortest fishing periods first in order in news releases. It was apparent during the 2002 fishing season that it would be clearer if the news releases were arranged in order of district, that is all of the open fishing periods for District 1 will be listed first, District 2 next and so forth.

For the 2003 season, the fishery opening and closing times will be as follows: 1) from the start of the seine season (June 22) through approximately August 15 — 5:00 a.m. to 8:00 p.m.; 2) from approximately August 15 through the end of the pink salmon season — 6:00 a.m. to 9:00 p.m.; and 3) from the start of the chum salmon season until the season closes — 7:00 a.m. to 7:00 p.m.

MATURE PINK SALMON FISHERIES

In 2001 the department, at the request of several processors, initiated terminal area fisheries for mature pink salmon in areas where management needs had been exceeded. These fisheries were directed at harvesting the roe or ikura of the pink salmon. Approximately 2.4 million pink salmon were harvested in these fisheries that took place in Districts 1, 3, 5, 6, and 7. In order to meet the added cost of this fishery the department had a test fishery for mature pink salmon in District 3. Although no terminal area pink fisheries occurred during the 2002 season the department will continue to look for opportunities to continue the terminal area pink salmon fisheries in 2003 if there is an interest and a market. The department will continue to open fisheries so all of the fish can be harvested in the best possible quality in the existing 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 September. Since this is still a 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 will be required to cover additional aerial surveys and personnel costs.

CHINOOK SALMON HARVEST

The department is required to manage the Southeast Alaska purse seine fishery for a harvest of 4.3% of the annual all-gear chinook salmon catch ceiling determined under the terms of the Pacific Salmon Treaty [5 AAC 33.367]. 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 regulation is to make management of the purse seine harvest of chinook salmon more consistent with the abundance-based management approach agreed to by the U.S. Section of the Pacific Salmon Commission in June 1999. The all gear chinook salmon harvest quota was finalized by the Chinook Technical Committee during the week of March 24. The preseason abundance index is 1.79 that translates into an all-gear harvest ceiling for Southeast Alaska of 366,132 chinook salmon. Based on the allocation of 4.3% of the harvest ceiling 15,744 chinook salmon will be available for harvest by the purse seine fishery.

The board has adopted size limits [5 AAC 33.392] and directed the department 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. Purse seiners may take but may not sell chinook salmon between the sizes of greater than 21 and less than 28 inches in length.
3. Purse seiners may possess and sell chinook salmon that are less than 21 inches (approximately 5 pounds or less).

Non-retention of 28-inch and larger chinook salmon will be the primary management measure for maintaining the catch limit. Chinook salmon non-retention will be required early in the season when total salmon catch rates are low. This will allow a more efficient release of chinook salmon and minimize the impact of incidental mortality. Retention of chinook salmon will be permitted for as long as possible during the time period when the catch rate for other species is high. During these retention periods, the department encourages seiners to release any live chinook salmon unharmed. This will reduce chinook salmon mortality and could increase the number of retention periods. Once the quota is reached, non-retention regulations will be reinitiated.

Implementation Plan

Purse seiners can anticipate periods of non-retention of chinook salmon (28 inches or longer) during openings in June and July. Following the non-retention period, seiners will be allowed to retain chinook salmon 28 inches or larger until the catch quota is reached. This retention period may be of short duration and will be announced via department news release.

There may be specific terminal areas in which all chinook salmon may be, or must be, retained. At this time the department intends to implement full retention (5 AAC 39.265) from the beginning of the season for net fisheries in the Deep Inlet Terminal Harvest Area. Additional areas may be announced via news releases.

During periods of non-retention, seiners 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, the department 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 because it is not pre-printed.

SOUTHERN DISTRICTS PURSE SEINE FISHERY

2003 Pink Salmon Returns

The 2001 pink salmon escapement indices were above the 1990–1999 average in all but one of the nine stock groups in District 1–4. The escapement index for the Moira Sound stock group (District 2) was slightly below the average. Escapement indices for all nine of the stock groups in Districts 5–8 were above average. The District 1 pink salmon escapement index was 4.35 million fish, well above the upper management target goal of 3.0 million pink salmon. The District 2 pink salmon escapement index of 1.15 million fish was above the upper end of the management target range of 1.10 million pink salmon. The District 3 pink salmon escapement index of 3.26 million fish was above the upper end of the management target range of 2.55 million pink salmon. The District 5 pink salmon escapement index of 1.04 million fish was well above the upper management target limit of 0.65 million pink salmon. The District 6 pink salmon escapement index of 1.00 million fish was well above the upper management target range of 0.85 million pink salmon. The District 7 pink salmon index escapement of 0.88 million fish was above the upper management target range of 0.85 million pink salmon. When summed across Districts 1–8, escapement indices totaled 11.63 million, above the 4.0 to 9.0 million biological escapement goal range for southern Southeast Alaska pink salmon.

