FISHERIES ISSUES

STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
OFFICE OF THE COMMISSIONER

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APR 24 1982

April 22, 1982

The Honorable Dick Randolph
Representative
Chairman, Administrative
Regulation Review Committee
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Representative Randolph:

I am unsure about your April 1, 1982, letter's reference to my statements on the Alaskan chinook troll salmon Optimum Yield (OY). You state that I said that the reductions in OY were made for "purely political reasons." If I left you with that impression, I certainly regret it. The fact is that chinook salmon stocks up and down the Pacific Coast from Alaska to the Columbia River are in very serious biological trouble. Unless all appropriate management entities take some form of immediate action, I personally believe that the Alaska troll fishery will be drastically reduced within the next one or two cycles of chinook salmon.

Information available to us indicates that Southeastern Alaska chinook salmon stocks have been seriously depressed below minimum escapement levels for several cycles. Despite action to close terminal area fisheries to directed gill net pressure on these stocks and substantial closure in inside troll and recreational fisheries, these stocks have not significantly recovered. This lack of response to these other conservation measures is due primarily to expanding offshore troll effort intercepting these fish both as immatures and as matures some distance from their spawning grounds.

Last year further restrictions on the commercial troll fishery were instituted primarily as a measure to reverse this declining trend in Alaskan chinook stocks. The troll fishery was closed for the first month of the season during a time when Alaskan mature chinook spawners were thought to be migrating through our waters. Additionally, a ceiling was put on the troll fishery to prevent the fishery from making up the fish lost during this early period out of stocks of immatures later in the season--in effect taking this year's reduction out of next year's pocket. These actions were taken as part of a conscious plan to start rebuilding our Alaskan chinook stocks over three cycles (15 years). In point of fact, rebuilding our Alaskan chinook stocks in the short term could have required near total closure in the fishery--certainly an unacceptable socio-economic disruption of this fishery regardless of the purely biological merit of doing so.

The Department, the Alaska Board of Fisheries, and the North Pacific Fishery Management Council received considerable testimony this year on the status of chinook stocks. Last year's effort in Alaska did have a beneficial effect on Southeastern Alaska chinook escapements, but that was one of the few bright spots along the coast. This year's Southeastern Alaska chinook run is expected to be less than last year and, while the continued early closure will be beneficial, the results will probably not be as dramatic as they were in 1981. In addition to these factors, it appears that Canadian chinook escapements may be on the order of one-third of the desired level due to fishing pressure from both the United States and Canadian fleets. Rough estimates indicate that the Alaskan troll fishery is dependent primarily (perhaps up to 80%) on non-Alaskan chinook stocks and that perhaps half of these originate in British Columbia. If this is the case, Alaskans must take very seriously the severely depressed nature of these stocks.

The Board and Council additionally received information on problems with Columbia River chinook. The majority of the decline of these stocks over history is undoubtedly due to environmental disturbances caused by the dams on the Columbia. Dams result in very high losses of immature fish migrating downstream. On top of this, there is an unexplained problem with loss of mature spawners between The Dalles and McNary dams. Nearly half of the spawners passing The Dalles do not make it over McNary. This unexplained loss has skyrocketed in the last two years. Some fish are lost to uncounted spawning in lateral streams, but this is probably not significant. There are also undoubtedly errors in the accuracy of counting fish at both these dams, but it is hard to see why this should be so directional. The other two possible explanations, environmental problems and illegal fishing, are not at present evaluated. There is little doubt, however, that if the total number of fish reaching the Columbia or available to legal fisheries and escapement increased, many of the conservation and allocation problems in the Columbia River would be rectified. The States of Washington and Oregon have indicated they will be conducting research and expanded enforcement efforts on the river in an effort to both explain and reverse this recent phenomena. Nevertheless, despite extreme closures in Washington and Oregon commercial and recreational fisheries, insufficient chinook salmon are reaching the Columbia for tribal Indian allocation mandated by the United States Federal courts and escapement requirements. Clearing up the unexplained spawner loss will help, but not totally solve, the problem.

I concur that much of the data on the percentage of various stocks harvested in the Alaska fishery is weak. One of the few things that is clear is that we are severely dependent on stocks originating elsewhere and, therefore, on conservation of those stocks by other people. We are bringing as much influence to bear as possible through the Alaska Board of Fisheries, the North Pacific Fishery Management Council, US/Canada negotiations, and other forums, to assure that conservation objectives will be met. It is certainly true that we cannot conserve these stocks by ourselves; nevertheless, we do have a responsibility as one of the harvesters to contribute to that conservation.

We have made moves to assist our own stocks and we probably are going to have to share in the conservation reductions on some of the other stocks we are harvesting. Due to the uncertainties in the data and a lack of definitive response at this time from other entities, both the Board and Council felt it was unwarranted to dramatically reduce the Alaskan troll fishery by going to the lower end of the OY range. They did indicate some movement in a multiyear approach was desirable, assuming that other agencies and jurisdictions will follow suit, and reduced the catch limits some 13,000 chinook below last year's catch of 268,000. Allowance was made for Alaska hatchery produced chinook to not count against this quota. It appears likely that Canadian authorities will make one of their first really significant efforts toward conserving both their own chinook stocks and the Columbia River stocks by instituting a two week closure of their fishery in Northern British Columbia this summer. We certainly do not think this is a totally adequate response, but it is a step in the right direction.

I have included some information regarding the escapement statistics data you requested and the information used to compute the initial OY ceiling of 320,000 chinook in 1980. I wish to emphasize that this initial OY was an arbitrary average chosen to represent some stability in the troll fishery while the conservation needs of the stocks and the various stock contributions to this fishery were being assessed. Reductions from that point have been made in response to conservation requirements and the sharing by contributing fisheries in reaching those conservation goals. The reports enclosed include: the Department's Southeastern Chinook Salmon Management Plan for 1981 that sets forth background escapement data and our objectives for rebuilding these stocks; our 1981 season report to the Alaska Board of Fisheries that shows the results of 1981 management; and an interagency joint report on coastwide chinook salmon escapement concerns.

