

1989 MANAGEMENT PLAN
SOUTHEAST ALASKA AND YAKUTAT TROLL FISHERY



Regional Information Report No. 1J89-14

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

May 1989

INTRODUCTION

This plan provides an overview of the approach that will be used to manage the 1989 Southeast Alaska commercial troll salmon fishery. This management plan may need to be refined and modified during the season as information on run strength and fishery performance becomes available. However, this current plan should assist fishermen and processors in general pre-season planning. A special summary of 1989 regulations entitled "1989 Alaska Salmon Troll Regulation Guide" and the 1989 Finfish Regulation Booklet are also available at local Fish and Game offices. Addresses and phone numbers of ADF&G offices are provided at the end of the plan.

The general dates for the 1989 trolling season are as follows:

1. Winter Season: October 1, 1988 through April 14, 1989.
2. Special June Hatchery Chinook Salmon Access Seasons: June 5 through 7, and June 21 through 23 provided that the 25,000 non-hatchery catch limit established by the Board of Fisheries for the June 5-7 period is not exceeded.
3. Experimental Troll Fisheries: June 5 through June 29 during weeks without hatchery access openings except for the Carroll Inlet and Wrangell Narrows terminal areas.
4. General Summer Season: July 1 through September 20.
 - A. The summer troll chinook season will close when the established chinook harvest ceiling is reached. The closure is expected to occur sometime during the period July 12-20 depending on actual chinook abundance and fishery performance.
 - B. A seven to 14 day regionwide closure will be implemented for coho conservation beginning in late July if the projected coho run strength is below the 1980-88 average and movement of coho along migratory paths toward inside areas is not sufficient to ensure adequate spawning escapements.
 - C. A regionwide troll closure of approximately 10 days will be implemented during mid-August if either conservation or allocation criteria established by the Board of Fisheries for coho salmon are not being met. The likelihood of a troll closure during mid-August to meet Board allocation criteria will be reduced if a late July coho conservation closure has been implemented.
 - D. Other inseason time/area regulations will be implemented as needed for coho conservation.

MANAGEMENT SYSTEM

The commercial troll fishery in the Southeast Alaska Region, occurs in waters under both state and federal jurisdiction east of the longitude of Cape Suckling. All other waters of Alaska, including the Economic Exclusive Zone (EEZ) west of Cape Suckling, are closed to commercial salmon trolling.

The Alaska Board of Fisheries promulgates fishing regulations for State waters, while the U.S. Secretary of Commerce establishes regulations for the EEZ. The Board of Fisheries and the North Pacific Fishery Management Council coordinate state and federal regulations to ensure that compatible management measures are employed to the greatest extent possible. Although less than 10 percent of the troll chinook and coho salmon catch is normally reported from outer coastal areas beyond three miles of the

surflines, which constitute the federal EEZ waters, coordination of state and federal regulations is required to minimize confusion for trollers fishing both areas.

An annual, all-gear chinook catch ceiling is established for Southeast Alaska commercial and recreational fisheries, as well as other coastal fisheries, by the United States and Canada through the Pacific Salmon Commission. Allocation of the allowable all-gear chinook catch in Southeast Alaska between gear types is established by the Board of Fisheries.

Management of Alaska's commercial fisheries is based on policies and regulations promulgated by the Board of Fisheries. Authority to issue in-season emergency orders to adjust fishing seasons and areas as required to achieve conservation objectives is delegated through the Commissioner of the Alaska Department of Fish and Game (ADF&G) to department fisheries management biologists. This provides the necessary flexibility to regulate fisheries in response to in-season assessment of resource availability. A similar system exists in the federal management agency, where the National Marine Fisheries Service has authority to institute in-season regulatory changes.

The widespread and complex nature of the troll fishery necessitates a closely coordinated management program. Inseason management is accomplished through a team led by the Southeast Regional Management Biologist and includes the Region's Troll Fishery Management Biologist, the five Area Management Biologists, and the Region's senior Biometrician. Names and work locations of people to contact concerning commercial troll fishery management are listed at the end of this management plan.

SALMON STOCKS

The Southeast Alaska commercial troll fishery targets primarily on chinook and coho salmon. While limited directed trolling occurs for other salmon species in certain localized areas, pink, chum and sockeye salmon catches are considered incidental to the taking of the two primary target species and will not be addressed in this plan. The troll fishery normally accounts for 80%-90% of the chinook salmon and 50%-75% of the coho salmon taken in Southeast Alaska Region fisheries.

