

1989 MANAGEMENT PLAN
SOUTHEAST ALASKA DRIFT GILL NET FISHERY



Regional Information Report No. 1J89-12

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

May 1989

INTRODUCTION

This management plan provides an overview of the expected salmon run sizes, management problems, and harvest strategies for the 1989 drift gill net fishery. Department staff members listed at the end of this plan are available to provide further information and answer any questions.

There are approximately 464 limited entry permits in the Southeast Alaska drift gill net fishery. A substantial majority of these are actively fished each year. Drift gill net landings of salmon have averaged approximately 1.9 million fish annually since 1960. Over the same time period, they have represented an average of 41% of the total Southeast Alaska Region commercial sockeye salmon harvest, 29% of the chum, 13% of the coho, 6% of the pink and 4% of the chinook salmon. The fishery targets on and is managed for different species depending on the time of the year and area of fishing. There are no directed gill net fisheries for natural stock chinook salmon.

There are five drift gill net fishing areas in Southeast Alaska: District 1, Tree Point - Portland Canal; District 6, Prince of Wales; District 8, Stikine; District 11, Taku - Snettisham; District 15, Lynn Canal. Additionally, drift gill net fisheries occur in several terminal areas adjacent to enhancement sites. In 1989, the Alaska Board of Fisheries eliminated the drift gill net fishing area in the Lower Clarence Strait which included portions of Districts 1 and 2.

The salmon species harvested, timing of runs, management problems, and available information used for management are quite variable among the different areas. This management plan will consider each area separately.

SALMON RETURNS

In southeast Alaska a formal quantitative salmon forecast is available only for pink salmon. The expected returns of sockeye, chum, and coho salmon presented in this management plan are qualitative and formulated from parent year catch and escapement information and are expressed in terms of probable relative magnitude as opposed to absolute numbers.

Overall sockeye salmon runs entering the drift gill net fishing areas are expected to be above average for the 1989 season. Returns of natural summer chum salmon are anticipated to be average. Above average returns of fall chum salmon are expected in the Lynn Canal drift gill net fishing area. Returns of hatchery produced summer chum salmon are expected to contribute significant landings in the Districts 1 and 11 fisheries. Overall average coho salmon returns are expected. The 1989 pink salmon forecast indicates that approximately 19.5 million fish will be available for harvest by all gear types. Good availability of pink salmon is expected in Districts 1, 11, and 15 drift gill net areas.

MANAGEMENT APPROACH

The lack of accurate pre-season forecasts for salmon runs entering the various drift gill net fishing areas requires a flexible approach be developed for management of the region's drift gill net fisheries. Thus, this plan presents a general outlook of how the season is expected to develop. Some specific management approaches presented here may have to be altered depending on inseason assessments of salmon run strength.

The primary objectives for the management of the 1989 drift gill net fishery are as follows:

1. Obtain overall salmon spawning escapement goals with the best possible distribution to all systems.
2. Provide for an orderly fishery while harvesting those fish in excess of spawning escapement needs.
3. Promote the harvest and processing of good quality fish within the constraints dictated by run size.
4. Manage the drift gill net fisheries for a catch of 7,600 chinook salmon, exclusive of new Alaska hatchery produced fish.
5. Minimize, to the extent possible, the interception of salmon destined for watersheds where weak runs are expected.

Achievement of these management objectives will be accomplished by inseason adjustments of fishing time to control harvest areas in accordance with salmon run strength and timing. The comparison of the current year fishing performance to historical fishing success (i.e., catch per unit of effort analysis) is a major component of inseason run strength assessment. This approach assumes that commercial catch rates are a true reflection of run strength by time period, and can be relied upon to indicate salmon escapement rates through the fishing area. However, experience has shown that management of salmon fisheries based only on catch per unit of effort analysis can be misleading, especially for mixed stock situations.

Although fishery performance will be an important factor in the drift gill net inseason management process, other run strength indicators, when available, will be utilized to the extent possible. Information on spawning escapements, stock separation by scale characteristics, test fishing, observed salmon concentrations or schooling in sanctuary areas, and catches from other fisheries comprise the types of additional information also considered by managers.

The increasing availability of hatchery produced salmon is a major factor in the management of the southeast Alaska drift gill net fisheries. Where inseason management is based on fishery performance, it may become difficult to gauge natural stock run strength if significant numbers of hatchery fish are included in the catch. Where possible, the hatchery component of the catch will be accounted for when evaluating fishery performance.