The forecasted return for all of Southeast Alaska is strong with a potential harvest of 32 to 55 million fish. Based on the distribution of the 2001 pink salmon escapement approximately 61% of that harvest is expected to occur in southern Southeast Alaska.

Management Problems

The continuation of the management strategy that started in 2002 will still pose the largest management problems in 2003. Uncertainties about fleet size and distribution and the department's reaction to those can only be answered in season. The department 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 fundamental objective of the modified fishing strategy that is to provide a more stable supply of fresher fish.

In response to the guidelines established in the Sustainable Salmon Fisheries Policy (5 AAC 39.222), the department during the October 2002 work session identified Hugh Smith Lake sockeye salmon as a candidate for stock of management concern status. The Board of Fisheries, after reviewing stock status information and public input during the February 2003 regulatory meeting, classified Hugh Smith Lake sockeye salmon as a stock of management concern. This determination was based on the inability, despite the use of specific management measures, to maintain escapements for a salmon stock within the bounds of the BEG during the last five years.

The department recently completed an analysis of available stock assessment data for Hugh Smith Lake sockeye salmon in the process of re-examining the escapement goal for the system. The conventional method for setting an escapement goal in a sockeye salmon producing system with 20 years of catch and escapement information, would be to do a Ricker stock-recruit analysis (Quinn and Deriso 1999). Unfortunately, the unknown annual Canadian harvests of the Hugh Smith Lake stock of sockeye salmon, and questions about the U.S. harvests in some years, greatly clouds the picture for an analyst attempting to conduct a Ricker stock-recruit analysis. The department conducted three independent analyses of available information as summarized below, to determine an appropriate escapement goal range for the system (Geiger et al. 2003).

- (1) A "risk" analysis led to the conclusion that an escapement of about 8,000 fish was a reasonable threshold level to minimize making fishery management errors.
- (2) A Ricker approach, using reasonable assumed values for alpha and beta, led to the conclusion that a biological escapement goal of 9,000 to 18,000 fish was probably the best way to tradeoff risk and uncertainty, given the limitations of the analysis.
- (3) A Beverton-Holt spawner-juvenile production relationship for Hugh Smith Lake sockeye salmon, once adjusted for assumed juvenile to adult survival rates, identified a level of about 9,000 to 18,000 spawners as a potential range of values associated with the maximum sustained yield spawner escapement level.

On the basis of these diverse analyses, a BEG for the Hugh Smith Lake stock of sockeye salmon of 8,000 to 18,000 spawners was recommended. The Board of Fisheries adopted this goal as an Optimal Escapement Goal (OEG) in February 2003. The escapement goal will be reevaluated in 2005.

Action Plan Development

Hugh Smith Lake Sockeye Salmon Action Plan Goal

To rebuild the Hugh Smith Lake sockeye salmon run back to levels that attain the current escapement goal range. The rebuilding plan will include measures to reduce harvests, rehabilitation efforts including egg takes and back-plants, and improved stock assessment.

Action Plan Alternatives

ACTION 1. Reduce the commercial harvest of Hugh Smith Lake sockeye salmon.

Objective

Modify historic purse seine and drift gillnet fisheries managed by emergency order authority to reduce the harvest of Hugh Smith sockeye salmon in the Section 1-F purse seine and Section 1-B drift gillnet fisheries so that the Hugh Smith escapement goal range can be achieved.