Sincerely,

Ronald O. Skoog
Commissioner

Enclosures

Southeastern Alaska Chinook Salmon Harvest OY Range

Year	Southeastern Region Commercial Harvest in Thousands of Fish
1971	334
1972	287
1973	344
1974	347
1975	301
1976	242
1977	291
Average	306

Range plus or minus one standard deviation = 286-320

The years 1971–1977 were used for this derivation of ABC because (1) the use of recent catch data (7 years as opposed to 25 years) is essential in understanding changes and trends which occur in biological systems over time and (2) a seven-year period takes into account a recent full cycle of spawning for major chinook and coho stocks. Additionally, 1971 was the initiation of the first reliable fish ticket information which clarified landings by area for the first time.

Cape Suckling is an established boundary for management and statistical areas and separates Southeastern Alaska waters from the remainder of Alaskan waters. There is no known information which shows a significant mixing of stocks originating west and east of Cape Suckling.

4.9 *Estimates of Future Stock Conditions*

The future status of salmon in the offshore Alaska troll fishery is unclear. Non-Alaska fall chinook in the fishery presently are strongly supported by West Coast hatchery production. The future condition of these stocks will be closely tied to existing hatchery programs and the success of new coast-wide rehabilitation and enhancement programs. *Hatcheries for spring chinook have generally been financially unsuccessful. Until this problem is solved, maintaining spring chinook stocks will depend largely on natural production.* Reversing the severely depressed status of Southeastern Alaska chinook can only be achieved by stern conservation efforts that eliminate or restrict further harvest of these fish. Efforts are underway in Southeastern Alaska to develop spring chinook brood stocks for artificial propagation programs. However, these efforts will remain small until successful techniques are established. *Until that time, conserving these stocks with an ABC approaching zero is vitally important.*

Prospects for enhancement of coho production in Southeastern Alaska, in addition to conventional hatchery programs, include several different approaches to artificially recruiting smolts to ocean nurseries. These include utilizing estuarine and freshwater culture in net pens, floating raceways, and unused natural rearing areas. There may be a significant number of unused freshwater nurseries for coho production in Southeastern Alaska that are not accessible to natural runs due to geologic features of the area. Active research on these approaches is underway at several locations. Caution should guide their use and development, especially in relation to simultaneously maintaining viable native stocks in adjacent areas (Heard, in press).

4.10 *Non-target Species Mortality Other Than Salmon*

This is not a serious problem with the ocean salmon fishery. Although species such as the Pacific halibut (*Hippoglossus stenolepsis*), rockfish (genus *Sebastes*), and lingcod (*Ophiodon elongatus*) may be caught, the total catch is minor.

5.0 Catch and Capacity Descriptors

5.1 *Data and Analytical Approaches (5.1.1., 5.1.2.)*

There is insufficient data to quantitatively define capacities. Harvesting characteristics (section 3.5.2) and catch trends (section 3.2.1.3) substantiate the values for DAC and DAH discussed below.

5.2 *Domestic Annual Capacity (DAC)*

Capacity of the power troll fishery to harvest salmon is exceedingly difficult to estimate. In 1978, approximately 100 vessels with a mean keel length of 41 feet made landings from offshore waters. Because of the increased efficiency of the vessels in the fishery, due to technological advances in electronic gear and increased hold capacity, it is estimated that the DAC is substantially greater than the largest catch that could be realized from the offshore fishery.

Provisions of limited entry will restrict the number of fishermen who could conceivably fish; this does not necessarily limit fishing effort.

Larger boats and increased experience on the part of the fishermen plus increasing sophisticated electronic gear is the means by which effort can increase without numbers of fishermen increasing.

5.3 *Expected Domestic Annual Harvest (DAH)*

Based upon past performance of the troll fleet and market trends, the DAH for chinook and coho is expected to be equivalent to OY.

5.4 *Domestic Annual Processing Capacity*

Domestic processors have in the past been able to process the entire domestic harvest of troll-caught salmon, and it is expected that they will be able to process the harvest of salmon allowed by this plan.

6.0 Optimum Yield (OY)

Optimum Yield (OY) may be obtained by a plus or minus deviation from ABC because of economic, social, or ecological objectives as established by law and the public participation processes. Ecological objectives where they relate primarily to biological purposes and factors are included in the determination of ABC. Where ecological objectives relate to resolving conflicts and accommodating competing uses and values, they are included as appropriate with economic and social objectives in the determination of OY.

The optimum yield for all species in all areas is based on the acceptable biological catch for the years 1971–1977 modified by social and economic considerations. The OYs are expressed as ranges determined from past mean catches plus and minus one standard error.

It is necessary to take into consideration MSY, ABC, and OY based on all species, all areas, for purposes of management. The plan, however, is subdivided and deals primarily with the one active fishery in the FCZ off Southeast (east of Suckling) as this is the area of council jurisdiction as addressed by the FCMA.

Catches of pink, chum, and sockeye salmon are relatively insignificant in the troll fishery. The 1971–1977 average annual combined catch of pink, chum, and sockeye is less than five percent of the total offshore troll salmon harvest (Table 13, Appendix 4.0). Pink, chum, and sockeye salmon caught in the offshore are not considered significant in the overall optimum yield determination. Any catch likely to be realized in the troll fishery will be an acceptable by-catch.

