

**SOUTHEAST ALASKA DRIFT GILL NET FISHERY
MANAGEMENT PLAN, 1991**



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INTRODUCTION

This management plan provides an overview of the expected salmon run sizes, management issues, and harvest strategies for the Southeast Alaska drift gill net fishery for the 1991 season.

There are approximately 480 limited entry permits in the Southeast Alaska drift gill net fishery. Over 95% are actively fished each year. Drift gill net landings have averaged approximately 1,900,000 salmon annually since 1960. The drift gill net fishery takes an average of 42% of the sockeye, 26% of the chum, 12% of the coho, 5% of the pink and 4% of the chinook salmon harvested in all southeast commercial fisheries combined.

The drift gill net fishery targets primarily on sockeye, pink, and summer chum salmon early in the season, and on coho and fall chum salmon during the fall season. Chinook salmon are usually harvested incidentally, although some targeted chinook salmon fisheries are allowed in terminal hatchery areas in the spring. Currently, there are no directed gill net fisheries for natural stock chinook salmon in Southeast Alaska.

There are five drift gill net fishing areas in Southeast Alaska: District 1 (Tree Point and Portland Canal), District 6 (Prince of Wales), District 8 (Stikine), District 11 (Taku-Snettisham), and District 15 (Lynn Canal). In addition, drift gill net fisheries occur in several terminal areas adjacent to hatchery enhancement facilities. Each of the gill net fisheries is discussed separately in this management plan.

SALMON RETURNS

In the Southeast Alaska region, the Alaska Department of Fish and Game (ADF&G) issues formal preseason return forecasts only for pink salmon and for Lynn Canal (District 15) sockeye salmon. Otherwise, the projected returns of sockeye, chum, and coho salmon presented in this management plan are strictly qualitative and should not be considered as official department forecasts. The return projections are calculated primarily from parent year catch and escapement data and are expressed in terms of probable magnitude of return relative to historic levels.

Average returns of sockeye salmon to the drift gill net fishing areas are expected in 1991. Regionwide returns of natural summer chum salmon stocks are anticipated to be below 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, 11, and

15 gill net fisheries. Overall, returns of coho salmon should be close to average levels. An extremely large pink salmon return of 98,100,000 pink salmon has been predicted for Southeast Alaska in 1991. Subtracting the overall escapement goal of 30,800,000 from the forecasted return, results in a total catch forecast of 67,300,000 pink salmon. This total includes 1,200,000 pink salmon from hatchery returns.

MANAGEMENT APPROACH

The lack of accurate preseason forecasts for salmon runs entering the various drift gill net fishing areas requires a flexible management approach. Thus, this management plan presents only a general outlook of how the season is expected to develop. Some specific management approaches presented here may be altered depending on in-season assessments of salmon run strength. Drift gill net fishermen are encouraged to contact department management staff listed at the end of this plan for more detailed management information.

The primary objectives for the management of the 1991 drift gill net fishery are:

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 quota of 7,600 chinook salmon, exclusive of new Alaska hatchery produced fish [5AAC 33.365. (10)(B)].
5. Minimize, to the extent possible, the interception of salmon destined for locations where weak runs are expected.

Achievement of these management objectives will be accomplished by in-season adjustments of fishing time to control harvests in specific areas in accordance with salmon run strength and timing. Comparisons of current year fishing performance to historical fishing success (i.e., catch-per-unit-effort, or CPUE analysis) is a major component of in-season 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.

Past experience has demonstrated, however, that management of salmon fisheries based only on CPUE analysis can be misleading, especially for mixed-stock fisheries. Therefore, although fishery performance will be important in in-season management, other run strength indicators, when available, will also be utilized. For example, information on spawning escapements, stock separation using scale characteristics, test fishing, observed salmon concentrations or schooling in sanctuary areas, catches from other fisheries, and salmon run timing models will also be utilized 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 in-season management is based on fishery performance, it may become difficult to gauge natural stock run strength if significant numbers of hatchery fish are present in the catch. Where possible, the hatchery component of the catch will be separated when evaluating fishery performance.