Weekly Fishing Announcements

Inseason management of the District 1 drift gill net fisheries is conducted by the Ketchikan Area staff, Districts 6 and 8 by the Petersburg and Wrangell area staff, District 11 by the Juneau area staff, and District 15 by the Haines area staff. Because fishermen can move freely among all gill net fisheries, weekly fishing announcements for all areas will be coordinated by the Juneau Regional Office. These will normally be released simultaneously in all Area Offices by mid-afternoon each Thursday during the fishing season.

Weekly Fishing Periods

Drift gill net weekly fishing periods can generally be expected to begin at 12:01 p.m. Sunday. An exception is the Southern Southeast Regional Aquaculture Association's terminal fisheries in Nakat Inlet, Carroll Inlet, and Eastern Passage where a rotational harvest plan for gill net, seine, and troll fisheries will apply.

U.S./CANADA PACIFIC SALMON TREATY

The treaty between the United States and Canada concerning Pacific salmon will influence management of the Districts 1, 6, 8, and 11 drift gill net fisheries. For the 1989 season, these fisheries will be managed consistent with the provisions of the annex for transboundary rivers and the northern boundary area. The management provisions necessitated by the treaty will be considered separately under the specific management plan for each respective fishery. Gill net fishermen are encouraged to contact local department staff for more detailed information concerning the treaty obligations.

NEW REGULATIONS

The Alaska Board of Fisheries adopted several new regulations for the Southeast Alaska drift gill net fishery. These included: 1) the elimination of the Lower Clarence drift gill net fishery, 2) establishment of management plans for rotational fisheries at Southern Southeast Regional Aquaculture Association's terminal areas at Nakat Inlet, Carroll Inlet, and Eastern Passage, 3) setting a fixed starting date for implementation of the District 1 Pink Salmon Management Plan, 4) a division of District 8 into Sections 8-A and 8-B, 5) providing authorization for management of Districts 1, 6, 8, and 11 consistent with the U.S./Canada Pacific Salmon Treaty; and 6), establishing various gill net mesh requirements. The new regulations will be discussed in the appropriate sections of this management plan.

The Board of Fisheries also adopted commercial salmon fishery allocative guidelines. The Department will make a special informational report, on these new regulations, available for general review by late June.

CHINOOK SALMON CATCH

Established regulations specify a southeast Alaska drift gill net fishery catch limit of 7,600 chinook salmon, exclusive of new Alaskan hatchery produced fish. The Alaska Board of Fisheries adopted this regulation to ensure that various user groups maintain their recent year share of the total chinook salmon harvest quota specified by the U.S./Canada Pacific Salmon Treaty.

The need for management measures, to ensure the drift gill net catch quota for chinook salmon is not exceeded, will depend on the inseason evaluation of catch rates relative to the catch ceiling. The Board of Fisheries has recommended night time closures as the primary management measure to conserve rearing chinook salmon. Additionally, early season area closures will be maintained to minimize the incidental harvest of mature chinook salmon near spawning rivers.

TREE POINT AND PORTLAND CANAL FISHERY

Introduction

The Tree Point and Portland Canal gill net area consists of Sections 1-A and 1-B. This fishery targets on chum and sockeye salmon early, followed by pink salmon, and finally chum and coho salmon at the end of the season.

1989 Outlook

The sockeye salmon fishery will be managed in accordance with the U.S./ Canada Pacific Salmon Treaty. The treaty specifies an average annual harvest of 130,000 sockeye salmon. The catch limit is viewed as a level to be maintained over the long term. An average seasonal catch of approximately 135,000 sockeye salmon has occurred in the area during the treaty period from 1985 through 1988.

Sockeye salmon returns to Canadian systems, which contribute significant numbers of fish to the Tree Point drift gill net fishery, are expected to be average or above, base on parent year escapements. Returns to Hugh Smith Lake, a local U.S. spawning system, are expected to be above average. Based on parent year spawning escapements, overall chum salmon returns to natural spawning systems are expected to be above average. However, it is difficult to project if good returns will develop, as the pink salmon survival from the same parent year were poor.

Returns of summer chum, fall chum and coho salmon to the Nakat Inlet release site of the Southern Southeastern Alaska Regional Aquaculture Association (SSRAA) are expected to contribute fish to the gill net fishery. The 1989 projected returns are approximately 70,000 summer chum, 110,000 fall chum, and 5,000 coho salmon. Peak chum catches from these releases are expected between mid-July to mid-August for summer chum and late August and early September for fall chum salmon.

The Pink Salmon Management Plan (5AAC 33.260) establishes gill net fishing time in Section 1-B, in relation to District 1 purse seine fishing time when both gear types are concurrently harvesting the same pink salmon stocks. A new regulation designates the plan will start on the second Sunday in July, if the District 1 seine fishery is harvesting the same pink salmon stocks as the Section 1-B gill fishery.