Alternatives Considered

Two other concepts of optimum yield were considered in the development of this plan: (1) a greatly restricted OY essentially prohibiting trolling in the FCZ by certain time and area closures and (2) allowing OY and effort to expand according to current trends in the fishery (see also EIS, Section 12.5). The argument to greatly restrict and reduce the OY was considered unacceptable given the basic definitions of OY which mandates a consideration of relevant socio-economic factors. The preponderance of public testimony and socio-economic data did support this conclusion by showing the grave social and economic dislocation and hardships that would occur in several geographic areas and villages in Southeast Alaska. Likewise any expansion of effort or greatly increased catch or catch potential was not consistent with a principle management objective of controlling the expansion of the fishery. Neither was this alternative considered optimal in terms of the carefully considered balance of social and economic values and the biological principles of mixed stock management.

West of Cape Suckling: The optimum yield for waters west of Cape Suckling addressed by this plan is fully utilized by existing inshore net fisheries. (Table 6)

East of Cape Suckling: The optimum yield for salmon east of Cape Suckling is set equal to ABC (See Table 6).

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TABLE 6

OPTIMUM YIELD

For Salmon East and West of Cape Suckling

	Pounds	Numbers
	(of fish in thousands	
Chinook		
West	5,063 - 6,390	225 - 284
East	4,424 - 4,950	286 - 320
Sockeye		
West	43,531 - 65,811	6,697 - 9,817
East	3,566 - 4,717	669 - 885
Coho		
West	3,636 - 4,600	505 - 631
East	7,420 - 9,053	841 - 1,100
Pink		
West	29,972 - 45,599	7,382 - 11,051
East	25,716 - 37,489	6,494 - 9,467
Chum		
West	30,288 - 35,687	4,071 - 4,796
East	12,232 - 17,813	1,292 - 1,883

PROPOSED MANAGEMENT PLAN FOR

SOUTHEAST ALASKA CHINOOK SALMON RUNS IN 1981

SOUTHEAST REGION

FISHERIES MANAGEMENT DIVISIONS

ALASKA DEPARTMENT OF FISH AND GAME

JANUARY 1981

JUNEAU, ALASKA 99801

PROPOSED MANAGEMENT PLAN FOR

SOUTHEAST ALASKA CHINOOK SALMON RUNS IN 1981

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Considerations Relating to the Proposed Management Plan
for Southeast Alaska Chinook Salmon Runs in 1981

Brief

Southeast Alaska chinook salmon runs continue to be depressed far below historical levels and recovery trends have not yet occurred in spite of significant restrictions imposed on Southeast Alaska fisheries, particularly since 1975. Regulations proposed for the 1981 season are directed primarily toward establishing the increasing trends in escapements required to rebuild these depressed runs.

A reduction of 10% or 32,000 fish from the 1980 Optimum Yield (OY) catch ceiling (the upper end of the OY range) of 320,000 established for Southeast Alaska commercial fisheries by joint action of the Alaska Board of Fisheries and the North Pacific Fisheries Management Council in March 1980 is being recommended for the 1981 season. This reduction will be achieved through selected time/area regulations designed to allow mature fish of Alaskan origin to reach spawning grounds in Southeast Alaska in 1981 and to reduce the harvest of immature salmon in 1981 thereby further increasing the number of available mature spawners in 1982-83.

On the basis of certain assumptions regarding current harvest and escapement levels, production rates and the effect of the proposed regulations, it is estimated that approximately three 5-year cycles or 15 years will be required to rebuild Southeastern Alaskan chinook salmon stocks to the point where minimum escapement goals are achieved. Increased harvestable surpluses would be expected in the 4th cycle.

Status of Southeast Alaska Chinook Salmon Stocks

Commercial catches of chinook salmon by Southeast Alaska fisheries averaged 320,000 fish annually during the 1970's or about half of the 610,000 average annual catch taken during the peak decade of the 1930's (Fig. 1, p. 7). Significant contributions to this harvest by non-Alaskan stocks and the absence of effective stocks separation techniques required to determine stocks components in these highly mixed stock fisheries prevent direct inferences being made from total catches as to the status of Southeast Alaska chinook salmon stocks. However, historical catches by Southeast Alaska fisheries operating in more terminal areas near local chinook producing systems such as the Alsek, Taku and Stikine Rivers also reflect serious declining trends (Figs.3-5, pp. 9-11).

Chinook salmon escapements to Southeast Alaska systems are estimated to have averaged some 25,000 to 34,000 fish during the last three year period 1978-80 or less than half of the total minimum escapement goal of 66,000 to 80,000 (Fig. 7, p. 29). As a result, production in terms of average annual harvest from Southeast Alaska stocks is also thought to be less than half of the harvest which might be expected if minimum escapement goals were being achieved (Tables 5-6, pp. 21-24). Although some improvement was observed in escapements to the Taku and Stikine Rivers in 1980, escapements to other surveyed systems were generally

poor (Table 2, p. 13). Evidence relating to production from the 1975-76 brood years suggest that while escapements to the Taku River in 1981 might be expected to be of the same relative magnitude as in 1980, escapements in 1982 will probably drop below the 1980 level in the absence of further catch restrictions.

Proposed 1981 Management Plan

In 1980 the Troll fishery took approximately 94% of the total Southeast Alaska commercial chinook salmon harvest of 321,000 (Table 1, p. 6). The remaining 6% was taken incidental to the harvest of other species by gillnet fisheries (2%) and seine fisheries (4%). There are currently no directed net fisheries for chinook salmon in Southeast Alaska, the last directed gillnet fisheries being closed in 1975-76. Thus, regulations designed to increase escapements of Alaskan chinook salmon are directed primarily toward the troll fishery, however regulations are also being proposed to further reduce the incidental catch of mature chinook spawners by the gillnet fishery and to reduce the sport harvest of mature fish (Table 7, p. 26).