Specific Action Recommended to Implement the Objective

If projections of the cumulative Hugh Smith Lake sockeye salmon weir counts in Statistical Week 29 and 30, fall below the cumulative number of sockeye salmon needed to meet the lower end of the escapement range the department shall:

1. Close that portion of the District 101 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.

If the projections of the cumulative Hugh Smith Lake sockeye salmon weir counts in Statistical Weeks 31, 32, and 33 fall below the cumulative number of sockeye needed to meet the lower end of the escapement range the department shall:

1. Close that portion of the District 101 purse seine fishery east of a line from Foggy Point Light to Black Rock Light to the southernmost tip of Black Island and;
2. Close the upper portion of the Section 1-B drift gillnet fishery one nautical mile south of the latitude of Foggy Point Light.

The base years for determining the mean weekly run timing will start in 1982 and continue through the most current year of weir counts.

When the projections of Hugh Smith Lake sockeye salmon counts are above the cumulative number of sockeye needed to meet the lower end of the escapement range, the department shall manage the purse seine and drift gillnet fishery on the basis of the overall strength of wild stock salmon to District 101.

Management Plan

The southern Southeast Alaska area purse seine management plan consists of separate segments for the District 4 fishery, the inside districts pink salmon fishery, the McDonald Lake sockeye salmon fishery, the fall chum salmon fishery in Cholmondeley Sound, and hatchery terminal area 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 the following:

- A. Manage the Alaskan District 4 purse seine fishery prior to Statistical Week 31 to:
 - i. achieve an annual catch share of the Nass and Skeena sockeye salmon of 2.45 percent of the Annual Allowable Harvest (AAH) of the Nass and Skeena sockeye salmon stocks in that year
 - ii. 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 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 and Skeena 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.

Although the management intent shall be to harvest salmon at the allowable percentage AAH, it is recognized that overages and underages will occur and an accounting mechanism is required. The payback mechanism for the fishery will be based on the number of fish.

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 two years the Bilateral Northern Boundary Technical Committees have worked to finalize the total run reconstructions for the Nass and Skeena Rivers. While the final numbers have yet to be agreed upon the following table reflects the work to date:

Table 4. District 4 purse seine Nass/Skeena allocation.

	1999	2000	2001	2002
Nass/Skeena Total Return	1,774,962	5,323,779	4,987,376	2,525,269
Nass/Skeena Escapement	936,705	1,100,000	1,100,000	1,030,688
Allowable Nass/Skeena AAH	838,257	4,223,779	3,887,376	1,494,581
Allowable D4 Harvest (2.45%)	20,537	103,483	95,241	36,617
Actual Nass/Skeena Harvest	3,232	29,221	179,321	21,243
Cumulative overage/(underage)	(17,305)	(91,567)	(7,487)	(22,861)

While these numbers, especially 2002, are still preliminary Table 4 does show the size of the returns since the signing of the 1999 agreement and the approximate underage the District 4 season has going into the 2003 season.

The Canadian Department of Fisheries and Oceans has a preseason expectation of approximately 1,903,510 sockeye salmon to the Nass/Skeena River in 2003. If the 2003 forecast is accurate and escapement goals are achieved then the AAH for District 4 will be approximately 19,500 Nass/Skeena sockeye salmon. Along with an underage of approximately 22,800, the number of Nass/Skeena sockeye salmon available in the District 4 fishery in 2003 is 42,300 fish.

In 2003, the District 4 purse seine fishery will start on Sunday, July 6. It is anticipated the initial opening on July 6 will be 10 hours in length. The duration of subsequent openings will be based on the run strength of sockeye and pink salmon, the amount of effort in the district, and the need to stay within treaty numbers. District 4 will be managed under the treaty annex through July 26, 2003. Starting on Sunday, July 27, 2003 the district will be managed on the strength of southern southeast Alaska salmon.

While the new management regime will be implemented well after the treaty period is over the department's intent is to keep the general fishing time in the district similar to that since the signing of the treaty. Weekly fishing periods in August will be decided only after the department starts to realize the distribution of the fleet, the number of tenders in the district, 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. That may not be the case under the 2003 fishing regime.

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 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 portions of Section 7-A (Anan).

Fishing time and area through early August will be a series of 15-hour to 39-hour openings depending on run strength and the distribution of the purse seine fleet.

The modified fishing regime will be in place only after the department would have implemented a 2-on/2-off fishing pattern. Based on the preseason forecast and historical run timing the department anticipates this will be in early August. Until that time the purse seine fishery will be managed similarly to previous years.