The fishing time formula specified by regulation is as follows:

1. When the purse seine fishery is open for any portion of one day during a fishing week the drift gill net fishery must be open for 48 hours during the same fishing week.
2. When the purse seine fishery is open for any portion of two days during a fishing week the drift gill net fishery must be open for 96 hours during the same fishing week.
3. When the purse seine fishery is open for any portion of three or more days during a fishing week, the drift gill net fishery must be open for 120 hours during the same fishing week.
4. Conservation concerns for other salmon species may reduce the fishing time specified in the Pink Salmon Management Plan.

Management Goals

The following are specific goals for management of the 1989 District 1 drift gill net fishery:

1. Manage the fishery in accordance with the Pink Salmon Management Plan (5AAC 33.260).
2. Manage the fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (5AAC 33.361).

Management Plan

The Tree Point gill net fishery will initially be open in the waters of Section 1-B for a standard four day fishing week beginning at 12:01 p.m., Sunday, June 18. This is the opening date specified by regulation. The duration of subsequent fishing periods, through early July, will be based on the strength of sockeye and summer chum salmon returns and fishing effort levels. Sockeye salmon run strength to Canadian as well as Alaskan systems will be considered.

If the return develops as expected, area closures, to protect the Hugh Smith Lake return, are not expected this season, as were necessary in 1987 and 1988.

The Section 1-B gill net fishery will be managed according to the Pink Salmon Management Plan, beginning July 9. If the pink salmon run develops as forecasted, it is expected that two to four day weekly fishing periods will be allowed from mid-July through most of August.

Beginning in early September, depending on the duration of the pink salmon run, Section 1-B will be managed for harvesting fall chum and coho salmon. If a below average coho salmon return is apparent, a conservative management approach can be expected during September. As in recent years, gill net fishermen can expect the season not to extend beyond September 20. However, The Nakat Inlet terminal special harvest area, as discussed later in this management plan, is scheduled to be open after this date.

If pink salmon conservation becomes necessary, during the fall season, a minimum mesh size of five and one-half inches will be implemented to allow chum and coho salmon fishing to continue. The Alaska Board of Fisheries did approved a new regulation to establish a six inch mesh management option. However, as that regulation is not scheduled to become effective until the 1990 season, gill net fishermen are encouraged to use six inch or larger mesh if a minimum mesh requirement is established to conserve pink salmon during the fall season.

The Pacific Salmon Treaty requires that interception of Portland Canal chum salmon be minimized to assure rebuilding of these stocks. During negotiations of fishing regime for 1989, no agreements were reached with Canada on sharing of any surplus production that may be available for harvest in Section 1-A this season. Thus, any decision to direct a fishery on these stocks in Section 1-A must consider not only the magnitude of the surplus which is available but also the impact of a directed Canadian fishery on these same stocks.

As in recent years, the catch of the Nakat Inlet release site chum salmon stock will not be included in the evaluation of natural stock fishery performance. The contribution of Nakat Inlet chum salmon will be determined by in-season analysis of coded-wire tag data. Enhanced chum salmon have contributed as much as 71% of individual weekly catches and as much as 31% of the total harvest in recent years.

PRINCE OF WALES AND STIKINE FISHERIES

Introduction

The District 6 drift gill net fishery occurs in the waters of northern Clarence Strait and Sumner Strait, in regulatory Sections 6-A, 6-B and 6-C, and portions of Section 6-D. The Stikine fishery encompasses the waters of District 8 surrounding the Stikine River mouth. The management of these fisheries is inter-related due to their close proximity and salmon migration patterns which results in some major stocks being subjected to both fisheries. Two distinct management areas exist within each district. These being the Frederick Sound (Section 8-A) and Wrangell (Section 8-B) sides of District 8 and the Sumner Strait (Section 6-A) and Clarence Strait (Sections 6-B, 6-C, and 6-D) portions of District 6. Two terminal fishing areas for harvesting returns to the State operated Crystal Lake hatchery are also present and will be discussed in the terminal hatchery section of this management plan.

Historical information indicates that Stikine River sockeye salmon stocks represent a high proportion of the fish available in District 8, a small proportion of the fish in Section 6-A and a very low proportion of the fish in Sections 6-B, 6-C and 6-D.

Management of these fisheries is based on sockeye salmon early in the season, pink salmon in the middle, and coho salmon at the end.

1989 Outlook

The parent year (1984) sockeye salmon spawning escapement at Tahltan Lake, the primary production area in the Stikine River drainage, was approximately 33,000 fish. This is at the mid point of the established escapement goal range from 20,000 to 40,000 sockeye salmon. However, smolt outmigration was poor and the 1989 return is expected to produce only a limited number of surplus Stikine River sockeye for harvesting. Sockeye salmon returns to local Alaskan spawning areas have been increasing in recent years, but it is difficult to anticipate their production for 1989.

