

1990 MANAGEMENT PLAN  
SOUTHEAST ALASKA DRIFT GILL NET FISHERY



Regional Information Report No. 1J90-09

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

June 1990

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## INTRODUCTION

This management plan provides an overview of the expected salmon run sizes, management issues, and harvest strategies for the 1990 Southeast Alaska drift gill net fishery. Department staff listed at the end of this plan are available to provide further information and answer questions.

There are approximately 480 limited entry permits in the Southeast Alaska drift gill net fishery. A substantial majority (greater than 95%) 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, these catches have represented an average of 42% of the total Southeast Alaska Region commercial sockeye salmon harvest, 26% of the chum, 12% of the coho, 5% 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; and District 15, Lynn Canal. Additionally, drift gill net fisheries occur in several terminal areas adjacent to enhancement sites.

The salmon species harvested, timing of runs, management problems, and 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 magnitude relative to historic catches.

Overall, sockeye salmon runs entering the drift gill net fishing areas are expected to be above average for the 1990 season. Region wide returns of natural summer chum salmon are anticipated to be below average. 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 1990 pink salmon forecast indicates that approximately 9.6 million fish will be available for harvest by all gear types.

## MANAGEMENT APPROACH

The lack of accurate preseason 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 in-season assessments of salmon run strength. Gillnetters are encouraged to contact the department staff, listed at the end of this plan, for more detailed management information.

The primary objectives for the management of the 1990 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 in-season 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 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. 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 in-season management process, other run strength indicators, will be utilized when available. 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. Additionally, salmon run timing models are used to assist in-season run strength assessments.

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 included in the catch. Where possible, the hatchery component of the catch will be accounted for 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*

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 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 1990 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.

## 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 taking management measures to ensure the drift gill net catch quota for chinook salmon is not exceeded will depend on the in-season evaluation of catch rates relative to the catch ceiling. The Board of Fisheries has recommended nighttime 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 in Districts 8, 11, and 15.

## 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.

### *1990 Outlook*

Sockeye salmon returns to Canadian systems, which contribute significant numbers of fish to the Tree Point drift gill net fishery, are expected to be above average, based on parent year escapements. Returns to Hugh Smith Lake, a local U.S. spawning system, are expected to be strong enough to meet minimum spawning escapement goals. Chum salmon returns to natural spawning systems are expected to be above average to most areas, based on parent year spawning levels.

Returns of summer chum, fall chum, and coho salmon to the Nakat Inlet release site of the Southern Southeast Alaska Regional Aquaculture Association (SSRAA) are expected to contribute fish to this gill net fishery. The 1990 projected returns are approximately 75,000 summer chum, 62,500 fall chum,

and 3,000 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 (5 AAC 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 regulations, the plan will start on the second Sunday in July (July 8). 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 additional specific management goals for the 1990 District 1 drift gill net fishery:

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

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 137,000 sockeye salmon has occurred in the area during the treaty period from 1985 through 1989.

## *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 17. 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 and Alaskan systems will be considered.

If the return develops as expected, area closures used in 1987 and 1988 to protect Hugh Smith Lake returns will not be necessary this summer.

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 from two to four-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 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.

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 1990, 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, 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) portion 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.

### *1990 Outlook*

The parent year (1985) sockeye salmon spawning escapement at Tahltan Lake was approximately 67,000 fish. This is above the established escapement goal range from 20,000 to 40,000 sockeye salmon. The pre-season forecast for the total return of sockeye salmon to the Stikine River is 94,000 fish. This should produce an allowable harvest of approximately 34,000 sockeye salmon. Sockeye salmon returns to local Alaskan spawning areas have been increasing in recent years, but it is difficult to anticipate their production for 1990.

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 will be available at certain times of the year.

The return of natural coho salmon stocks is expected to be about average. 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 previously, the following are specific management goals for Districts 6 and 8 during 1990:

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

The 1990 Stikine River sockeye returns should be strong enough to fulfill treaty obligations and allow drift gillnetting in District 6 and perhaps even 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 17, for a 48-hour period. Prior to this date, a special terminal hatchery fishery will take place in the Ohmer Creek portions of District 8, as discussed in the hatchery fishery portion of this management plan. After 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.

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 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 any 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 the need to use only large mesh gill nets, 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 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.

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. 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.

To harvest surplus hatchery coho in District 6 while avoiding overharvest of wild stocks, fishing time may be restricted in early September and increased in mid-to-late September. 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, 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 17) through the last Saturday in July (July 28) and 2) from the second Sunday in September (September 9) 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.