It can anticipated that the fishing pattern that developed during the month of August in 2002 will be similar to the 2003 season. If the run develops as expected, extended fishing time could start around August 6th. Purse seine fishers should expect fishing times may be in blocks of 15-hours rather than continual fishing and areas will open and close within the extended fishing opportunities.

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

In District 2, the department will open a portion of the lower district outside of the THA when Kendrick Bay opens in late June. This will be done to target on Kendrick Bay summer chum salmon at a time when few wild stock chum salmon are available, and to maximize the quality of those chum salmon. It is anticipated that Kendrick Bay will open on the same day as the initial Hidden Falls Hatchery chum salmon opening on June 22.

As in recent years, 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 seining should be expected in middle Clarence Strait, along the Ship Island and Tolstoi 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 and back Behm Canal.

Returns of pink salmon to District 3 are expected to be above 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 warrants it. By late July or early August Sections 3-B and 3-C will also open. Under the extended fishing periods expected during August it is possible 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.

Districts 5, 6, and 7

Parent-year pink salmon escapements were quite good in District 5 (Sumner Strait). Seine openings can be expected to occur in major portions of the district during the first week of August. Escapements were uniformly excellent in District 6 (upper Clarence Strait). Openings are expected to begin during the first week in August. Parent year escapements were very good in District 7. Openings in Section 7-B (Pt. Eaton to Union Bay) are expected to begin in late July. If run strengths are as strong as expected, the present plan is to rotate openings between District 6 and Districts 5 and 7. This means that District 6 would be open for 15 hours and the next day Districts 5 and 7 would be open for 15 hours. If effort does not distribute into District 5, then District 5 may have to be opened by itself in the rotation. Every effort will be made to begin more continuous openings as soon as possible in early August to give industry maximum flexibility for harvesting large returns.

McDonald Lake Sockeye Salmon

The forecasted return of sockeye salmon to McDonald Lake in Section 1-D is 113,000 to 150,000 with an escapement goal range of 65,000 to 85,000 fish. The department will monitor returns beginning in early July by aerial surveys and test fishing with purse seine vessels. If a harvestable surplus is evident, a limited seine fishery in the immediate vicinity of Yes Bay will be allowed from mid-July to early August. If a fishery is authorized, the opening will be in conjunction with other seine openings and it may be of short duration to minimize impacts on other stocks. However, with the low forecasted return of sockeye salmon the department will take a conservative management approach to McDonald Lake this year.

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 1998, 1999, and 2000 parent year chum salmon escapements were average to above average. The first opening for fall-run chum salmon can be expected about September 10. At the fall 2001 Purse Seine Task Force meeting the department agreed to have fall chum salmon seine fisheries in the Cordova Bay area. The department did open Cordova Bay in the fall of 2002, however few, if any, boats fished there. The department will again open Cordova Bay in 2003. The time and area will be similar to the 2002 openings.

Terminal Hatchery Fisheries

For the 2003 season, special harvest area seine fisheries will occur at Neets Bay, Nakat Inlet, Eastern Passage (Earl West Cove), Anita Bay, and Kendrick Bay to harvest fish returning to Southern Southeast Regional Aquaculture Association (SSRAA) enhancement facilities. The fisheries in these Terminal Harvest Areas will be managed jointly with SSRAA, and in accordance with existing Board of Fisheries approved management plans. Details regarding the open fishing periods by gear type in each of these areas will be announced via commercial fishery news releases.

Neets Bay [5 AAC 33.370]: In 2003 SSRAA is expecting a total return of 1,634,000 million summer chum, 400,000 fall chum, 160,000 coho, and 14,000 chinook salmon to return to Neets Bay.

Nakat Inlet [5 AAC 33.372]: The waters of Nakat Inlet between 54°50' N. latitude and 54°56' N. latitude. In 2003, approximately 200,000 summer chum, 80,000 fall chum, and 15,000 coho salmon are expected to return to Nakat Inlet.

Eastern Passage [5 AAC 33.373]: The waters of Eastern Passage south of 56°24'50" N latitude and west of 132°06'36" W. longitude. In 2003, approximately 10,000 chinook, and 60,000 summer chum salmon are expected to be returning to Eastern Passage. It is projected that about 4,000 chinook and 45,000 chum salmon will be available for harvest in the terminal area.