Chinook Salmon

Native chinook salmon stocks occur throughout Southeast Alaska and Yakutat area rivers. Chinook salmon spawn primarily in large mainland rivers and their tributaries, the most important of which are the Asek, Taku, Stikine, (the transboundary rivers) and the Behm Canal rivers. In total, 34 systems in the region are known to produce runs of chinook salmon. The stocks are nearly all "spring type", in that mature adults enter spawning streams during the spring and early summer months. After emergence the following spring, juveniles rear in freshwater one complete year before their seaward migration.

Several age classes of mature spawners and immature chinook salmon are harvested by the troll fleet during any one fishing season. A minimum size limit of 28 inches (measured from tip of snout to tip of tail) applies to chinook salmon harvested by troll gear.

The long term management approach for Southeast Alaska and transboundary river chinook salmon stocks includes a 15-year stock rebuilding program begun in 1981. In addition, a 15-year coastwide natural chinook stock rebuilding program, initiated in 1985 under the Pacific Salmon Treaty is expected to improve the status of many non-Alaskan chinook stocks which contribute to Southeast Alaska fisheries.

Current information indicates that a majority of the chinook presently harvested in the Alaska troll fishery are produced from spawning streams and hatcheries in Canada and the Pacific Northwest. Management of these stocks is coordinated on a coastwide basis through the Pacific Salmon Commission.

Chinook salmon escapements to most Southeast Alaska and trans-boundary river systems have increased substantially since the rebuilding program for these stocks was initiated in 1981. This has been primarily the result of regionwide, spring and early summer trolling closures since 1981, and continuation of extensive troll, net and sport fishery restrictions implemented during the mid-1970s in inside waters and terminal areas. Shortened troll chinook seasons resulting from catch ceilings imposed since 1985 under the Pacific Salmon Treaty for coastwide natural chinook stock rebuilding have further reduced troll harvest of Southeast Alaska and transboundary river chinook stocks. Spawning escapements to indicator chinook stocks in Behm Canal in the southern portions of the region have met management goals during the past several years. However, rebuilding progress for chinook stocks in the central and northern portions of the region has been more variable.

Production of chinook salmon by Southeast Alaska hatcheries was relatively small prior to the mid-1980s but is now contributing significantly to Southeast Alaska fisheries. The projected 1989 Alaskan hatchery contribution to common property, mixed stock fisheries is 51,000 fish. Future hatchery production is expected to increase substantially.

Coho Salmon

Most coho salmon harvested in the troll fishery are of Alaskan origin. Coho salmon occur in approximately 2,000 anadromous fish streams in the Southeast Alaska Region and spawn during the fall and early winter months. There is no minimum size limit for coho salmon.

Coho salmon stocks, which were depressed in the mid to late 1970s, improved through 1986. Coho salmon returns for 1987 were about one-half of the 1986 return and were especially weak in southern Southeast Alaska. In 1988, coho salmon returns were below those experienced in 1987, and were again very weak in the southern portions of the region. Coho returns appeared to be near normal in the northern portions of the region. Returns of the Yakutat area were at near record levels in 1988.

Coho escapements to some index systems have been quite variable in recent years. During the past two years, escapements were generally below average in southern portions of the region. While information on status of specific coho stocks is limited, recent escapement patterns have raised concerns for potential coho conservation problems. A detailed report on the status of coho salmon stocks in Southeast Alaska is available upon request. Coho returns and inseason indicators of coho escapements are being monitored more closely to determine if additional conservation actions are required.

Although Southeast Alaska hatchery coho production has increased since the early 1980s, hatchery production was weak in 1988. For the 1989 season a return of approximately 500 to 600 thousand hatchery produced coho salmon is projected. However, because of poor ocean survival hatchery coho production during the past two years has been substantially below projections.

CHINOOK SALMON MANAGEMENT

New management and regulatory approaches have been required for the troll fishery in recent years in response to: (1) implementation of a rebuilding program for Southeast Alaska chinook stocks; (2) implementation of the Pacific Salmon Treaty including establishment of annual chinook catch ceilings as part of a coastwide natural stock rebuilding program; and (3) increased production and availability of Alaska hatchery chinook salmon.

General chinook management goals for the Southeast Alaska troll fishery include:

1. Achieve the chinook salmon harvest allowable under the Pacific Salmon Treaty.

2. Provide for maximum harvest of new Alaska hatchery chinook salmon, production which may be added onto the Pacific Salmon Commission quota.
3. Continue the Southeast Alaska natural chinook stock rebuilding program.
4. Manage for other Treaty provisions including allowance for Alaska hatchery chinook add-on and minimize the incidental mortality of chinook salmon.

1989 Chinook Salmon Guideline Harvest Level

The Alaska Board of Fisheries and the North Pacific Fisheries Management Council, in compliance with stipulations of the Pacific Salmon Commission, have established a total commercial and recreational, all gear base catch ceiling of 263,000 chinook for the 1989 season. This is the same as in 1988.