Below average pink salmon returns are forecasted for District 6 spawning streams. As these returns are harvested in mixed stock fisheries prior to entering District 6, it is difficult to anticipate local availability. However, since the fishery occurs in a major migration corridor, pink salmon destined for other districts may be available at certain times of the year.

The return of natural coho salmon stocks is expected to be about average. Fishing time and area will be dependent upon the actual inseason return to both districts. Coho salmon returns to enhancement facilities are also expected to contribute catch to these fisheries.

Management Goals

In addition to the general gill net management goals listed above, the following are specific management goals for Districts 6 and 8 during 1989:

1. Minimize the interception of mature chinook salmon entering the Stikine River.
2. Obtain pink salmon spawning escapement goals in Districts 6 and 7 which have been depressed in recent years.
3. Improve sockeye salmon spawning escapement levels to Alaskan island producing systems.

4. Manage the fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (5AAC 33.361).

Management Plan

The sockeye salmon fishery in both districts will be managed in accordance with the Transboundary Rivers Annex of the U.S./Canada Pacific Salmon Treaty. The annex generally allows the District 6 fishery to be managed for harvesting local Alaskan sockeye salmon stocks and is not influenced under most conditions by the presence of stocks of Stikine River origin. Management of the District 8 fishery will be based on the need to harvest sockeye salmon of Stikine River origin as allowed by the sharing provisions of the annex and the conservation of the resources.

The 1989 Stikine River sockeye returns should be strong enough to fulfill treaty obligations and allow drift gillnetting in District 6 and allow a limited fishery in District 8. The general summer sockeye salmon fishing season in both districts can be expected to open on Sunday, June 18, for a 48-hour period. A special terminal hatchery fishery will take place, in the Blind Slough portions of District 8, prior to this as discussed in the hatchery fishery portion of this management plan. Beyond the initial period, fishing will depend on assessments of the abundance of sockeye salmon stocks in relation to spawning escapement needs and terms of U.S./Canada Pacific Salmon Treaty.

Management during the sockeye salmon fishing season will be based on the results of test fishing, catch per unit of effort analysis, and analysis of scale patterns to determine the availability of Stikine River fish. All of these stock strength indicators, together with information from Canadian commercial, test, and subsistence fisheries, will be incorporated with a Stikine River sockeye salmon management model. This management model will, as the season progresses, be the primary management tool to estimate the availability of sockeye salmon for harvest by the Alaskan fishery in District 8 and the Canadian in-river fisheries.

Test fishing is anticipated to begin prior to the opening of the general commercial season. The objectives of the test fishing are to determine the relative abundance of sockeye salmon by area and to obtain sockeye salmon scales in areas where limited or no commercial fisheries are anticipated. Any required conservation measures for Stikine River sockeye salmon will first be implemented in District 8 followed by Sumner Strait in District 6. If the return of sockeye salmon to Alaskan island producing systems is determined to be weak, area and time restrictions will be necessary in District 6.

The area around the mouth of the Stikine River and other known milling areas for chinook salmon, in District 8, will be closed during the early portions of the sockeye season to reduce the incidental take of chinook salmon. These area restrictions will be maintained during sockeye salmon directed fishing periods through early July.

Pink salmon should begin to enter the District 6 fishing area in significant numbers by the third or fourth week of July. No early season pink salmon restrictions, including gill net mesh are anticipated. The early portion of the pink salmon fishery will be managed primarily on catch per unit of effort. By mid-August the pink salmon destined for the local systems will begin to enter the fishery in greater numbers and at that time management will be based on observed local escapements. In the event that the strength of the local return is not evenly dispersed within the district or is weaker than anticipated, restrictions or total closures may be necessary. Depending upon the strength of the return to District 8, a limited pink salmon directed fishery could occur within the district.

The coho salmon season will occur during late August and early September. Limited terminal coho salmon directed fishing is anticipated in District 8. Management of the District 6 coho salmon fishery will be based predominantly on wild stock catch per unit of effort analysis. The state-operated Crystal Lake Hatchery and Southern Southeastern Regional Aquaculture Association facility returns are expected to contribute coho salmon to the Districts 6 and 8 fisheries. Inseason estimates from microwire tag

recovery data will be used to identify the hatchery component of the catch. Only the catch of natural coho salmon will be used for fishery performance evaluation.

To test the feasibility of harvesting good numbers of hatchery coho in District 6 while avoiding the overharvest of wild stocks, fishing time may be restricted in early September and increased in mid to late September when hatchery stocks are normally much higher. The implementation of this management approach will depend on the assessed availability of both natural and hatchery stocks.