At current harvest levels, only minimal--if any--improvement is expected in the condition of Southeast Alaskan chinook salmon stocks. Therefore, a reduction of 10% or 32,000 fish from the 1980 Optimum Yield (OY) catch ceiling (the upper end of the OY range) of 320,000 is being recommended for the purpose of rebuilding depressed Alaskan chinook salmon stocks. This reduction made through selected area/time regulations is expected to result in an increase of approximately 4,800 spawners in 1981 increasing to 6,100 in 1982 and to 7,500 in 1983 as unharvested immature fish reach maturity (Table 9, p. 28).

The strategy being proposed for 1981 to achieve increased escapements to Southeast Alaska systems in 1981 consists primarily in delaying the opening of the troll fishery in outer coastal areas until May 15 (compared to April 15 in 1980) coordinated with an additional early May 8-day closure in the '8 on - 6 off" troll fishery schedule in the Icy Straits - Chatham Straits corridor areas (Table 7, p. 26). This is expected to allow spring spawning Alaska chinook salmon to move into inside terminal areas where current fishing regulations provide a high degree of protection.

Regulations are also being proposed for an outward adjustment of the inner Taku River gillnet fishery boundary to reduce the incidental catch of mature chinook during the first three weeks of the sockeye fishery beginning June 15 and a 10-14 day closure of the Juneau area sport fishery in early May.

The balance of the proposed 10% or 32,000 fish reduction remaining after the above regulations are implemented would be achieved by a final adjustment near the end of the summer troll fishing season in September or October. A tentative closing date of September 20 has been proposed coincident with the closing date for coho salmon. The magnitude of the end of the season adjustment is difficult to predict because of the unknown ability of the troll fishery to compensate for the early season time/ area restrictions by increasing effort in other time/area strata

thereby changing the seasonal/spatial distribution of the chinook harvest and because regulations required for management of coho salmon runs which also affect the chinook salmon fishery are not completely determined until inseason.

The end of the season adjustment would have the effect of reducing the harvest of immature Alaskan chinook stocks. Based on the estimate derived here for the expected increase of 7,500 Alaska spawners when the full effect of the proposed regulations is realized in 1983, the expected reduction in harvest of non-Alaskan stocks would be about 24,500 fish minus an estimated loss of 1,800 fish due to natural mortality in the immature Alaska stock component of the reduction (Table 8, p. 27) or about 22,700.

The proposed harvest reduction of 32,000 chinook salmon, the majority of which will result from a reduction of the troll fishery harvest, will represent an estimated reduction of approximately 7% of the total value of all species of salmon harvested by the troll fishery in 1980 (Fig. 9, p. 31).

Long Term Projections for Recovery of Southeast Alaska Chinook Runs

Minimum escapement goals for Southeast Alaska chinook salmon systems currently being surveyed have been established based on the maximum number of spawners observed since surveys were initiated in the early 1950's--except for the Situk River where weir counts date back to 1928 (Table 4, p. 20). Since the 1950's Southeast Alaska chinook stocks appear to have been substantially depressed below historical high levels and based on harvest patterns of fisheries in terminal areas, even maximum escapements observed during this latter period do not appear to have reached or exceeded optimum escapement levels.

Expanding average minimum escapement goals for surveyed systems to non-surveyed systems within each of the run size categories--major, medium and minor--results in an estimated total minimum escapement goal for all Southeast Alaska systems of 66,000 to 80,000 fish. Average escapements observed during 1978-80 are estimated to have been 25,000 to 34,000 indicating a 42,000 to 46,000 spawner deficit (Fig. 7, p. 29).

Assuming that escapements initially increase as predicted and that these additional spawners produce at the rate of 3:1 with 0.5 of the 3 fish being harvested by fisheries not currently included under the OY ceiling (thus resulting in an effective rate of increasing escapements of 2.5:1), minimum escapement goals would be expected to be reached during the third 5-year cycle or 1991-95 (Fig. 7, p. 29). While a small harvestable surplus above minimum escapement goals would be expected in 1991-95, an average harvestable surplus of approximately 70,000 fish would be expected in the fourth 5-year cycle 1996-2000.

In addition to the expected increased harvestable surplus of approximately 70,000 fish beginning in 1996-2000 as a result of rebuilding natural Alaska chinook runs, supplemental hatchery production in Southeast Alaska is expected to contribute an increasing number of chinook salmon to Southeast Alaska fisheries of up to 90,000 fish when planned capacity production is reached in the 1990's (Fig.8, p. 30).

Evaluation of Effectiveness of Proposed Regulations

In the final analysis, effectiveness of the proposed fishery regulations must be evaluated in terms of achievement of increased production and harvest available to the fisheries. However, as indicated above, a significant harvestable surplus above increased production necessary for achieving minimum escapement goals would not be expected until the fourth 5-year cycle or 1996-2000. Thus, final evaluation is obviously a long term process.

For immediate and intermediate term evaluation, two basic approaches will be used. The first most immediate expected effect of the proposed regulations is increased chinook salmon escapements to Southeast Alaska systems. Spawning ground surveys are currently conducted on 9 of the 33 known chinook salmon spawning systems in Southeast Alaska (Fig.6, p. 14) and further expansion of the surveys is being planned. Increased escapements should be observed in these surveys. Second, catches of chinook salmon in both directed and incidental fisheries near terminal areas should reflect increases in the abundance of Alaska chinook salmon.

Evaluation of observed changes in spawner abundance resulting from reduction of the harvest of mature fish in 1981 will be made in the fall of 1981. However, evaluation of the effect of reducing the immature harvest in 1981 will not be possible until these fish mature and spawn in 1982 and 1983.