In addition to the base catch ceiling of 263,000 chinook, harvest of Southeast Alaska hatchery produced chinook above the 1984 level (approximately 5,000 fish) will be allowed under the terms of the treaty. The pre-season projection for the 1989 Alaska hatchery add-on is 42,000 chinook salmon. This yields a total 1989 projected all-gear catch ceiling of 305,000 chinook salmon.

For purposes of catch accounting, the 1989 season extends from October 1, 1988 through September 30, 1989. This includes both the winter and summer trolling seasons. The 1989 winter season is completed and this management plan addresses the summer trolling season.

For pre-season planning purposes the department projects that the following number of chinook salmon will be available for harvest during the 1989 fishery:

Total Commercial And Recreational Fishery Catch Projections

Fishery	Total Chinook Catches in Thousands		
	Base Catch	Hatchery* Add-on	Total Catch
Troll	221	26 (62%)	247
Net	20	9 (22%)	29
Recreational	22	7 (16%)	29
All Gear	263	42 (100%)	305

* The 1988 hatchery harvest percentages are used for the 1989 projections.

Total Troll Fishery Catch Projections

Fishery	<u>Troll Chinook Catches in Thousands</u> (Base Catch Plus Hatchery Add-on)
Winter Fishery (Est.)	35
June Special Hatchery Access and Experimental Fisheries	(25 - 35)
Summer Season	(177 - 187)
Total Troll	247

The following information is provided to further explain the projected chinook salmon catches for the 1989 trolling season

1. Discussion of the winter troll chinook salmon catch.

The chinook salmon catch in both the winter and summer seasons is included in the tabulation of the harvest ceiling. Preliminary catch statistics indicate that 35 thousand chinook salmon were taken during the 1989 winter trolling season, which occurred from October 1, 1988 through April 14, 1989.

2. Discussion of the chinook salmon hatchery add-on.

In addition to the base catch ceiling of 263,000 established by the Pacific Salmon Commission, harvest of Southeast Alaska hatchery produced chinook above the 1984 level (approximately 5,000 fish) is allowed under terms of the Treaty. The preseason projection for the 1989 hatchery add-on is approximately 42 thousand chinook salmon. This would increase the total all gear catch ceiling to 305 thousand chinook salmon. The preseason projection for the hatchery add-on is calculated as follows:

Add-on = (Total hatchery harvest) minus ("Pre-treaty" or 1984 hatchery harvest) minus
 (Risk adjustment for potential estimation error)
 = 51,000 - 5,000 - 4,000
 = 42,000

The actual hatchery add-on allowed in 1989 will be determined in-season from estimated catches of Southeast Alaska hatchery chinook based on coded wire tag recoveries. The projected hatchery add-ons by fishery are based on approximate proportions of hatchery harvest by gear type observed in 1988. There are no established target levels. Most Alaska hatchery chinook are harvested incidentally during the normal conduct of fisheries targeting on other chinook stocks or species of salmon.

3. Discussion of net fisheries chinook salmon catches.

The Board of Fisheries established a harvest limit of 20,000 chinook salmon, excluding Alaska hatchery chinook, for Southeast Alaska net fisheries, and directed the Department to implement regulations as required to maintain the catch within this limit. Details of implementing this limit can be found in the net fishery (purse seine, drift gill net and set gill net) management plans.

4. Discussion of recreational fishery chinook salmon catch.

The Board of Fisheries has not established a limit or guideline harvest level for recreational fisheries. The recreational fishery harvest of chinook salmon has remained relatively constant during recent years. Based on these data, the department projects a recreational catch of about 22,000 excluding Alaska hatchery chinook for 1989. For a preseason estimate of the allowable harvest for the summer troll fishery, this number of fish will be subtracted from the total allowable harvest. The estimate of recreational harvest will be revised inseason based on creel census monitoring data.

5. Discussion of June special hatchery access troll fisheries.

The Board of Fisheries authorized two special hatchery chinook salmon access fishing periods during June. Because such fisheries have not been conducted in the past, it is difficult to estimate the chinook catch during these two 3 day, inside area openings. However, for planning purposes, an estimated catch of between 20,000 to 30,000 chinook salmon will be used. These fisheries are discussed in greater detail further in this management plan. If the non-hatchery catch limit of 25,000 established by the Board of Fisheries, is exceeded during the opening scheduled for June 5-7, the opening scheduled for June 21-23 will not occur.

6. Discussion of June experimental troll fisheries.

The Board of Fisheries again authorized several June experimental troll fisheries (discussed below) to be conducted in areas similar to those employed in 1988 prior to the opening of general summer trolling season. A catch of approximately 5,000 chinook salmon is projected for these fisheries.