Regulations allow gillnetting along the Screen Island shore of Section 6-D during the early and later portions of the season. Specifically these areas are Section 6-D, west of a line from Mariposa Rock buoy to the northernmost tip of Point Harrington to a point on the shore of Etolin Island at 56°09'35" N. latitude, 132°42'42" W. longitude to the southernmost tip of Point Stanhope. The time period when fishing may be allowed are from the third Sunday in June (June 18) through the last Saturday in July (July 29) and from the second Sunday in September (September 10) until the season is closed. During this time, gillnetting is allowed during the same time periods that the adjoining waters of Section 6-C are open.

TAKU/SNETTISHAM GILL NET FISHERY

Introduction

The Taku/Snettisham gill net area encompasses Section 11-B (Taku Inlet, Port Snettisham, and Stephens Passage south to Midway Island) and Section 11-C (Midway Island south to a line from Point League to Point Hugh). The fishery has traditionally targeted on harvesting sockeye salmon during the early portion of the season and fall chum and coho during the later part of the season.

1989 Outlook

An above average overall Taku/Snettisham gill net harvest is expected in 1989. Returns of sockeye and fall chum are expected to be above average. A very good abundance of pink salmon is anticipated. Coho returns to Taku River should also be slightly above average. Snettisham and Douglas Island Pink and Chum (DIPAC) hatchery produced summer chum are expected to contribute to the gill net harvest incidental to the directed sockeye salmon fishery.

Management Goals

The following are specific management goals for the Taku/Snettisham drift gill net fishery:

1. Provide for sufficient salmon spawning escapements to the Taku River drainage, Port Snettisham, and Stephens Passage streams, while harvesting those fish in excess of escapement needs.
2. Provide for a Snettisham Hatchery chum salmon brood stock of 50,000 fish.
3. Minimize to the extent practical, the incidental harvest of chinook salmon.
4. Manage the fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (5AAC 33.361).

Management Plan

Section 11-B will initially open for a 72 hour period on the third Sunday of June (June 18) to harvest sockeye salmon. The strength of the sockeye salmon return will be evaluated using catch per unit of effort analysis and weekly escapement estimates derived from the Taku River fish wheel tagging and recovery project. Subsequent weekly fishing periods will be based on inseason evaluation of return strength.

Protection for Port Snettisham sockeye salmon will be necessary again this year in order to rebuild production of these stocks to historic levels. To accomplish this and to provide protection for Snettisham Hatchery salmon brood stock, Port Snettisham will be closed inside a line from Point Anmer to Point Styleman through approximately August 13. Additionally, the closure of Stephens Passage to minimize the take of Snettisham Hatchery chum salmon, should benefit Port Snettisham sockeye salmon.

To minimize the harvest of mature chinook salmon, Taku Inlet will be closed north of the latitude of Jaw Point during the initial fishing weeks. During the first three weeks, the fishery will be monitored to determine the catch of large mature chinook salmon. If landings of mature chinook salmon are above average additional time or area restrictions may be implemented to maintain the harvest at recent year levels.

As specified in the U.S./Canada Pacific Salmon Treaty, a harvest allocation to Canada of 18% of the total allowable sockeye catch originating in the Canadian portion of the Taku River needs to be provided in the management of the District 11 fishery. In addition, the Canadians are also allowed to harvest a maximum of 3,000 coho salmon. Other species are allocated to Canadian fishermen only as incidental landings taken during the directed sockeye salmon fishery. Fishery performance as well as the Canyon Island fish wheel adult tagging and recovery project will provide information to be considered in managing the fishery consistent with the treaty.

Directed gill net management for harvesting Taku River and upper Stephens Passage pink salmon stocks is not anticipated in Section 11-B. This is necessary to avoid overharvesting of sockeye and summer chum salmon, particularly Port Snettisham sockeye and Snettisham Hatchery summer chum salmon. Previous mesh size studies conducted by the department indicate small mesh web is very effective in harvesting sockeye. Consequently, the summer fishery will be managed for the harvest of sockeye salmon.

Directed pink salmon fishing can be expected in portions of Section 11-C, lower Stephens Passage. Pink salmon gillnetting in Section 11-C will be dependent on the availability of pink returns in lower Stephens Passage, Seymour Canal, and the northern portions of District 10. In general, gillnetting in Section 11-C will be tied to seining in the northern portions of District 10 and Seymour Canal which utilize similar pink salmon stock units. As an opening of the District 10 seine fishery is expected during the first week of July, gillnetting in Section 11-C will probably begin at the same time.