Anita Bay [5 AAC 33.383]: The waters of Anita Bay west of 132°24.40' W. longitude. In 2003, approximately 20,000 coho and 50,000 summer chum salmon are expected to return. It is anticipated that

approximately 3,000 coho and 37,500 chum salmon will return to the terminal area and be available for harvesting in the rotational fisheries.

For Kendrick Bay [5 AAC 33.377], located on the southeastern shore of Prince of Wales Island in District 2, the 2003 return is expected to be approximately 120,000 summer chum salmon. The Kendrick Bay terminal harvest area (THA) has been designated for purse seine and troll gear only and is managed in consultation with SSRAA. The department will open the Kendrick Bay THA in conjunction with the first Hidden Falls Hatchery opening in late June. The department will allow for a limited purse seine opening in lower District 2 just adjacent to the THA when wild stock salmon availability is limited and to harvest the best quality chum salmon possible. The THA will be open continuously until the end of the pink salmon seine season. Adjustments to this plan may be made during the season if the harvest of non-targeted species is excessive. The Kendrick Bay THA is defined as follows:

Kendrick Bay: The waters of Kendrick Bay west of the 131°59'00" W. longitude.

Fishers are requested to ensure fish caught in terminal areas are reported correctly on the fish tickets. This will enable the accurate documentation of fish taken from the special harvest areas and allow area-specific catch sampling to determine contribution rates based on recovery of coded microwire tags.

NORTHERN DISTRICTS PURSE SEINE FISHERY

2003 Pink Salmon Returns

Pink salmon escapement goals were met in the 2001 parent year in Districts 9 through 14. The department expects good returns from the good parent year escapements observed in all of these districts.

Management Problems

As with southern Southeast seine areas, implementation of the new management strategy will pose the most significant management problems in 2003. Uncertainties about fleet size and distribution and the department's reaction to those can only be answered in season. The department 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 fundamental objective of the modified fishing strategy that is to provide a more stable supply of fresher fish.

With no specific northern Southeast Alaska pink salmon return prediction, it will be necessary to assess the overall run strength of the return early in the season. Another early-season management concern will be to prevent excessive interception of weak salmon stocks in mixed stock fishing corridors (e.g., Icy Strait and upper Chatham Strait) 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.

Inside Fishing Areas

The 2003 seining season will begin on Sunday, June 22, with initial open periods of 15 hours to harvest expected 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 early-June openings so the first openings in these areas will occur on Sunday, June 29.

Escapements of summer chum salmon in Tenakee Inlet were well above the long term 1960 to 2001 average in the 1998–2000 parent years. For example, the 1999 chum salmon escapement index for Tenakee Inlet was 121,000 fish that compares to a 1960 to 2001 average of 66,838 fish and a recent 10-year average of 114,500 fish. The 1998 Tenakee Inlet chum salmon escapement index was 77,600 fish which was below the recent 10-year average of 114,500 fish. Parent year pink salmon escapements inside Tenakee Inlet were 25% of the 10-year average and less than half of the 1960 to 2001 historical average. A conservative early season fishing schedule for Tenakee Inlet can be expected to protect pink salmon stocks. 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.

Parent year pink and chum salmon escapements were strong in Peril Straits and Hoonah Sound. Beginning June 29, 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 in season based on catch and observations of escapement. In the event that chum salmon returns can provide for sufficient escapement, then the department 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 escapement for Hoonah Sound and Peril Strait streams is 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 total District 10 parent year bias adjusted escapement index for District 10 was 1.03 million pink salmon, within the escapement goal range of 650,000 to 1.45 million fish. Parent year escapements were 30% above the 10-year average in Seymour Canal (Section 11-D). If Seymour Canal runs develop adequately in 2003, openings to access these fish may be allowed 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 13. The 1998 chum salmon escapement index for Southwest Admiralty chum salmon systems (primarily in Hood and Chaik bays) was well below average while the 1999 and 2000 escapements were well above average for these systems. The department will monitor summer chum salmon escapements to these systems and open targeted seine fisheries for chum salmon as appropriate.