7. Discussion of general summer troll chinook salmon catch.

The preseason projected troll portion of the established all-year harvest ceiling, plus the projected troll portion of hatchery add-on, is 247,000 chinook salmon. Subtracting an estimated catch of 35,000 chinook during the winter trolling season, 5,000 chinook during the June experimental fisheries, and 20-30,000 for the June hatchery access fisheries results in a projected general summer troll fishery (beginning July 1) harvest of 177-187,000 chinook salmon. Updated winter troll and June troll fishery catches will be used to determine the actual allowable chinook harvest prior to the summer troll fishery.

Summer Troll Chinook Salmon Season

The general summer troll fishery will open July 1 regionwide for the harvest of all salmon species. The fishery will remain open for chinook salmon until inseason catch projections indicate the allowable chinook catch has been taken. The date on which the season will close for chinook will depend upon chinook abundance and catch rates of the fleet. Based on recent years, we expect the chinook salmon season to extend to somewhere between July 12 and 20.

If at the time of the chinook closure, trolling remains open to fishing for other species, fishermen will be required to off load all chinook salmon they have on board prior to continuing to fish for other species. Once the quota is reached, trollers will also be required to release all chinook salmon incidentally hooked while targeting on other species. Troll fishermen are encouraged to avoid areas of high chinook abundance and to utilize fishing techniques which minimize incidental hooking of chinook salmon. During the chinook salmon closure, the department will close areas of high chinook abundance. These are the same areas that have closed in the past to help minimize incidental hooking and release of chinook salmon (see map at the end of plan).

Chilkat Inlet Closure

The summer season opening for waters of Chilkat Inlet will be delayed from July 1 until July 15 in 1989. This closure is needed to provide additional protection for mature chinook salmon returning to spawn in the Chilkat River drainage. The troll closure corresponds to a similar closure for the drift gill net fishery and includes all waters of Chilkat Inlet north of the latitude of Seduction Point. Time and area restrictions, and harvest limits have also been implemented in the sport fishery to conserve Chilkat River chinook salmon.

June Special Hatchery Chinook Salmon Access Fisheries

Special troll fisheries to access Alaska hatchery fish were authorized by the Board of Fisheries for 1989. The two periods established for inside water areas are from June 5 through June 7, and again from June 21 through June 23. The period scheduled for June 21 through June 23 will occur only if the chinook salmon catch, excluding those produced by Alaskan hatcheries, taken during the first period is less than 25,000 fish. A description of the open areas follows (also see map at end of plan):

1. In the waters of Yakutat Bay east of a line from the easternmost tip of Ocean Cape to the southernmost tip of Point Manby.
2. In the waters of Districts 1 and 2, north of a line from Tree Point light to Barren Island Light to Cape Chacon, except that the waters at the entrance to and including Behm Canal, and at the entrance to and including Boca de Quadra will remain closed as per the existing regulations (see 5AAC 33.311(e), and (f)(1),(f)(3) and (f)(4) and 5AAC 33.350(b)(12)).
3. In the waters of District 3, north of a line from Cape Chacon to Cape Muzon.
4. In the waters of District 5, north of lines from Cape Lynch to the southernmost tip of Warren Island and from the northernmost tip of Warren Island to Point St. Albans.
5. In the waters of Districts 6, 7, and 8, except:
 - the waters of District 6 as described in 5AAC 33.311(g) will remain closed during the June 5 through 7 period.
 - the waters of District 7 described in the closed water regulations (5AAC 33.350) will remain closed.
 - the waters of District 8 will be open only during the period scheduled for June 21 through June 23 and only in the same portions and during the same time periods that drift gillnetting is allowed in the district as per existing regulations (5AAC 33.311).
6. In the waters of District 9 north of a line from Point Conclusion to Point Harris Light.
7. In the waters of District 10 except those portions described in 5AAC 33.311 (i) will remain closed during the period of June 5 through 7 as per existing regulations.
8. In the waters of Section 12-A.
9. In the following waters of District 13: Lisianski Inlet east of a line from Rock Point to Miner Island; all waters of Peril Strait; Salisbury Sound east of a line from Point Leo to Point Kruzof; and Sitka Sound north of a line from Shoals Point to Povorotni Point.
10. In the waters of District 14, east of a line from Soapstone Point to the southern tip of Taylor Island.

11. All waters, not listed, within the above districts where trolling is prohibited in the closed water section of the existing regulations (listed in 5AAC 33.350) will remain closed to trolling.

June Experimental Fisheries

The experimental troll fishing periods, authorized by the Board of Fisheries in 1988, will continue in 1989. These fisheries are intended to allow evaluation of harvest opportunities for mature chinook salmon returning to the Crystal Lake, Little Port Walter, Medvejie and Whitman/Neets Bay hatcheries. Additionally, experimental trolling opportunities, for harvesting chum and pink salmon, are provided in portions of Cross Sound.