### *1990 Outlook*

An average overall Taku/Snettisham gill net harvest is expected in 1990. Returns of sockeye are expected to be above average. Coho salmon returns to the Taku River are expected to be average while a below average return of fall chum salmon is expected. The early run of Taku River pink salmon is expected to be weak while the later pink salmon returns to Stephens Passage systems are expected to be near 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 additional 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 40,000 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 (5 AAC 33.361).

## *Management Plan*

Section 11-B will initially open for a 72-hour period on the third Sunday of June (June 17) 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 in-season evaluation of run 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 chinook and chum salmon brood stock, Port Snettisham will be closed inside a line from Point Amner to Point Styleman through approximately August 18.

As specified in the U.S./Canada Pacific Salmon Treaty, a harvest allocation to Canada of 18% of the total allowable sockeye catch originating from 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 and coho fisheries. Fishery performance as well as the Canyon Island fish wheel adult tagging and recovery project and scale pattern analysis of District 11 catches will provide information for 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 Sections 11-B or 11-C. 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.

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. DIPAC expects a return of 240,000 chum salmon, all of which will be needed to meet hatchery brood stock and cost recovery needs. Approximately 40,000 chum salmon will be needed to meet brood stock needs for the Snettisham hatchery. Because fewer than 40,000 chums are expected to return to Snettisham, portions of the Limestone Inlet shoreline will be closed. The Port Snettisham chum salmon test fishery will be implemented again this year to provide a hatchery chum escapement index.

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 magnitude of the developing run strength of the fall chum salmon and coho salmon stocks. In-season 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 in-season management information.

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. If high catches of immature chinook salmon are apparent it may be necessary to implement nighttime fishery closures.

## 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, beginning in mid-June, while chum and coho salmon dominate the catch from late August through the end of the season, which may be as late as early October.

### *1990 Outlook*

Escapements through the Chilkat Lake weir totaled 115,269 and 57,724 during the 1984 and 1985 parent years; the Chilkat Lake sockeye runs are normally composed of 59% five-year-old and 38% six-year-old fish. Parent year escapement through Chilkoot Lake weir totaled 69,026 in 1985; most Chilkoot Lake sockeye salmon return after five years. Escapement levels of the early returning stocks to both systems were low during the parent cycle. Therefore, early season run strength during 1990 is expected to be weak. Returns of late segment Chilkoot and Chilkat sockeye are expected to be above average, based on good parent year escapement and survival rates in recent years.

Chum salmon harvests during the 1986 parent year totaled approximately 372,000 salmon, the fourth highest in the past ten years. Parent year chum salmon escapement surveys indicated below normal numbers of chum spawners in the Klehini River and tributary spawning areas. Escapement surveys in main-channel Chilkat River spawning areas were hampered due to poor visibility. In general, the fall chum salmon run is expected to return in average strength.

Coho salmon landings during the 1986 parent year totaled over 81,400 salmon, the second highest in ten years. Coho salmon escapement surveys during 1986 were not completed in most Lynn Canal index areas, although Berners River escapement numbers were well below average. Overall, average returns of coho salmon are expected to Lynn Canal systems in 1990.

### *Management Goals*

Specific management goals for the 1990 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 escapement objective for the early stock is approximately 20,000 fish prior to week 29 (about July 12th). The management intent for the late stock is to achieve approximately 50,000 spawners.
2. Obtain an escapement count of between 45,000 to 85,000 spawners through Chilkat weir. A wider range is set for Chilkat Lake due to a less precise management system. The escapement objective for the early stock is approximately 18,000 fish through week 33 (about August 15) and 47,000 from the late stock thereafter.

### *Management Plan*

The 1990 Lynn Canal gill net fishery will open on Sunday, June 17, for a 48-hour fishing period. The open area will include portions of both Sections 15-A and 15-B.

During the initial fishing periods in Section 15-A, the fishery can be expected to be limited to the waters south of the southern tip of Talsani Island. The waters north of Talsani Island will be closed to provide protection for mature chinook salmon returning to the Chilkat River and to prevent excessive incidental harvest of early run sockeye salmon in the terminal areas. In subsequent weeks, protection for Chilkat River chinook salmon will be limited to closures in the waters of Chilkat Inlet.