Weekly Fishing Announcements

In-season 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

Weekly fishing periods for the drift gill net fisheries can generally be expected to begin at 12:01 p.m. Sunday. An exception is the Southern Southeast Regional Aquaculture Association's (SSRAA) terminal fisheries in Nakat Inlet and Earl West Cove where a rotational harvest plan for drift gill net, seine, and troll fisheries will apply. An additional exception is the Wrangell Narrows and Ohmer Creek terminal hatchery fisheries that will begin on Monday.

U.S./CANADA PACIFIC SALMON TREATY

The U.S./Canada Pacific Salmon Treaty (PST) will influence management of the District 1, 6, 8, and 11 drift gill net fisheries. For the 1991 season, these fisheries will be managed consistent with the provisions of the PST annexes for the transboundary rivers (Taku, Stikine, and Alsek) and the northern boundary area (northern British Columbia and southern Southeast Alaska). The management provisions specified by the PST 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 Alaska's PST obligations.

CHINOOK SALMON CATCH

Existing regulations specify a catch limit of 7,600 chinook salmon (exclusive of Alaska hatchery fish) for the Southeast Alaska drift gill net fishery. The Alaska Board of Fisheries adopted this regulation [5AAC 33.365. (10)(B)] to ensure that the various user groups maintain their recent year share of the total chinook salmon harvest quota specified by the PST.

The need for management measures to comply with the drift gill net harvest quota for chinook salmon will depend on the in-season evaluation of chinook salmon catch rates relative to the 7,600 fish ceiling. The Board of Fisheries has recommended nighttime fishing closures as the primary management measure to restrict the incidental catch of immature, "feeder" chinook salmon. As for past years, early season area closures will be maintained to minimize the incidental harvest of mature, "spawner" chinook salmon returning to the Stikine River in District 8, the Taku River in District 11, and the Chilkat River in District 15.

TREE POINT AND PORTLAND CANAL FISHERY

Introduction

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

1991 Outlook

Sockeye salmon returns to northern British Columbia river systems contribute significantly to the Tree Point drift gill net fishery. Based on parent-year escapements, overall returns to these systems are expected to be average. Returns to Hugh Smith Lake, a local Alaska spawning system, are expected to be below average. Chum salmon returns to natural spawning systems are expected to be below average to most areas, based on parent-year spawning levels and the amount of three-year old chum salmon observed in the harvest and escapement in 1990.

Returns of summer chum, fall chum, and coho salmon to the Nakat Inlet release site of SSRAA should contribute fish to the 1990 District 1 gill net fishery. The 1991 projected returns are approximately 40,000 summer chum, 47,600 fall chum, and 7,000 coho salmon. Peak chum salmon catches from these releases are expected to occur between mid-July and 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. Based on new regulations passed by the Board of Fisheries in February of 1991, the plan will start on the third Sunday in July (July 21). 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 specific management goals for the 1991 District 1 drift gill net fishery are as follows:

1. Manage the fishery in accordance with the Pink Salmon Management Plan (5AAC 33.360).
2. Manage the fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (5AAC 33.361).

The sockeye salmon fishery will be managed in accordance with the PST which 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 128,000 sockeye salmon has occurred in the area affected by the PST from 1985 through 1990.

Management Plan

The Tree Point gill net fishery will initially be open in the waters of Section 1-B for a four-day fishing week beginning at 12:01 p.m., Sunday, June 16. This is the opening date specified by regulation. The duration of subsequent fishing periods, through mid-July, will be based on the strength of sockeye and summer chum salmon returns and fishing effort levels. Sockeye salmon run strength to Canadian and local Alaskan systems will be also be considered.

In the winter of 1991, the Alaska Board of Fisheries passed a new regulation (5AAC 33.332) specifying that during concurrent seine and drift gill net openings in Sections 1-B and 1-F, seine nets may not be in the waters of Section 1-B in a fishing or non-fishing condition. This regulation will be in effect for the 1991 season.

The Section 1-B gill net fishery will be managed according to the Pink Salmon Management Plan, beginning July 21. If the pink salmon run develops as forecasted, it is expected that four to five-day

weekly fishing periods will be allowed from mid-July through late August or early September. As allowed by regulation, a minimum gill net mesh size of six inches may be required, if needed, to protect pink salmon during the fall season.

Beginning in early September, depending on the duration of the pink salmon run, Section 1-B will be managed for the harvest of 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 Special Harvest Area, discussed later in this management plan, is scheduled to be open after this date.