Chum salmon returning to the Port Snettisham and DIPAC hatcheries are expected to contribute the major portion of the District 11 drift gill net harvest of summer chum salmon. The department anticipates the need to implement management measures to protect the summer chum salmon return to the Snettisham Hatchery to ensure adequate brood stock is available. Approximately 50,000 chum salmon will be needed for brood stock. The need for any restrictions will be based on inseason evaluation of abundance of Snettisham Hatchery chum salmon returns. This may include a closure of portions of upper Stephens Passage during mid to late July. The Port Snettisham chum salmon test fishery will be implemented again this year, to provide a hatchery chum escapement index. This will be conducted one day each week from July 6-27, and will assist the department in determining if Snettisham Hatchery chum brood stock requirements are being reached.

Beginning in mid-August, the Taku/Snettisham gill net fishery will switch to fall management. Fishing time and area will then be dependent upon the developing run strength of the fall chum salmon and coho salmon stocks. Inseason management will be based on evaluation of catch, catch per unit of

effort, and fishing effort. The coho salmon catches and escapement estimates developed by the Taku River fish wheel project will be considered as additional inseason management information.

LYNN CANAL FISHERY

Introduction

The Lynn Canal drift gill net fishery includes Section 15-A in upper Lynn Canal, Section 15-C in lower Lynn Canal and Section 15-B, Berners Bay. Sockeye salmon are the target species during the summer season, while chum and coho salmon dominate the catch from late August through the end of the season.

1989 Outlook

Sockeye escapements through the Chilkat Lake weir totaled over 115,000 during the 1984 parent year. Parent year escapement through Chilkoot Lake weir exceeded 101,000 sockeye salmon. A good sockeye salmon return is anticipated to the Chilkoot Lake. However, based on an evaluation of parent year escapement and the return of younger age fish in 1988, a below average return is anticipated to Chilkat Lake.

Chum salmon harvests during the 1985 parent year totaled approximately 699,000 salmon, the highest on record for Lynn Canal. Parent year chum salmon escapement surveys indicated average numbers of chum spawners in main-channel spawning areas of the Klehini and Chilkat Rivers and below normal numbers in the side channels and tributary spawning areas. In general, the fall chum salmon run is expected to be above average. Coho salmon landings during the 1985 parent year totaled over 98,300 salmon, the highest coho catch on record for District 15. Coho salmon escapements were above average in Lynn Canal index areas during 1985. Returns of Coho salmon to Lynn Canal systems in 1989 are expected to be good.

Management Goals

Specific management goals for the 1989 Lynn Canal drift gill net fishery are as follows:

1. Obtain an escapement count of between 60,000 to 80,000 sockeye salmon at the Chilkoot Lake weir. The target goal will depend on the strength of the return. If a average or below average return is indicated, the target goal will be the lower end of the escapement goal range; while if an above average return is indicated the upper end of the range will be the target. This approach is being taken in order to better evaluate the optimum escapement level for this system by providing a better understanding of the spawner to recruit relationship for Chilkoot Lake while minimizing the impact upon the drift gill net fleet.
2. Obtain an escapement count of between 50,000 to 70,000 sockeye salmon at the Chilkat Lake weir. Analysis of the spawner to recruit relationship for the Chilkat Lake database conclusively indicates an optimum escapement goal at a lower level than the 70,000 to 90,000 range used previously. Returns from thirteen years of known escapement to Chilkat Lake formed the basis for this evaluation.
3. Continue efforts to improve the spawning escapement of the early run segment of the Chilkat sockeye salmon stock.

Management Plan

The 1989 Lynn Canal gill net fishery will open on Sunday, June 18, for a 72-hour fishing period. During the initial fishing period, waters of Section 15-A will be open south of the southern tip of Talsani Island in order to provide additional protection for mature chinook salmon returning to Chilkat River. Chilkat Inlet and Chilkoot Inlet south of the latitude of Mud Bay Point will be closed until Chilkat River sockeye salmon strength can be determined.

Stock contribution based on scale pattern analysis of the first week's catch, as well as early Chilkoot River weir sockeye salmon counts, will be used to indicate the relative strength of early sockeye salmon returns. Following the initial fishing period, fishing time will be reduced to 48-hour periods, unless early sockeye strength is above average.

Following the development of the main body of the sockeye salmon runs, fishing time and area adjustments will be made according to stock specific catch and escapement results. Management will be based on catch rate analysis, stock composition from scale sampling, weir counts, observations of fish buildups and limited test fishing. Salmon migratory timing models will be utilized to provide an additional gauge of run strength. Gill net fishermen are encouraged to review these management methods with the local area management biologist.