A special department permit will not be required to participate in the experimental troll fisheries as was required last year. Participating fishermen will need to report their catches by the five digit statistical sub-area where they were caught. Statistical catch reporting charts are available at local department offices to determine the correct reporting areas. Fishermen are required to land chinook harvested each week prior to beginning fishing the following week. Trollers are encouraged to cooperate with department port samplers, when landing their catch, to ensure good sampling for the presence of coded-wire tags. That information will be used to determine the contribution of Alaskan hatchery produced fish in the catch.

The experimental troll fisheries will be conducted as follows:

1. All legal salmon may be retained except coho salmon may not be retained until June 15.
2. The general season is from June 5 through 29, with open periods as indicated below for each specific location (also see maps at end of plan):

Carroll Inlet (chinook hatchery release site): The waters of Carroll Inlet north of the latitude of California Head and south of the latitude of Nigelius Point will be open for a continuous fishing period from June 5 through June 29.

Neets Bay and Whitman Lake Hatcheries: The waters of District 2 within one nautical mile of the shore of the Cleveland Peninsula north of the latitude of Niblack Point and south of the latitude of Lemesurier Point and the waters in Section 1-F north of a line from Cone Point to Harbor Point to Hid Reef light and then due west to the District 2 boundary will be open Monday and Tuesday each week during June that the special hatchery access fisheries, discussed above, are not being conducted except as follows:

- The waters of George Inlet will be closed north of the latitude of California Head.
- The waters of Tongass Narrows will be closed north of a line from Mountain Point Light to Gravina Point.
- The waters of Vallenar Bay and contiguous portions of Section 1-F will be closed north of the latitude of South Vallenar Point.
- The waters of Carroll Inlet will be open as indicated above.

The waters of Section 1-E within one nautical mile of the shore of Revillagigedo Island south of the latitude of Brow point and north of the latitude of Indian Point may be open by emergency order if the availability of Neets Bay hatchery produced chinook salmon is demonstrated to be high.

Crystal Lake Hatchery: The waters of Wrangell Narrows, in Section 6-A, south of 56°46' north latitude and north of a line from North Point to Spruce Point will be open for the same time

periods that the waters of Frederick Sound are open during either the experimental fishing periods or hatchery access periods are open in June except the waters of Blind Slough are closed east of a line from Blind Point to Anchor Point. The waters of Frederick Sound, in District 10, within 2 nautical miles of the shore of Kupreanof Island west of the longitude of Boulder Point and east of 133°40' W longitude will be open for a one day period on June 12. The duration of subsequent fishing periods will be established by emergency order depending on the observed catch and presence of Alaska hatchery chinook salmon.

Little Port Walter Hatchery: The waters of Section 9-A south of the latitude of Patterson Point and north of the latitude of Graveyard Point (located at 56°15'50" north latitude), including all waters of Patterson Bay, Deep Cove, Port Herbert, Port Walter, Port Lucy and Port Conclusion, will be open Monday and Tuesday during June that the special hatchery access fisheries, discussed above, are not being conducted.

Medvejie Creek Hatchery: The waters of Silver Bay, in Section 13-B, east of a line from entry point to a point at 57°01'43" north latitude, 135°14'17" west longitude will be open Monday and Tuesday each week during June that the special hatchery access fisheries, discussed above, are not being conducted, except the waters of Bear Cove will be closed east 135°09'42" west longitude.

Cross Sound (hatchery chum and pink salmon harvest area): The Waters of Section 14-A west of the longitude of Point Dundas, and east of a line from the southern end of Taylor Island to George Island Light to Point Lavinia will be open Monday, Tuesday and Wednesday each week from June 13 through 29 that the special hatchery access fisheries, discussed above, are not being conducted except as follows:

- The waters of Dundas Bay will be closed north of the latitude of Point Dundas.
 - The waters of Fern Harbor and adjacent waters of North Inian Pass will be closed north of a line from the southernmost tip of Taylor Island to the southernmost tip of Point Wimbledon.
3. Each fishery will close by emergency order when the harvest in that fishery of legal size chinook salmon, excluding Alaskan hatchery chinook, reaches 1,000 fish, except as follows:
- If the catch of Alaskan hatchery chinook salmon is 33 % or more of the total chinook salmon catch in a specific area, the catch limit for that area will be increased to 2,000 fish, excluding Alaskan hatchery chinook.
 - For the Neets Bay Hatchery and Whitman Lake Hatchery experimental areas, the two catch limits will apply in aggregate to the combined waters of the Revillagigedo Channel-Nichols Passage areas and the Gravina Island shore-Ship Island shore areas.
 - The chinook catch limit for the Cross Sound fishery in Section 14-A is 500 chinook salmon.
4. The open areas and duration of weekly open periods may be adjusted by emergency order to ensure the catch limits are maintained.
5. Each of the hatcheries near the experimental fishing areas is anticipating returns of mature chinook salmon in excess of brood stock needs which may be available for harvest. If it is determined that brood stock needs are not being obtained, the fisheries will be limited.