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. Catch rates in the Cross Sound troll fishery and incidental catches of pink salmon at the Hidden Falls Hatchery terminal fishery during the first three weeks of the season will also be monitored as indicators of pink salmon run strength. The department will open a one-mile section of shoreline by Point Augusta in District 12 in conjunction with other weekly openings to provide an additional assessment of incoming run strength of early-run pink salmon. The Point Augusta shoreline will be included in mid-week openings early in the season to obtain additional stock strength information. Test fishing will be conducted at Point Gardner starting in late June 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 27 to assess the strength of pink salmon returns entering the northern inside waters of Districts 11 and 15.

Seining in District 12 along the west Admiralty Island shoreline may expand in mid-to-late July depending on the observed run strength of middle-run pink salmon stocks in District 10 and 11 and continue as long as Chatham escapements develop satisfactorily. Parent year pink salmon escapements were well above average in streams on the northern Chatham Strait shoreline of Chichagof Island (with the exception of Tenakee Inlet) and slightly above average in streams along the west Admiralty Island shoreline. 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.

Pink salmon escapements in District 14 were fair to very good in 2001. 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. Short openings may be allowed in early to mid-August near local streams adjacent to Porpoise Islands along Homeshore to harvest pink salmon surplus to escapement needs.

Middle-run pink salmon returns should begin entering the inside waters of the northern districts during July. Seining is expected to begin in District 9 during mid-July near Red Bluff Bay in Section 9-A, in 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 were strong in Section 9-A. In order to provide for escapement needs as well as subsistence uses at Falls Lake the department will closely monitor subsistence harvest of sockeye and escapements at the Falls Lake weir. If necessary, an area closure will be implemented in the Falls Lake vicinity immediately south of Red Bluff Bay. If pink salmon escapements are sufficient into Red Bluff Bay, short openings inside of the bay may occur to harvest pink salmon surplus to escapements. Parent year escapements of pink salmon were excellent in almost all of the major systems in Section 9-B. Openings in District 12 along the Catherine Island shoreline and in portions of Kelp Bay may occur in early August to harvest surplus pink salmon returning to Kelp Bay. Parent year escapements to Kelp Bay were excellent. If run strengths are strong enough to warrant going to openings longer than two days, the present plan is to rotate openings between the southern and northern half of Section 9-B. This means that Section 9-B would probably be split into two

areas, somewhere around Piledriver Cove just north of Washington Bay. The northern half would be open for 15 hours one day and the next day the southern portion would be open for 15 hours. It is very likely that all or portions of Section 9-A will rotate with one of the Section 9-B areas. Every effort will be made to begin more continuous openings as soon as possible in very early August in District 9 to give industry maximum flexibility for harvesting large returns.

Late-run pink salmon returns should begin entering the inside waters of the northern districts in August. A modified fishing regime may be put in place in August only after the department would have historically implemented a 2-on/2-off fishing pattern. Based on the pre-season forecast and historical run timing the department anticipates this will occur in early August. Until that time the purse seine fishery will be managed similarly to previous years.

Hawk Inlet Shore Fishery

The Admiralty Island shoreline between Funter Bay and Point Marsden in Chatham Strait is known as the Hawk Inlet shoreline. Fishing is allowed in this area to harvest pink salmon stocks migrating northward to Taku River, Lynn Canal, and upper Stephens Passage. During July, the department will manage the Hawk Inlet Shore fishery in accordance with the Northern Southeast Seine Fishery Management Plan (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 sockeye salmon have been harvested.

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

Pink salmon escapements in northern inside areas were mixed in 2001. Pink salmon escapements to Lynn Canal systems were very strong (index counts of 365,000 in 2001 and the 10-year average is 113,000), Stephens Passage systems had a pink salmon index escapement count of 196,000 fish, which was well below the recent 10-year average of 289,000 fish. The pink salmon catch in the Taku River fish wheels was also below average in 2001. 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.
2. Inseason forecasts of pink salmon run size from the "Icy Strait troll index" program.
3. Test fishing at designated locations along the Admiralty Island shoreline north of Point Marsden.
4. Aerial assessments of pink salmon abundance along the Admiralty Island Shoreline north of Point Marsden.
5. Pink salmon catches in the department's Taku River fish wheels.
6. Pink salmon marine sport fish catch rates in the Juneau area (lower Lynn Canal and upper Stephens Passage).
7. Fishery performance of District 11 and District 15 drift gillnet fisheries.

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 not final at the time of this writing but the general intent 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.