A major management concern will be to ensure spawning escapement levels to Chilkat Lake are improved over recent year levels. The Chilkat Lake sockeye salmon management approach in the event of a poor return will consist of three phases depending on the indicated stock strength. Phase one, employed during the initial fishing periods, consists of maintaining closures in the Chilkat Lake sockeye salmon milling areas in the vicinity of and including Chilkat Inlet and restricting fisheries in lower Lynn Canal (Section 15-C) that would harvest Chilkat Lake sockeye salmon. Phase two, implemented as an intermediate conservation measure, would limit fishing in the southern portions of Section 15-A to one day per week while fishing additional time in upper Chilkoot Inlet and Lutak Inlet as needed to harvest Chilkoot Lake sockeye salmon runs. Phase three, to be employed if it is determined that no surplus Chilkat Lake sockeye salmon are available for harvest, would limit gillnetting to northern portions of Chilkoot Inlet and Lutak Inlet as needed to harvest the sockeye salmon return to Chilkoot Lake. A six and one-quarter inch minimum gill net mesh restriction may be employed to allow fishing to continue for chum salmon while conserving sockeye salmon. New regulations allow this mesh restriction to be employed during the summer season.

Extensions of fishing time and area in portions of upper Chilkoot Inlet and Lutak Inlet can be expected after approximately 30% of the Chilkoot Lake escapement goal is achieved.

Section 15-B will initially be open on Sunday, June 18, for a 48 hour fishing period in waters of the section south of the latitude of Point St. Mary. This should provide an evaluation of the availability of summer chum salmon in Berners Bay. Additional gillnetting in Section 15-B will depend on the indicated chum salmon run strength.

During early July, portions of Section 15-C may be opened to target local summer chum and pink salmon stocks. This may include the eastern shore in the vicinity of Berners Bay in an attempt to harvest Berners Bay stocks while they are of good quality. The open area will not extend below the latitude of Vanderbilt Reef Light in order to avoid conflicts with sport fisheries. Following the peak availability of summer chum and pink salmon stocks, the fishery will return to sockeye management and the approaches to Berners Bay will be closed. However, continued fishing along the western shore of Section 15-C may be allowed in order to target pink and chum stocks returning to this area.

As a general guideline, targeting fishing effort on sockeye salmon in Section 15-C will be limited until Chilkat Lake sockeye salmon run strength has been determined and portions of Chilkat Inlet have been opened, based on indications that an adequate escapement of the Chilkat Lake stock is being achieved.

Fall season management will begin in late August or early September depending on the availability of sockeye and chum salmon. A conservative management will be followed during the early weeks of the fall season until chum salmon run strength can be determined. Chilkat Inlet will initially be closed north of Glacier Point. If there is a surplus of late Chilkat river sockeye salmon, short openings within Chilkat Inlet will enable the harvest of late sockeye while avoiding an overharvest of early fall chum returns. As in recent years, the closure of Section 15-C north of the latitude of Point Bridget can be expected in September if inseason evaluation of coho salmon run strength indicates the need for conservation measures to ensure adequate spawning escapement.

TERMINAL HATCHERY FISHERIES

For the 1989 season, special drift gill net terminal area fisheries can be expected in Carroll Inlet, Nakat Inlet and Eastern Passage to harvest salmon returning to Southern Southeastern Regional Aquaculture Association (SSRAA) enhancement facilities and in portions of Blind Slough to harvest salmon returning to the state operated Crystal Lake Hatchery.

Southern Southeast Regional Aquaculture Association Terminal Area Fisheries

The fisheries at Carroll Inlet, Eastern Passage and Nakat Inlet will be managed jointly with SSRAA and according to Board of Fisheries management plans. No common property drift gill net fisheries are expected for the Neets Bay terminal area in 1989. The open areas and tentative open gill net fishing times are as follows:

1. The waters of Carroll Inlet north of Nigelius Point (55°33'30" N. lat.) are tentatively scheduled to be open from 12:00 noon to 12:00 noon on the following dates:
 - Sunday, June 25 - Monday, June 26
 - Friday, June 30 - Saturday, July 1
 - Wednesday, July 5 - Thursday, July 6

2. The waters of Eastern Passage south of 56°24'50" N. lat. and west of 132°06'21" W. long., with all waters of Madan Bay east of a line from the latitude of the channel marker in the narrows to the eastern tip of Channel Island (56°21'48" N. lat., 132°09'24" W. long.) to the navigational light on the northern tip of Channel Island to the southernmost tip of Point Madan (56°22'39" N. lat., 132°09'42" W. long.) are tentatively scheduled to be open from 12:00 noon to 12:00 noon on the following dates:

<ul style="list-style-type: none"> Sun., June 25 - Mon., June 26 Fri., June 30 - Sat., July 1 Wed., July 5 - Thurs., July 6 Mon., July 10 - Tues., July 11 Sat., July 15 - Sun., July 16 Thurs., July 20 - Fri., July 21 Tues., July 25 - Wed., July 26 Sun., July 30 - Mon., July 31 Fri., August 4 - Sat., August 5 Wed., August 9 - Fri., August 10 Mon., August 14 - Tues., August 15 Sat., August 19 - Sun., August 20 	<ul style="list-style-type: none"> Thurs., August 24 - Fri., August 25 Tues., August 29 - Wed., August 30 Sun., Sept. 3 - Mon., Sept. 4 Fri., Sept. 8 - Sat., Sept. 9 Wed., Sept. 13 - Thurs., Sept. 14 Mon., Sept. 18 - Tues., Sept. 19 Sat., Sept. 23 - Sun., Sept. 24 Thurs., Sept. 28 - Fri., Sept. 29 Tues., Oct. 3 - Wed., Oct. 4 Sun., Oct. 8 - Mon., Oct. 9 Fri., Oct. 13 - Sat., Oct. 14
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3. The waters of Nakat Inlet between 54°50' N. lat. and 54°56' N. lat. are tentatively scheduled to be open from 12:00 noon to 12:00 noon on the following dates:

Fri., July 7 - Sat., July 8
Wed., July 12 - Thurs., July 13
Mon., July 17 - Tues., July 18
Sat., July 22 - Sun., July 23
Thurs., July 27 - Fri., July 28
Tues., Aug. 1 - Wed., Aug. 2
Sun., Aug. 6 - Mon., Aug. 7
Fri., Aug. 11 - Sat., Aug. 12
Wed., Aug. 16 - Thurs., Aug. 17
Mon., Aug. 21 - Tues., Aug. 22

Sat., Aug. 26 - Sun., Aug. 27
Thurs., Aug. 31 - Fri., Sept. 1
Tues., Sept. 5 - Wed., Sept. 6
Sun., Sept. 10 - Mon., Sept. 11
Fri., Sept. 15 - Sat., Sept. 16
Wed., Sept. 20 - Fri., Sept. 21
Mon., Sept. 25 - Tues., Sept. 26
Sat., Sept. 30 - Sun., Oct. 1
Thurs., Oct. 5 - Fri., Oct. 6
Tues., Oct. 10 - Wed., Oct. 11

Gill net fishermen are cautioned that the above fishing schedules are tentative and subject to change by inseason modification. Fishermen should check with the department or SSRAA prior to fishing in any of the areas to obtain undated fishery information. This is especially true for Carroll Inlet where the season may need to be adjusted to conserve natural stocks of chum salmon entering the Carroll River. Fishermen are requested to ensure the fish caught in the terminal fisheries are reported correctly on fish tickets. This will enable the accurate documentation of fish taken from the special areas and allow area specific catch sampling.

Crystal Lake Chinook Salmon Terminal Fishery

There are two terminal fishing areas for harvesting chinook salmon returns to the state operated Crystal Lake Hatchery. One at the mouth of Crystal Creek in the Wrangell Narrows portion of District 6 and the other at the mouth of Blind Slough in District 8.

Chinook Salmon

Crystal Lake Hatchery reared chinook salmon will return to both terminal areas in 1989. The return to the District 8 terminal area is expected to be approximately 1,000 fish. None of these fish will be taken for brood stock and all will be available for harvest. Approximately 4,000 chinook salmon are expected to return to the Wrangell Narrows terminal area. As most of these fish will be needed for brood stock, a commercial gill net fishery should not be expected in Wrangell Narrows, unless more chinook return than expected.

The 1989 drift gill net season will begin on Monday, June 12 with a special two day open period in the Blind Slough portion of District 8. Subsequent open periods will be based on the fishing time allowed in the general sockeye salmon fishery and the need to utilize the available surplus chinook salmon. A chinook salmon directed fishery will not occur in Wrangell Narrows until egg take needs are ensured.

Coho Salmon

The Crystal Lake hatchery is anticipating a total adult coho salmon return of approximately 5,000 fish to the hatchery through Wrangell Narrows. These fish will contribute to both the general District 6 and Wrangell Narrows terminal gill net fisheries. Special open periods to harvest these returns can be expected in Wrangell Narrows beginning late August or early September. To minimize conflicts between fishing vessels and other vessels transiting Wrangell Narrows, fishing will be limited to the hours of daylight and length of gill net gear will be limited to 75 fathoms.

Following are Commercial Fisheries contacts regarding this management plan:

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Region I Management Biologist

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Bob DeJong
Area Management Biologist

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Sitka, Alaska 99835
(907) 747-6688

Ray Staska
Area Management Biologist

Box 431
Haines, AK 99827

The following is a list of telephone numbers that may be called during the purse seine 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) 586-3505