COHO SALMON MANAGEMENT

General Management Objectives and Approach

Overall management objectives for the Southeast Alaska coho salmon fishery are as follows:

1. Maintain adequate numbers and distribution of coho escapements to ensure conservation and maximum sustained productivity;
2. Provide maximum opportunities for coho harvest consistent with conservation and maximum sustained yield objectives;
3. Regulate the coho harvest to various fisheries consistent with Board of Fisheries harvest allocation regulations.

In 1989, the general troll coho salmon season will open July 1 and extend through September 20 except for closures required for conservation or to meet Board allocation guidelines. As noted above, coho may also be retained beginning June 15 in the June experimental and special hatchery access fisheries.

Southeast Alaska coho salmon fisheries are managed on the basis of inseason run strength assessments. They are regulated to allow maximum sustainable catches while achieving coho conservation objectives and Board established harvest allocations. Coho salmon are not managed under total harvest ceilings as those established for chinook salmon.

Troll coho salmon catches, the majority of which occurs in outer coastal areas, generally peak sometime during mid-July to mid-August. Catches in inside fisheries generally peak during late August to mid-September. Coho migrations into most spawning streams peak between late September and mid-October.

Since most coho spawning escapement information is not available until after the fishing season, inseason management is based on fishery performance data. Coho salmon catch rates in the outside troll fishery provide the first information on overall coho salmon run strength, however, they do not provide a good measure of eventual run strength or subsequent spawning escapements in specific areas. Coho salmon catch rates in inside troll, gill net and some recreational fisheries are used to provide information concerning movement of coho salmon to inside areas, and as inseason indicators of escapements to inside spawning systems.

1989 Inseason Management

Management of the troll coho salmon fishery in 1989 may be somewhat different than in recent years to address two issues considered at the 1989 spring Board meeting. These are: (1) conservation concerns in years of below average runs; and (2) commercial fishery allocation guidelines established by the Board of Fisheries.

Conservation Concerns In Years Of Below Average Runs

In 1987 and 1988, coho salmon escapements to indicator systems in southern portions of the region were below average. More generally, coho escapements to specific systems or areas have become more variable in recent years, even in years of average or above average overall coho returns. Management will strive to ensure that more consistent and well distributed coho escapements are obtained in the future. Special attention will be initially focused on coho stocks originating in southern portions of the region where the most persistent conservation problems have occurred.

Early in the season, southern coho stocks are harvested by the troll fishery in northern and central outside areas where they intermingle with coho bound for northern and central areas of the region. Lack of general coho stock identification techniques prevents assessment of run strength of individual stock groups contributing to these early season mixed stock fisheries. Thus, by the time information on run strength of individual stock groups becomes available later in the season, overharvest of weaker stock groups may have already occurred.

To minimize the likelihood of overharvest, the Department will initiate an assessment early in the season during mid-to-late July to determine (1) probable overall coho run strength; and (2) relative survival rates and/or run sizes of selected coded wire tagged indicator stocks. Overall run strength assessment will be based primarily on analysis of early season troll coho catch rates in outside areas compared to those of previous year. Information available on individual indicator stocks will also be taken into account. Projected total season troll coho harvests will be used as a relative index of total run size. If the projected overall run size is below the 1980-88 average, the Department will implement a 7 to 14 day conservation closure beginning sometime in late July. For this assessment, a projected total season commercial harvest of approximately 1.5 million coho, equal to the 1987 harvest or about 80% of the 1980-88 average, will be used as the level at which the closure will be implemented.

The primary purpose of an early season closure, if implemented, will be to reduce early season harvest rates on coho stocks, allowing them to move farther along their migratory paths where more stock specific assessments of run strength can be made. This will allow targeting subsequent fishing effort on stronger stocks with harvestable surpluses while providing protection for weaker stocks as needed.

A second, more limited conservation problem potentially exists for Lynn Canal coho stocks for which aggregate all-gear harvest rates have been relatively high in recent years (an average of 79% since 1982 with a range of 71-93%). This is higher than would normally be considered capable of producing long-term maximum sustainable harvests for coho stocks. These northern inside stocks are harvested by the troll fishery in both outside and inside areas, and by gill net and sport fisheries in inside waters. The Lynn Canal coho stocks exhibit late timing with the primary harvest occurring in late August and September. During this time, the Department will monitor the run strength of these stocks and will implement conservation measures to reduce total harvest rates if below average runs occur.