Hidden Falls Terminal Hatchery Fishery

The Hidden Falls Hatchery, operated by the Northern Southeast Regional Aquaculture Association (NSRAA), expects a return of approximately 3,450,000 chum salmon in 2003. Of this total return, approximately 2,951,000 will be available for the common property harvest after allowing 385,000 for cost recovery and 114,000 for broodstock requirements. The initial Hidden Falls opening for the 2003 season is scheduled for June 22. As usual, seiners are advised that openings at Hidden Falls during the 2002 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 22. NSRAA has scheduled cost recovery fishing daily beginning June 23. A mid-week opening on Thursday, June 26 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.

During the February 2003 meeting of the Alaska Board of Fisheries in Ketchikan a new Hidden Falls Hatchery Terminal Harvest Area Management Plan was adopted. The management plan sets forth different management approaches through June 30 and beginning July 1. Until July 1, if management actions are necessary to close the purse seine and troll fisheries to chum salmon harvest to achieve broodstock and cost recovery goals, then troll retention of chum in the THA is prohibited. Troll non-retention of chum salmon would occur in June in the event that there is no purse seine fishery on either June 22 or June 29. Also, in order to allow troll access to chinook salmon, Kasnyku Bay may 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 broodstock, and the department shall manage so that the troll harvest of chum salmon may not exceed the chinook salmon harvest.

The Hidden Falls terminal harvest area will include the waters of Chatham Strait, Kasnyku Bay, and Takatz Bay, within two nautical miles of the Baranof Island shoreline south of a range marker at South Point, and north of a range marker located at 57°06.83' N. latitude (½ mile south of Takatz Bay). The boundaries may be extended north to include Kelp Bay and the Catherine Island shoreline if chum salmon escapements to Kelp Bay streams are being met. Parent year chum escapements into Kelp Bay systems were good. 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. Any boundary expansions will be determined based on inseason observations of run strength.

Deep Inlet Terminal Hatchery Fishery

NSRAA expects a return of 1,450,000 chum salmon to the Deep Inlet remote release site and the Medvejie Hatchery in 2003. Cost recovery and broodstock goals for the Deep Inlet returns are 160,000 fish and 50,000 fish respectively, allowing for a common property harvest of approximately 1,240,000 chum salmon by purse seine, drift gillnet, and troll gear. The majority of this harvest can be expected to occur in the Deep Inlet THA by drift gillnet and purse seine gear, but some harvest is likely outside the THA by troll and purse seine gear as well. The NSRAA board decided at their March meeting in Sitka that, as during the 2002 season, THA openings for the early part of the season would be reduced in order to help achieve the season's cost recovery goal. The NSRAA board also requested a starting date of June 1 for the common property rotational fishery. Beginning June 1, the common property rotational schedule will be one day of seine and two days of gillnet per week contingent on adequate NSRAA and department staffing to sample chinook for coded-wire tags in order to comply with the Pacific Salmon Treaty. NSRAA plans to begin cost recovery fishing during the first week of July and to harvest half of the cost recovery goal by the end of July. The THA rotational schedule will change to two days of seine and four days of gillnet once NSRAA has reached or is close to reaching the cost recovery goal for the season. The change in schedule is expected to occur sometime during the mid-August period of peak returns. The following rotational fishing schedule will be in effect for the 2003 season:

From the beginning of the season until cost recovery goals are met:

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

After cost recovery goals are met until the end of the season:

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

*Seine and Troll gear alternates between Wednesday and Thursday.

The schedule indicated above is subject to inseason adjustments to ensure the NSRAA cost recovery remains on schedule and the seasonal cost recovery goal is achieved. An 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. The Silver Bay Special Harvest area is expanded including most of Eastern Channel through July 23 and after the troll coho salmon closure in August. The Silver Bay SHA is reduced in area to Eastern Channel and Silver Bay east of Galankin Island to Silver Point from July 24 through the August troll closure.

The Deep Inlet THA fishery will be managed jointly with NSRAA, and in accordance with the Deep Inlet Terminal Harvest Management Plan (5 AAC 33.376). The plan provides for the distribution of the harvest of hatchery-produced chum salmon between the purse seine and drift gillnet fleets. The ratio of gillnet fishing time to purse seine fishing time will be 2:1. Additionally, the Board of Fisheries has allowed trolling to occur when net fisheries are closed and when trolling does not interfere with cost recovery.