PRELIMINARY 1980 SOUTHEAST ALASKA SALMON HARVEST DATA
AND MISCELLANEOUS HISTORICAL CHINOOK SALMON HARVEST DATA

PRELIMINARY

Table 1. 1980 Southeast Alaska Region Commercial Salmon Harvest
(Based on Fish Tickets Compiled as of 11/18/80 - ADF&G)

Numbers of Fish in 1000's

Gear	King	Coho	Sockeye	Pink	Chum	Total
Power Troll	249	528	2	161	8	948
Hand Troll	51	180	1	116	5	353
All Troll	300	708	3	277	13	1,301
Gill Net	8	233	586	1,485	609	2,921
Seine	13	195	531	12,716	1,028	14,483
TOTAL[1/]	321	1,136	1,120	14,478	1,650	18,705

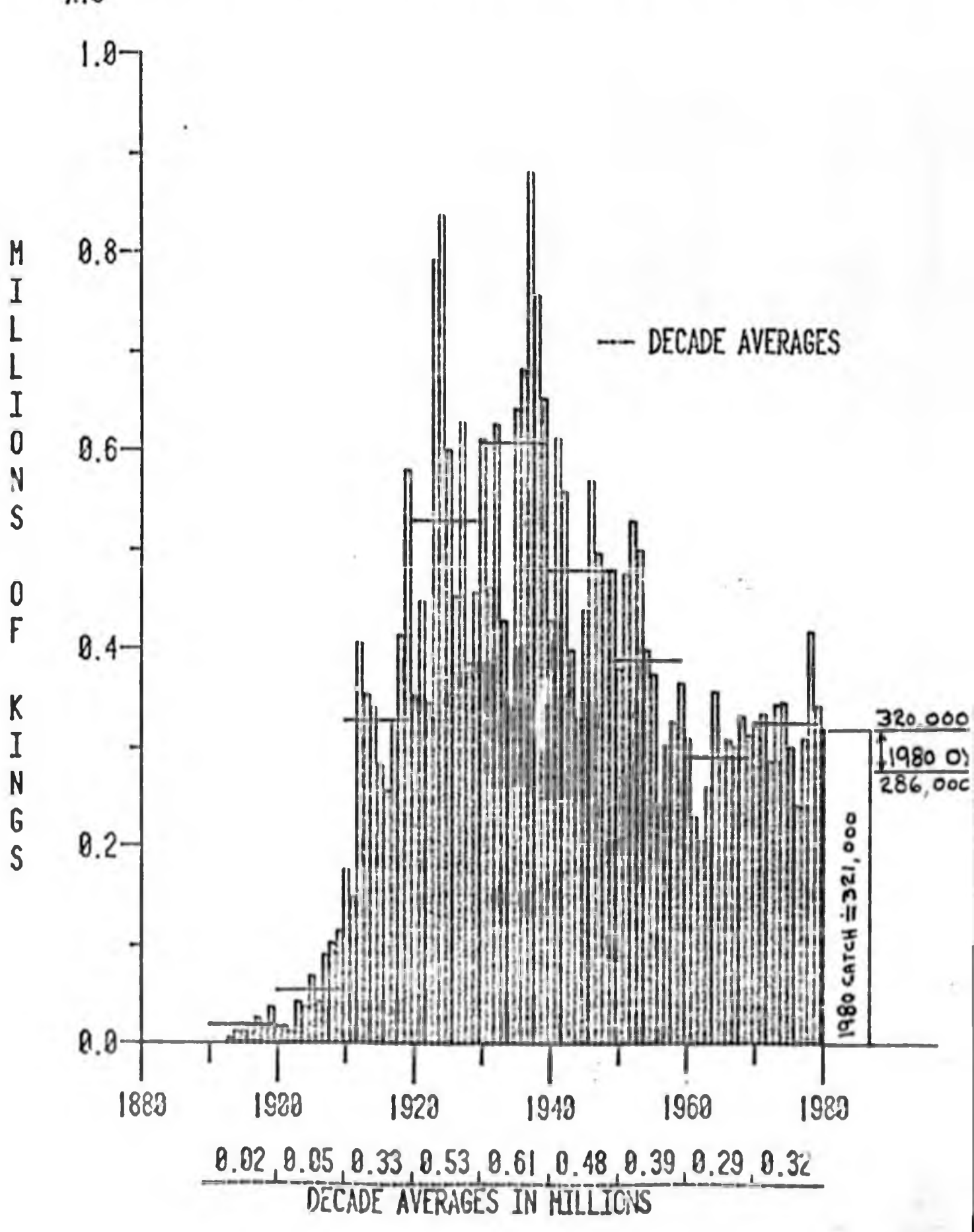
Percentage Harvest By Gear Type Within Species

Gear	King	Coho	Sockeye	Pink	Chum	Total
Power Troll	78%	46%	+	1%	+	5%
Hand Troll	16%	16%	+	1%	+	2%
All Troll	94%	62%	+	2%	1	7%
Gill Net	2%	21%	52%	10%	37%	16%
Seine	4%	17%	48%	88%	62%	77%
TOTAL	→					100%

Percentage Species Composition Within Gear Type

Gear	King	Coho	Sockeye	Pink	Chum	Total
Power Troll	26%	56%	+	17%	1%	100%
Hand Troll	15%	51%	+	33%	1%	100%
All Troll	24%	54%	+	21%	1%	
Gill Net	+	8%	20%	51%	21%	100%
Seine	+	1%	4%	88%	7%	100%
TOTAL	2%	6%	6%	77%	9%	100%