As before, other region or area specific conservation measures will be implemented inseason as required to ensure conservation of coho stocks.

Board Allocation Guidelines For Commercial Coho Harvest

At it's 1989 spring meeting, the Board of Fisheries established "historical commercial harvest guideline allocation" percentages for the coho harvest by each commercial gear type. These percentages are: troll - 61%; purse seine - 19%; drftt gill net - 13%; set gill net - 7%. The Board specifically stated that subsistence, personal use, and recreational harvest of coho salmon are not affected by the established allocations between commercial gear types.

In establishing these percentages, the Board noted: "These percentages are guidelines only and may vary from season to season given natural fluctuations in salmon abundance and distribution and the limitations of fisheries management. It is, however, the board's intent that these allocation guidelines be met as closely as possible over the long term." The Board further noted: "It is not the board's intent for the department to disrupt any of the traditional commercial fisheries upon which this historical allocation is founded. The department may, however, make in-season adjustments to attempt to achieve these long term allocation guidelines."

For the troll fishery, several coho catch allocation regulations have been established by the Board during recent years. These include:

1. A 10-day regionwide troll closure to be implemented during the coho season, if certain harvest sharing criteria are not being met, to address allocations between outside and inside fisheries;
2. An 8-day on, 6-day off troll fishing schedule after mid-July for the upper portion of Chatham Strait (Section 12-B) and Lynn Canal (District 15); and
3. A troll fishing schedule in portions of State waters off Yakutat beginning early August which is keyed to weekly fishing periods in the set gill net fisheries.

Allocation regulations for (2) and (3) were established by the Board to address specific, local harvest sharing issues, while the regulation for (1) was developed to address broader regionwide allocations between outside and inside fisheries.

The allocation criteria currently used for the 10-day closure are based on average 1971-80 harvest sharing proportions which closely approximate the 1989 commercial allocations established by the Board. Therefore, in 1989 the need for a 10-day allocation closure will be evaluated based on inseason evaluation of coho harvest sharing relative to existing criteria in regulation 5AAC 33.365. This regulation states that a closure of approximately 10 days will be implemented if either of the following criteria are met:

- A. The Department determines that numbers of coho salmon reaching inside areas may be inadequate to provide for spawning requirements, given normal or even restricted inside fisheries on coho salmon and other species. The primary abundance indicators for this assessment consist of relative harvest levels by all fisheries and, in particular, catch per unit effort in inside drift gill net and sport fisheries compared to 1971-80 levels (this criteria addresses conservation issues).
- B. The Department determines that the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gill net and recreational fisheries compared to the 1971-80 levels. Primary inside fishery indicators for this assessment are overall coho salmon harvests and catch per unit effort in the Tree Point, Prince of Wales, Taku/Snettisham, and the Lynn Canal drift gill net fisheries, and the Juneau marine sport fishery (this criteria addresses allocation issues).

If a regionwide troll closure is implemented for coho salmon conservation during late July, the likelihood of a closure during mid-August to meet the above allocation criteria will be reduced. Any potential transfer of coho harvest to inside fisheries resulting from an early closure, if implemented, will be reflected in inside fishery performance indicators used for comparison against the allocation criteria.

Current allocation regulations relating to (1) the 8-day on/ 6-day off troll fishing schedule for selected northern inside areas after mid-July, and (2) establishment of weekly troll periods in certain Yakutat areas based on set gill net weekly periods beginning early August, will be implemented during the 1989 season.

Tentative 1989 Coho Season Schedule

In this section the anticipated schedule for the 1989 general troll coho season is presented. It is emphasized that some modifications to this anticipated schedule may be required based on inseason assessment of coho run strength, projected relative escapements of coho salmon to spawning areas, and harvest sharing between commercial gear types.

Dates	Expected Regulatory Actions
June 15-29	Beginning June 15, coho harvested incidentally during the June special hatchery access and experimental troll fisheries may be retained;
July 1	Established regulatory opening date of 1989 general summer troll season for all species; the troll chinook season will close when the guideline harvest level has been reached;
Late July/early Aug.	Potential 7 to 14 day regionwide closure if projected run size is less than approximately 80% of 1980-88 average; the projected total season commercial harvest will be used as index of run size;
Mid-to late August	A regionwide closure of approximately 10 days will be implemented if required for either coho conservation or allocation based on assessment of stock and fishery performance data relative to Board established criteria. If a regionwide conservation closure has occurred during late July, the likelihood of a closure being implemented for allocation at this time will be reduced.
Late Aug. to Sept. 20	Coho conservation measures implemented regionwide or by area as required to protect weak coho stocks;
Sept. 21	Established regulatory closing date of 1989 general summer troll season.