The PST requires that interception of Portland Canal chum salmon be minimized to assure rebuilding of these stocks. In 1991, no fishing in Section 1-A for Portland Canal chum salmon should be expected unless it is determined that a harvestable surplus exists. Any management decision to fish Portland Canal must assume that there is sufficient additional surplus fish to support a Canadian as well as an Alaskan fishery.

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 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 interrelated due to their close proximity, which results in some major stocks being subjected to both fisheries. Two distinct management areas exist within each district. They are the Frederick Sound (Section 8-A) and Wrangell (Section 8-B) portions 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. Terminal hatchery fisheries for harvesting returns to the Crystal Lake (ADF&G) and Earl West Cove (SSRAA) hatchery facilities will be discussed in the "Terminal Hatchery Fisheries" portion of this management plan.

Historical information indicates that Stikine River sockeye salmon stocks represent a major proportion of the fish available in District 8, a small proportion of the fish in Section 6-A, and a very low proportion in Section 6-B, 6-C and 6-D. Management of these fisheries is based on sockeye salmon early, pink salmon in the middle, and coho salmon at the end of the fishing season.

1991 Outlook

The parent year (1986) sockeye salmon spawning escapement at Tahltan Lake was approximately 20,000 fish. This is at the low end of the established escapement goal range of 20,000 to 40,000. However, smolt outmigration abundance was good, and the 1991 return is expected to produce a surplus of Stikine River sockeye salmon for harvest. The preseason forecast for the total return of sockeye salmon to the Stikine River is 115,000, which should produce an allowable harvest of approximately 45,000. Sockeye salmon returns to local Alaskan spawning areas have been average in recent years, but it is difficult to anticipate their production for 1991.

Above-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, pink salmon returns to southern Southeast Alaska are also forecasted to be above average in 1991. Because the District 6 gill net fishery occurs in a major migration corridor, pink salmon destined for other districts will be available at certain times. The return of natural coho salmon stocks is expected to be about average. Coho salmon returns to enhancement facilities are also expected to contribute significantly to these fisheries.

Management Goals

In addition to the general gill net management goals listed previously, the following are specific management goals for District 6 and 8 during 1991:

1. Minimize the interception of mature spawning chinook salmon returning to the Stikine River.
2. Obtain pink salmon spawning escapement goals in District 6 and 7 streams; many of these stocks have been depressed in recent years.
3. Continue to improve sockeye salmon spawning escapement levels to local Alaskan island systems.

4. Manage the District 6 and 8 gill net fisheries 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 (TBR) Annex of the PST. The TBR 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 TBR annex and the conservation of the resource. The 1991 Stikine River sockeye returns should be strong enough to fulfill PST obligations and allow drift gillnetting in District 6 and in District 8.

The general summer sockeye salmon fishing season in both districts can be expected to open on Sunday, June 16 for a 48-hour period. Prior to this date, a terminal chinook salmon fishery will take place outside Ohmer Creek and in Wrangell Narrows as discussed in the hatchery fishery portion of this management plan. After the initial open period, fishing will depend on assessments of the abundance of sockeye salmon stocks in relation to spawning escapement needs and terms of the PST.

Management actions during the sockeye salmon fishing season will be based on analysis of test fishing, CPUE, and stock identification data to determine the availability of Stikine River fish. These stock abundance indicators, along with fishery performance and stock composition data obtained from Canadian commercial, test, and subsistence fisheries, will be incorporated into a Stikine River sockeye salmon management model. This management model will, as the season progresses, be the primary management tool used to estimate the availability of sockeye salmon for harvest by the Alaskan fishery in District 8 and the Canadian in-river fisheries.

Any conservation measures required 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 local Alaskan island systems is determined to be weak, area and time restrictions will be necessary in District 6.

The area adjacent to the Stikine River mouth and other milling areas for Stikine River chinook salmon in District 8, will be closed during the early portions of the sockeye salmon season to reduce the incidental harvest of Stikine River origin chinook salmon. These area restrictions will be maintained during any sockeye salmon directed fishing periods through early July. Portions of District 8 may be opened if the sockeye salmon returns are good and an area can be located that has a low incidence of wild chinook and a high number of hatchery chinook; any open areas will be closely monitored.