FIG. 1. SOUTHEASTERN ALASKA COMMERCIAL KING SALMON HARVESTS



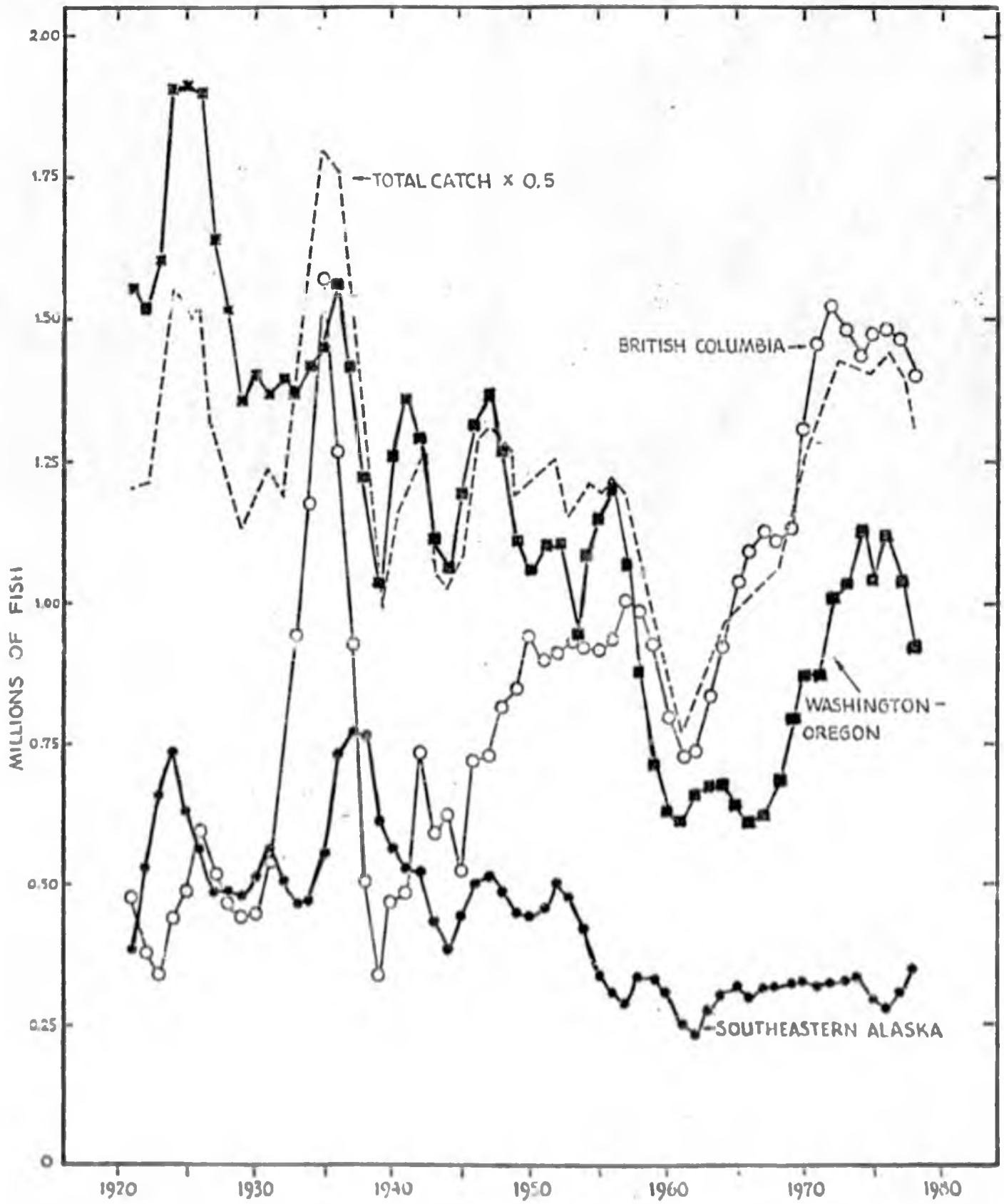


Figure 2. Annual catch of chinook salmon by commercial fisheries in Southeastern Alaska, British Columbia and Washington-Oregon, 1920-79, smoothed by moving averages of 3's. (Data are from INPFC Bull. 39, PFMC and Canada Dept. of Fisheries and Oce .ns.)