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 catch rate analysis, stock composition from scale sampling, weir counts, observations of fish buildups, and limited test fishing. Total run forecast models for each specific sockeye 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 Lake and Chilkat Lake sockeye salmon will not be conducted in Section 15-C until good run strength is demonstrated for both salmon runs. During the initial week of the season, Section 15-B will be open for a two-day period in the waters south of the latitude of Point St. Mary to assess sockeye salmon run strength to Berners Bay. Portions of Section 15-C may be opened during subsequent weeks depending on the Berners Bay sockeye and chum run strengths and the need to minimize the catch of upper Lynn Canal sockeye salmon stocks.

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. Following the peak availability of summer chum and pink salmon stocks, the fishery will return to sockeye management and the approaches to Berners Bay may 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.

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 determined. Chilkat Inlet will initially be closed north of Glacier Point. If there is a surplus of late Chilkat River sockeye salmon, very short openings within Chilkat Inlet will provide additional harvest of late sockeye while minimizing the harvest of early fall chum.

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 indications of 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 1990 season, special drift gill net terminal area fisheries can be expected in Nakat Inlet and Eastern Passage to harvest salmon returning to Southern Southeast Regional Aquaculture Association (SSRAA) enhancement facilities and in portions of Blind Slough to harvest salmon returning to the state-operated Crystal Lake Hatchery. No common property drift gill net fisheries are expected in Neets Bay or Carroll Inlet terminal areas during 1990.

### *Southern Southeast Regional Aquaculture Association Terminal Area Fisheries*

The fisheries at 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, including 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 27	-	Thursday June 28
Monday July 2	-	Tuesday July 3
Saturday July 7	-	Sunday July 8
Thursday July 12	-	Friday July 13
Tuesday July 17	-	Wednesday July 18
Sunday July 22	-	Monday July 23
Friday July 27	-	Saturday July 28
Wednesday August 1	-	Thursday August 2
Monday August 6	-	Tuesday August 7
Saturday August 11	-	Sunday August 12
Thursday August 16	-	Friday August 17
Tuesday August 21	-	Wednesday August 22
Sunday August 26	-	Monday August 27
Friday August 31	-	Saturday September 1
Wednesday September 5	-	Thursday September 6
Monday September 10	-	Tuesday September 11
Saturday September 15	-	Sunday September 16

Thursday	September 20	-	Friday	September 21
Tuesday	September 25	-	Wednesday	September 26
Sunday	September 30	-	Monday	October 1
Friday	October 5	-	Saturday	October 6

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 2	-	Wednesday	October 3
Sunday	October 7	-	Monday	October 8

Gill net fishermen are cautioned that the above fishing schedules are tentative and subject to change by in-season assessment of run strength. Fishermen should check with the department 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-wire tagged fish.

*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 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 1990. The return to the District 8 terminal area is expected to be approximately 200 fish. None of these fish will be taken for brood stock and all will be available for harvest. Approximately 5,600 chinook salmon are expected to return to the Wrangell Narrows terminal area, with approximately 800 of these being available for commercial harvest. 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 and egg take needs are ensured.

The Ohmer Creek portion of District 8 will open on Monday, June 11, 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 3,700 fish available for terminal area commercial harvest in Wrangell Narrows. Special open periods to harvest these returns can be expected in Wrangell Narrows beginning in late August or early September. To minimize conflicts between fishing vessels and other vessels traveling Wrangell Narrows, fishing will be limited to the hours of daylight and length of gill net gear will be limited to 75 fathoms.

## FISHERY CONTACTS

Following are Commercial Fisheries contacts regarding this management plan:

Scott Marshall  
Region I Supervisor

P.O. Box 20  
Douglas, Alaska 99824  
(907) 465-4250

Paul Larson  
Region I Management Biologist

P.O. Box 20  
Douglas, Alaska 99824  
(907) 465-4250

Don Ingledue  
Area Management Biologist

P.O. Box 20  
Douglas, Alaska 99824  
(907) 465-4250

Phil Doherty  
Area Management Biologist

2030 Sea Level Dr., Ste. 205  
Ketchikan, Alaska 99901  
(907) 255-5195

William Bergmann  
Area Management Biologist

Box 667  
Petersburg, Alaska 99833  
(907) 772-3801

Randy Timothy  
Assistant Area Management Biologist

Box 200  
Wrangell, Alaska 99929  
(907) 874-3822

Bob DeJong  
Area Management Biologist

Box 510  
Sitka, Alaska 99835  
(907) 747-6688

Ray Staska  
Area Management Biologist

Box 431  
Haines, AK 99827  
907 766-2830

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

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**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, Sport Fish Division, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907)267-2375.