Pink salmon should begin entering District 6 in significant numbers by the third or fourth week of July. Early-season pink salmon restrictions (i.e., large mesh gill nets) are not anticipated. The early portion of the pink salmon fishery will be managed primarily on CPUE comparisons. By mid-August, pink salmon destined for local systems will begin to enter the fishery in greater numbers and at that time, management will be based on observed local escapements. If the run strength of the local returns are not evenly dispersed within the district or are weaker than anticipated, area restrictions may be necessary.

The coho salmon season will occur during late August and early-September. Limited directed fishing in terminal areas for coho salmon is anticipated in District 8. Management of the District 6 coho salmon fishery will be based predominantly on wild stock CPUE analysis. The State-operated Crystal Lake Hatchery and the SSRAA facility (Earl West Cove) returns are expected to contribute coho salmon to the District 6 and 8 fisheries. In-season estimates from coded-wire 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.

Regulations allow gillnetting along the Screen Island shore of Section 6-D during the early and late portions of the season. Specifically, this area encompasses those waters of 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 periods when fishing may be allowed are: 1) from the third Sunday in June (June 16) through the last Saturday in July (July 27), and 2) from the second Sunday in September (September 8) 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 salmon during the later part of the season.

1991 Outlook

An above average salmon harvest is anticipated for the 1991 Taku/Snettisham gill net fishery. Returns of sockeye are expected to be about average, while pink, coho, and summer and fall chum salmon returns should be above average. The Snettisham (ADF&G) and Douglas Island Pink And Chum (DIPAC) hatcheries will be the primary contributors of the summer chum salmon return. Additional fishing time can be expected to harvest the Snettisham returns. However, due to broodstock requirements, DIPAC produced chums are only expected to contribute incidentally to the gill net harvest during 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, Port Snettisham, and Stephens Passage streams, while harvesting those fish in excess of escapement needs.
2. Minimize, to the extent practical, the incidental harvest of chinook salmon.
3. Manage the fishery consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (5AAC 33.361).
4. Maximize the harvest of Limestone Inlet and Speel Arm summer chum returns while minimizing incidental harvest of Port Snettisham sockeye salmon.

Management Plan

Section 11-B will initially open for a 72-hour period on the third Sunday of June (June 16) to harvest sockeye salmon. The strength of the sockeye salmon return will be evaluated from fishery CPUE data and from weekly escapement estimates derived from the ADF&G Taku River fish wheel tagging and recovery project at Canyon Island. Subsequent weekly fishing periods will be based on in-season evaluation of run strength.

As specified in the PST, the Canadian in-river gill net fishery is allocated 18% of the total allowable catch (TAC) of sockeye salmon originating from the Canadian portion of the Taku River. In addition, the Canadian fishery is 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 and coho fisheries. Analysis of CPUE, fishwheel tag recovery, and scale pattern data will be used to manage the District 11 gill net fishery consistent with the PST.

To minimize the harvest of mature chinook salmon, Taku Inlet will be closed north of the latitude of Jaw Point only during the first week but 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.

In recent years, large incidental catches of immature chinook during the early portion of the summer fishery have necessitated nighttime fishing closures. If this problem persists night closures can be expected again in 1991.

In order to avoid gear conflicts and potential gill net loss, gill net fisheries in Districts 11 and 15 will not be open concurrent with the Golden North Salmon Derby. Consequently, during statistical week 33, the gill net fisheries in Districts 11 and 15 will not open until Monday, August 5.

Conservation of Port Snettisham sockeye salmon returns will again be necessary in 1991 to rebuild escapements of these stocks to historic levels. To accomplish this and to provide protection for Snettisham Hatchery chinook salmon brood stock, Port Snettisham will be closed inside a line from Point Amner to Point Styleman through approximately August 17, except during a possible Snettisham Hatchery terminal chum salmon fishery.

Chum salmon returning to the Port Snettisham and DIPAC hatcheries are expected to contribute a significant portion of the District 11 drift gill net harvest of summer chum salmon. Common property harvest of the DIPAC summer chum salmon return will likely be limited to incidental catches during the conduct of the targeted sockeye fishery, because the majority of the projected return of (250,000 fish) will be needed for hatchery broodstock and cost recovery. The Snettisham Hatchery expects approximately 70,000 chum salmon to return to the remote release site at Limestone Inlet and 40,000 chum salmon to return to the hatchery facility in Speel Arm. These returns are not required for brood stock and all will be available for harvest.