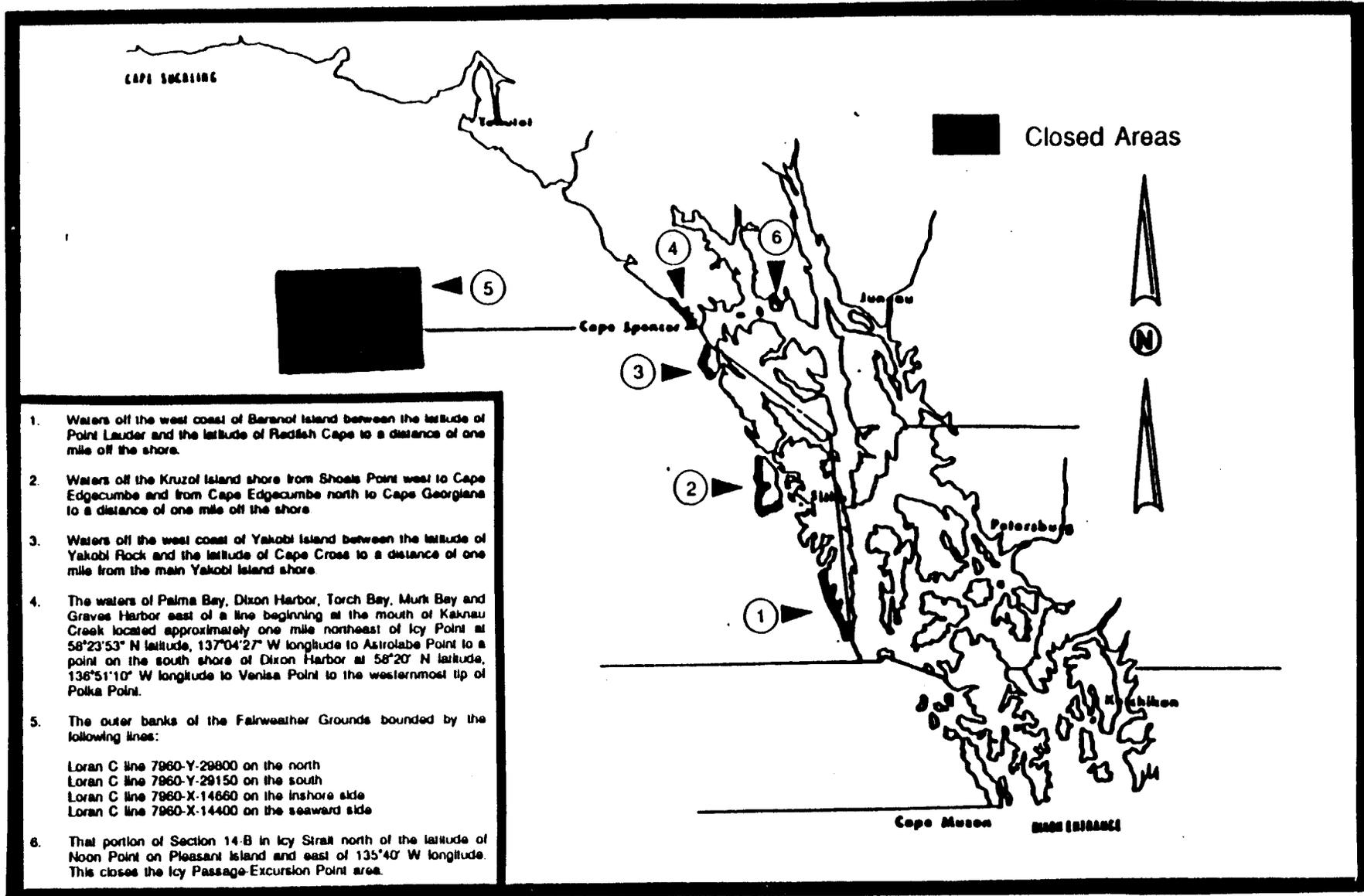
Fishermen participating in the troll fishery are encouraged to review the 1989 Troll Fishery Regulatory Guide and the 1989 Commercial Finfish Regulation booklet for specific regulations for the 1989 season.

The following are Commercial Fisheries contacts regarding this management plan:

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Don Ingledue Juneau Area Management Biologist	P. O. Box 20 Douglas, Alaska 99824 (907) 465-4250
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Randy Timothy Wrangell Assistant Area Biologist	P. O. Box 200 Wrangell, Alaska 99929 (907) 874-3822

The following is a list of telephone numbers that may be called during the troll fishing season to obtain recorded announcements concerning areas open to trolling.

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



Map of Southeast Alaska showing areas expected to be closed to all trolling for all species during chinook non-retention periods of the 1989 Southeast Alaska summer troll season.