The terminal harvest area during the 2003 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 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 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.

During the 2003 season, the boundaries of the Deep Inlet THA may be changed by NSRAA and the department 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 2003 by emergency order under authority of 5 AAC 39.325 FULL RETENTION AND UTILIZATION OF SALMON to require that all salmon harvested in net fisheries are retained and utilized. Coho and sockeye salmon harvested in the Deep Inlet THA that are not sold but are retained for personal use must be recorded on fish tickets [5 AAC 39.130 (c) (10)].

In early September the Deep Inlet THA boundaries may be adjusted by the department 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 been poor and the department needs detailed information on coho and sockeye salmon harvest patterns, personnel from the department or FWP may board some vessels and conduct hold inspections to ensure compliance as well as to sample marked coho for coded wire tags.

Gunnuk Creek Hatchery Returns

Chum salmon returns to Gunnuk Creek Hatchery at Kake and Southeast Cove on northeast Kuiu Island in Kuiu Strait are forecast to be significantly larger than any previous return. 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 1.55 million chums is expected, significantly higher than the largest previous return of 0.43 million.

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 very good in the 1999 parent year. Limited fishing opportunities in Excursion Inlet may occur in late August or early September. Parent year escapements to Excursion Inlet were well below average in 1998, slightly below average in 1999, and slightly above average in 2000. Fall chum openings may also occur in Nakwasina Sound. Fall chum fisheries will be managed on the basis of observations of run strengths in the bays beginning in mid-August and continuing through September.

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 to northern outside areas were excellent in Lisianski Inlet, Portlock Harbor, and Slocum Arm, but somewhat below the 1990's average in Salisbury Sound. In Section 13-B parent year pink salmon escapements in Sitka Sound and Whale Bay were excellent and average in West Crawfish Inlet. Pink salmon seine fisheries can be expected in these all of these areas depending on inseason observations of escapement. Seining for pink salmon returning to Lisianski Inlet, Salisbury Sound, and Hoonah Sound streams could begin in mid-July, and in late July in other outside water areas.

Summer chum salmon returns will be monitored to determine run strengths beginning in early July. If harvestable surpluses can be identified, fishers 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 from early to mid 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 to ensure that escapement needs and subsistence fishery needs are met.

A modified fishing regime may be implemented in early to middle August of 2003 provided that regional pink salmon returns to Southeastern Alaska develop as expected. At the time when the department would have historically implemented the 2-on/2-off fishing pattern, openings may be initially scheduled as 4-on/1-off to provide more continuous fishing opportunities and to maximize quality. Depending on fleet size, fishing patterns, catch rates, and escapements this pattern may either continue or be modified as the season progresses. Fishing patterns in Sitka Sound will most likely be scheduled as 2-on/2-off to prevent changes in the allocation of enhanced chum salmon that are also targeted by the other gear groups. Also, due to the expected concentration of effort targeting enhanced chum salmon in the Sitka Sound area, the 2-on/2-off fishing pattern has been shown to provide for a good distribution and amount of escapement at most run sizes. Continuous fishing opportunities can be provided in the general Sitka area by scheduling openings of nearby areas including Salisbury Sound, Whale Bay, and West Crawfish during those days when Sitka Sound is closed. More continuous fishing patterns will be considered as inseason options in the Lisianski Inlet and West Chichagof areas where effort is often more limited and surplus fish may not be harvested. Consecutive 15-hour openings will be considered as a management options to 39-hour or continuous

openings at intermediate run sizes in order to ensure escapement needs will be met. In addition line changes may be implemented if needed to ensure escapement needs are met.

LIST OF MANAGEMENT CONTACTS

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

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Sitka, AK 99835
(907) 747-6688

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) 747-5022
Juneau	-	(907) 465-8905

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If you believe you have been discriminated against in any program, activity, or facility, or if you desire further information please write to ADF&G, P.O. Box 25526, Juneau, AK 99802-5526; U.S. Fish and Wildlife Service, 4040 N. Fairfield Drive, Suite 300, Arlington, VA 22203, or O.E.O., U.S. Department of the Interior, Washington DC 20240.

For information on alternative formats for this and other department publications, please contact the department ADA Coordinator at (voice) 907-465-4120, (TDD) 907-465-3646, or (FAX) 907-465-2440.