In order to optimally harvest Snettisham Hatchery chum salmon returns and to protect depressed Port Snettisham sockeye salmon returns, the department will initiate a 6-inch minimum mesh size restriction in portions of section 11-B from June 30 until approximately July 27 in Stephens Passage south of Circle Point. In addition, terminal area openings will be allowed at the upper end of Speel Arm, again with a

6-inch minimum mesh size restriction. Fishing time will be based on the abundance of chum salmon and the magnitude of incidental catches of sockeye salmon.

Directed gill net management for harvesting Taku River and upper Stephens Passage pink salmon stocks is not anticipated in Section 11-B. Pink salmon will be harvested incidentally to the sockeye and chum salmon fishery, north and south of Circle Point, respectively. Fishing time for pink salmon in Section 11-C will depend on the strength of returns to streams in lower Stephens Passage, Seymour Canal, and the northern portions of District 10. Based on preseason forecasts, openings can be expected in Section 11-C as early as June 30; these openings will be contingent upon the seine openings in the northern portion of District 10 and Seymour Canal which target similar pink salmon stock units.

Beginning in mid-August, the Taku/Snettisham gill net fishery will switch to fall management. Fishing time and area will then depend on the run strength of the fall chum and coho salmon stocks. In-season management will be based on evaluation of catch, effort, and CPUE relative to historical levels and on coho salmon catch and escapement estimates obtained from the Taku River fish wheel project.

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.

1991 Outlook

Sockeye escapements through the Chilkat Lake Weir during the 1986 parent year (age-5 fish), totaled 24,000, the lowest on record. The age-6 component (normally 38% of the run) will return from a parent escapement in 1985 of 58,000. As a result, a below average return of sockeye salmon is expected to the Chilkat River in 1991, particularly during the early portion of the season. In contrast, the return of sockeye salmon to the Chilkoot River is expected to be above average. The 1986 parent-year escapement was 88,000 spawners and environmental conditions in Chilkoot Lake appeared favorable for survival.

Chum salmon harvests in Lynn Canal during the 1987 parent year totaled approximately 388,000 salmon, the fourth highest harvest on record. Parent-year chum salmon escapements were average in the Takahin and Klehini Rivers and tributaries, and resultant production from these areas should be good. Mainstem Chilkat River chum salmon index counts were about average, and the 1991 fall chum salmon run strength is expected to be average or above. The dramatic decline in run strength during the previous two seasons however, suggests a cautious outlook for 1991.

Coho salmon landings during the 1987 parent-year totaled 53,000 salmon, well below recent year averages. Escapement levels of coho salmon to major index systems, including Chilkoot Lake, Chilkat Lake, and the Berners River were all well below average and above average returns are not anticipated in 1991.

Management Goals

Specific management goals for the 1991 Lynn Canal drift gill net fishery are as follows:

1. Obtain an escapement count of between 53,000 and 92,000 sockeye salmon at the Chilkoot Lake Weir. The escapement objective for the early stock is approximately 22,000 fish prior to week 29 (about July 12), and 40,000 fish for the late stock.
2. Obtain an escapement count of between 52,000 and 106,000 sockeye salmon through the Chilkat Lake Weir. The escapement objective for the early stock is approximately 18,000 fish through week 33 (about August 15), and 48,000 for the late stock.
3. Provide for sufficient chum and coho salmon spawning escapements to the Chilkat, Chilkoot, and Berners Rivers and other Lynn Canal systems, while harvesting those fish in excess of escapement needs.
4. Minimize, to the extent practical, the incidental harvest of chinook salmon.

Management Plan

The 1991 Lynn Canal gill net fishery will open on Sunday, June 16, for a 48-hour fishing period. The open area will include portions of both Sections 15-A and 15-C.

During the initial fishing period, waters of Section 15-A will be open south of the northern tip of Sullivan island in order to provide additional protection for mature Chinook salmon returning to Chilkat River this season. Area closures to protect mature Chinook will continue through July 15. Chilkat Inlet and Chilkoot Inlet south of the latitude of Mud Bay Point can be expected to remain closed until Chilkat River sockeye salmon strength can be determined.