FIG. 3. SOUTHEASTERN ALASKA KING SALMON HARVESTS IN THE GILLNET FISHERIES

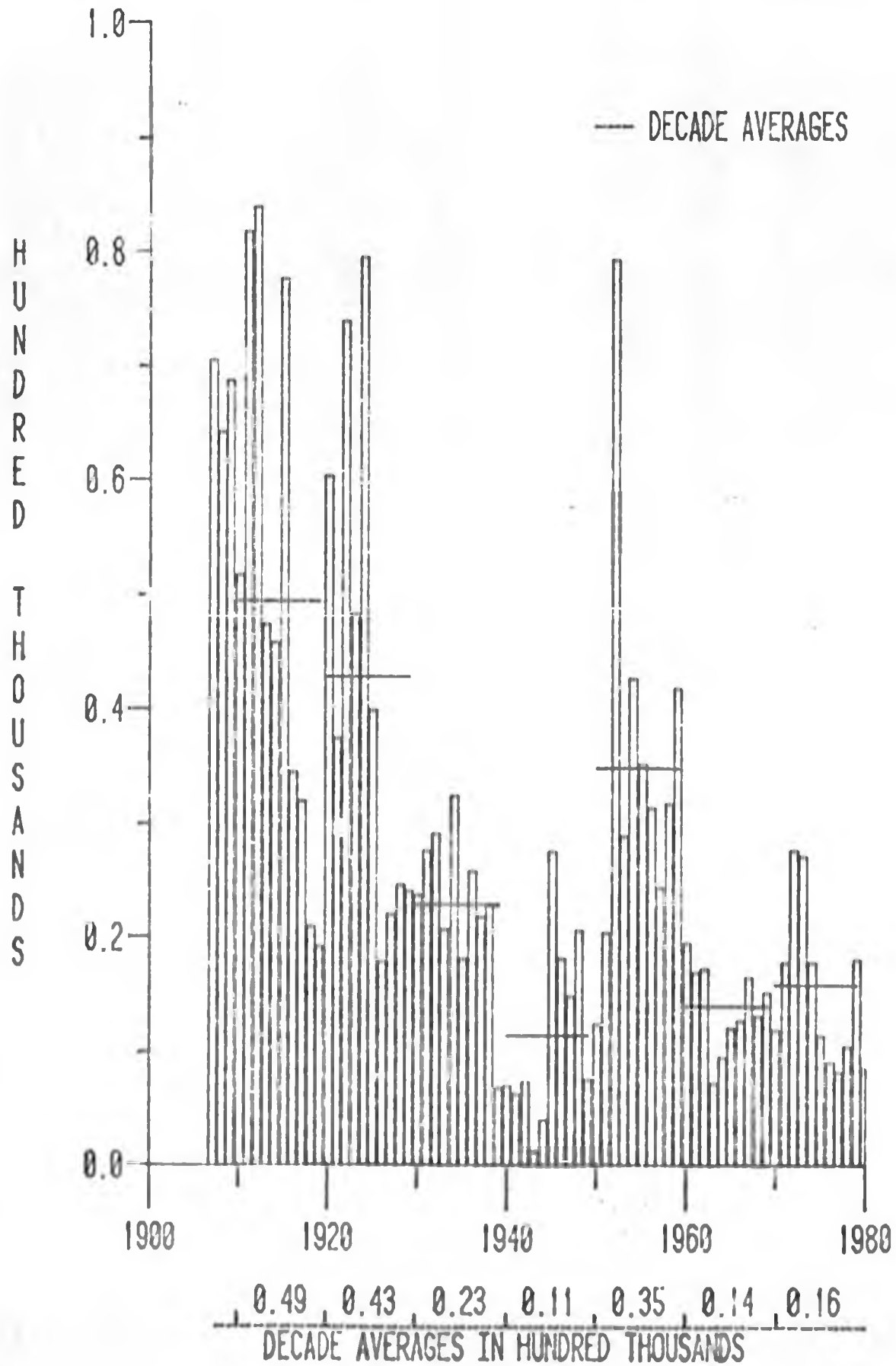
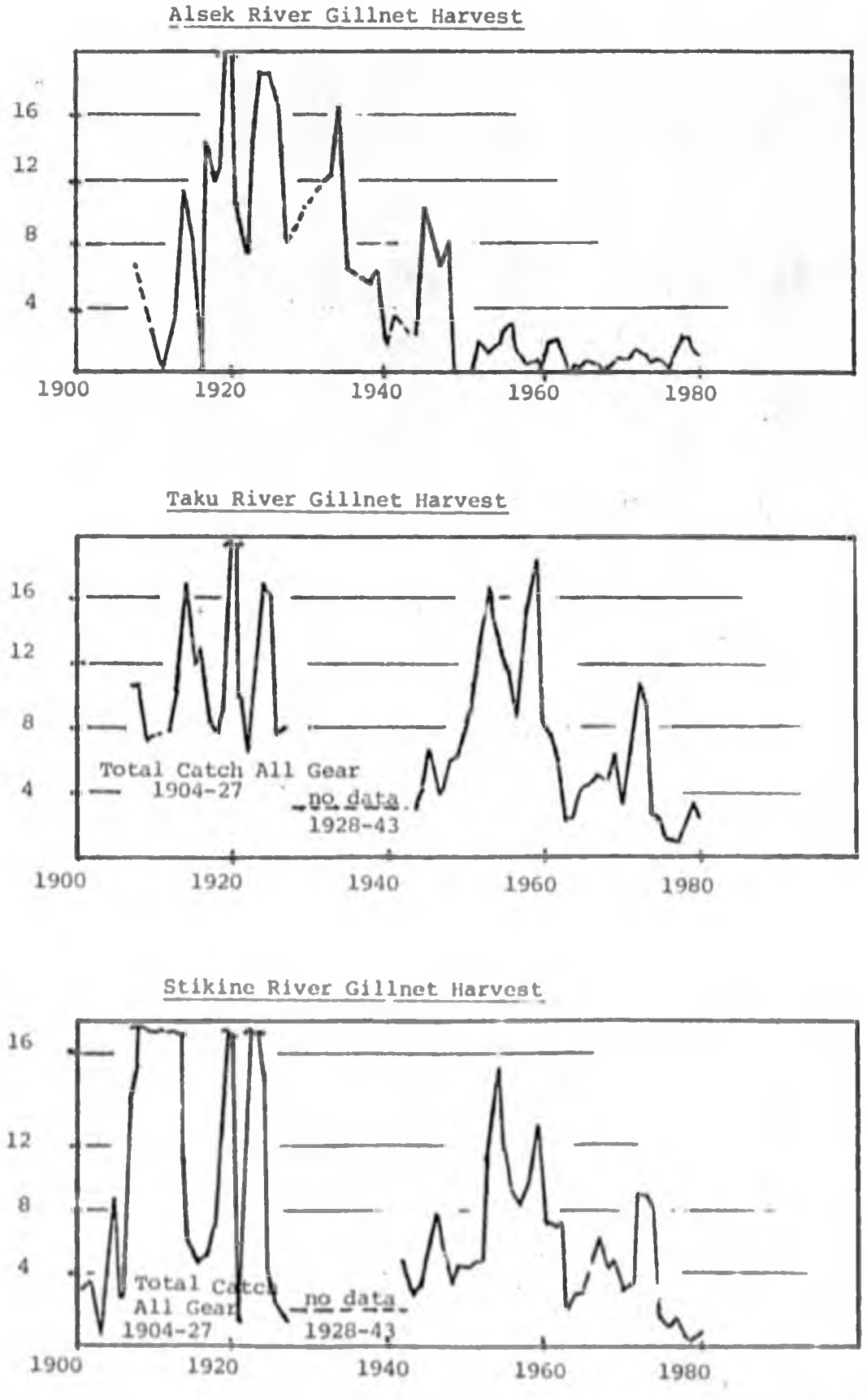