Beyond the initial week, gill net fishing time and area adjustments will be made according to stock-specific catch and escapement results. Management will be based on CPUE analysis, stock composition from scale sampling, weir counts, and test fishing. Total run forecast models for each specific sockeye salmon stock will be utilized to track the weekly run strength and help gauge the exploitation rate required to achieve escapement objectives.

As a general guideline, targeted fishing effort on Chilkoot and Chilkat Lake sockeye salmon will not be conducted in Section 15-C unless good run strength is demonstrated for both salmon runs. Section 15-B will remain closed during the initial weeks of the season, until Berners Bay salmon stock strength can be better assessed. Portions of Section 15-C will be opened on an experimental basis to evaluate the availability of hatchery summer chum salmon stocks. Approximately 40,000 hatchery-produced chum salmon are expected to return to the Boat Harbor remote release site in 1991 and special openings along the western shoreline of Section 15-C, including extended fishing time, are planned to optimize the harvest of these fish. During July, additional portions of Section 15-C may be opened to target wild stock summer chum and pink salmon stocks returning to local streams. Following the period of peak availability of summer chum and pink salmon stocks, the fishery will return to sockeye salmon management and migratory approaches to Berners Bay may be closed. However, continued fishing along the western shoreline of Section 15-C may be allowed to target effort on Boat Harbor hatchery chum salmon and returns of local wild stocks of pink and chum salmon.

Fall season management will begin in late August or early September, depending on the availability of sockeye and chum salmon. A conservative management approach will be followed during the early weeks of the fall season until chum salmon run strength can be adequately assessed. Chilkat Inlet will initially be closed north of Glacier Point. A 6-1/4 inch minimum gill net mesh restriction may be employed during the fall season to allow fishing for chum salmon if sockeye salmon escapements are below desired levels.

Management of Section 15-C during the fall season will be based on chum and coho salmon run strength and fishing effort levels. If it becomes necessary to provide protection for Berners River coho salmon, gillnetting will be restricted in Section 15-C. The degree of the restriction will be based on the in-season assessment of the coho salmon run. Closures in the immediate vicinity of Berners Bay will be considered as the initial conservation measure.

TERMINAL HATCHERY FISHERIES

For the 1991 season, special drift gill net terminal area fisheries can be expected in Nakat Inlet and Earl West Cove (Eastern Passage) to harvest salmon returning to SSRAA enhancement facilities and in portions of Blind Slough to harvest salmon returning to the Crystal Lake Hatchery (ADF&G). No common property drift gill net fisheries are expected in Neets Bay or Carroll Inlet terminal areas during 1991. At the 1991 meeting of the Board of Fisheries the board adopted a Deep Inlet terminal harvest management plan, however, the expected returns will be needed for cost recovery and a common property fishery is not likely for 1991.

Southern Southeast Regional Aquaculture Association Terminal Area Fisheries

The terminal hatchery fisheries at Earl West Cove (Eastern Passage) and Nakat Inlet will be managed jointly with SSRAA and according to Board of Fisheries management plans. The open areas and tentative open gill net fishing times are as follows:

1. The waters of Eastern Passage south of 56°24'50" N. latitude and west of 132°06'21" W. longitude, 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. latitude, 132°09'24" W. longitude) to the navigational light on the northern tip of Channel Island to the southernmost tip of Point Madan (56°22'39" N. latitude, 132°09'42" W. longitude) are tentatively scheduled to be open from 12:00 noon to 12:00 noon on the following dates:

Wednesday, June 19	-	Thursday, June 20
Monday, June 24	-	Tuesday, June 25
Friday, June 28	-	Saturday, June 29
Monday, July 1	-	Tuesday, July 2
Thursday, July 4	-	Friday, July 5
Sunday, July 7	-	Monday, July 8
Wednesday, July 10	-	Thursday, July 11
Saturday, July 13	-	Sunday, July 14
Tuesday, July 16	-	Wednesday, July 17
Friday, July 19	-	Saturday, July 20
Monday, July 22	-	Tuesday, July 23
Thursday, July 25	-	Friday, July 26

Sunday, July 28	-	Monday, July 29
Wednesday, July 31	-	Thursday, August 1
Saturday, August 3	-	Sunday, August 4
Tuesday, August 6	-	Wednesday, August 7
Friday, August 9	-	Saturday, August 10
Monday, August 12	-	Tuesday, August 13
Thursday, August 15	-	Friday, August 16
Sunday, August 18	-	Monday, August 19
Wednesday, August 21	-	Thursday, August 22
Saturday, August 24	-	Sunday, August 25
Tuesday, August 27	-	Wednesday, August 28
Friday, August 30	-	Saturday, August 31
Wednesday, September 4	-	Thursday, September 5
Monday, September 9	-	Tuesday, September 10
Saturday, September 14	-	Sunday, September 15
Thursday, September 19	-	Friday, September 20
Tuesday, September 24	-	Wednesday, September 25
Sunday, September 29	-	Monday, September 30
Friday, October 4	-	Saturday, October 5

2. The waters of Nakat Inlet between 54°50' N. latitude and 54°56' N. latitude are tentatively scheduled to be open from 12:00 noon to 12:00 noon on the following dates:

Thursday, July 19	-	Friday, July 20
Tuesday, July 24	-	Wednesday, July 25
Sunday, July 29	-	Monday, July 30
Friday, August 3	-	Saturday, August 4
Wednesday, August 8	-	Thursday, August 9
Monday, August 13	-	Tuesday, August 14
Saturday, August 18	-	Sunday, August 19
Thursday, August 23	-	Friday, August 24
Tuesday, August 28	-	Wednesday, August 29
Sunday, September 2	-	Monday, September 3
Friday, September 7	-	Saturday, September 8
Wednesday, September 12	-	Thursday, September 13
Monday, September 17	-	Tuesday, September 18
Saturday, September 22	-	Sunday, September 23
Thursday, September 27	-	Friday, September 28

Tuesday, October 3 - Wednesday, October 4
Sunday, October 7 - Monday, October 8

Gill net fishermen are cautioned that the above fishing schedules are tentative and subject to change depending on in-season assessments of run strength. Fishermen should check with ADF&G or SSRAA prior to fishing in any of the areas to obtain updated fishery information. 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 sampling of the catch for coded micro-wire tagged fish.

Crystal Lake Hatchery Chinook and Coho Salmon Terminal Fishery

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

Crystal Lake hatchery-reared chinook salmon will return to both terminal areas in 1991. The return to the District 8 terminal area is expect to be approximately 750 adults. None of these fish will be taken for brood stock and all will be available for harvest. Approximately 12,000 chinook salmon are expected to return to the Wrangell Narrows terminal area, with approximately 6,000 of these fish being surplus to the hatchery brood stock needs. A limited gill net fishery will be conducted in Wrangell Narrows to harvest a portion of the Crystal Lake chinook. The fishery will open on Monday, June 3 with a one-day open period. Subsequent one day openings are expected to occur on each Monday through June 24. However, open fishing periods will depend upon the egg take needs of the hatchery and the availability of surplus chinook. To minimize conflicts between fishing vessels and other vessels traveling Wrangell Narrows, fishing will be limited to the daylight hours and the length of gill net gear will be limited to 75 fathoms.

The Ohmer Creek portion of District 8 will open on Monday, June 3, with a two-day open period. Subsequent open periods will be based on the fishing time allowed in the directed sockeye salmon fishery and the availability of surplus chinook salmon.

The coho salmon return to the Crystal Lake hatchery is forecasted to produce 2,000 fish available for terminal area commercial harvest in Wrangell Narrows. A limited number of one-day open periods to harvest these returns can be expected in Wrangell Narrows beginning in mid- to late-August. As stated above, fishing time will be limited to daylight hours and the length of gill net gear will be limited to 75 fathoms.

Following are Commercial Fisheries contacts regarding this management plan:

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(907) 772-3801

Bob DeJong
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Sitka, AK 99835
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Randy Timothy
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Wrangell, AK 99929
(907) 874-3822

Ray Staska
Area Management Biologist
P.O. Box 431
Haines, AK 99827
(907) 766-2830

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

Ketchikan	-	(907) 225-6870
Petersburg	-	(907) 772-3700
Sitka	-	(907) 747-5022
Juneau	-	(907) 586-3505

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau AK 99811-5526

U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G, Division of Commercial Fisheries, P.O. Box 115526, Juneau AK 99811-5526 (907)465-4210.