Figure 4. Historical Chinook Salmon Catches in Terminal Area Fisheries on the Alsek, Taku and Stikine Rivers



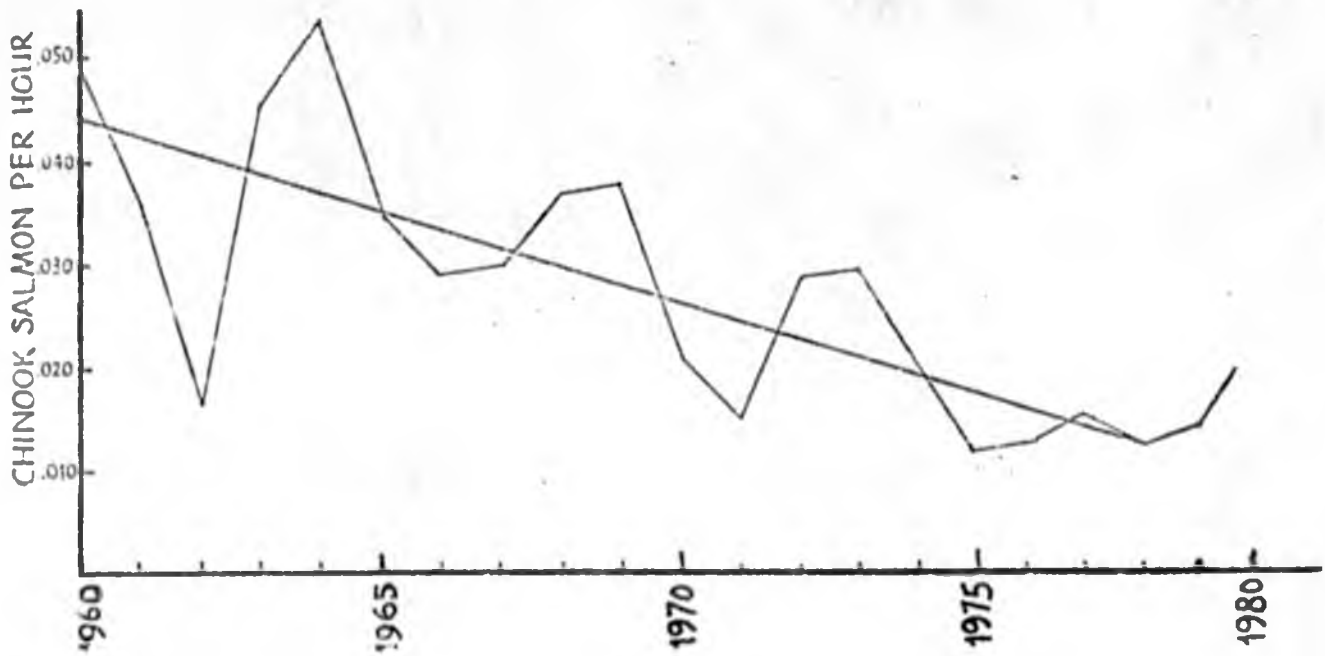


Figure 5. Trend in mean catch of chinook salmon per hour in the Juneau area sport fishery, 1960-1980. (Data are from ADFG.)

CHINOOK SALMON ESCAPEMENTS TO SELECTED SOUTHEAST ALASKA SYSTEMS INCLUDING PRELIMINARY DATA FROM 1980 SPAWNING GROUND SURVEYS

Table 2. Relative magnitude or ranking of 1980 chinook salmon escapements to surveyed Southeast Alaska systems (ADF&G-80).

Data Sources: ADF&G and Canadian Dept. Fisheries management records.

System (Tributary)	Year Records Began	Primary Type of Surveys[1]	1980 Escapement Estimate	Ranking of 1980 Escape. Relative To Largest Observed
Major Producers (runs of 10,000 and greater - 3 systems)				
Alsek (Kluckshu)	1976[2]	Weir/Total	1,401	4 of 5
Taku (Nakina)	1951	Aerial/Peak	4,500	5 of 21
Stikine (Little Tahltan)	1956	Aerial/Peak	2,137	1 of 12
Medium Producers (runs of 1500 to 10,000 - 8 systems)				
Situk	1928	Weir/Total	1,125	28 of 37
Unuk	1961	Aerial/Peak	1,052	4 of 13
Chickamin	1961	Aerial/Peak	261	8 of 13
Wilson/Blossum	1961	Aerial/Peak	89	7 of 10
Keta	1948	Aerial/Peak	192	12 of 16
Minor Producers (runs of 1500 and less - 22 systems)				
King Salmon	1957	Aerial/Peak	70	9 of 12

Note: Escapements are given for the above tributaries of the major systems since these have been most consistently and extensively surveyed. These tributaries are currently thought to account for approximately 64%, 40% and 25% respectively of total system production.

1/ "Weir/Total" counts are counts of fish moving past a weir and are generally considered total counts of spawning fish within the range of precision normally associated with weir counts, say ±10%. "Aerial/Peak" counts are aerial survey estimates of fish on the spawning grounds during peak spawning periods. These estimates generally account for 50% or more of the total spawning population surveyed dependening on physical characteristics of the watershed and migration and spawning characteristics of the particular stock. "Aerial/Peak" counts are used as indices or relative measures of total spawner abundance.

2/ Aerial/Peak counts for the Kluckshu tributary of the Alsek River begain in 1965.

Figure 6. Chinook salmon systems in Southeastern Alaska.



Table 3. Estimates of spawning abundance of chinook salmon for selected Southeast Alaska systems (cont.).

	Taku River						
Year	Nakina	Kowatua	Tatsamenie	Dudidontu	Tseta	Nahlin	Method
1951	5,000			400	100	1,000	Aerial/Peak
1952	9,000						Aerial/Peak
1953	7,500						Aerial/Peak
1954	6,000						Aerial/Peak
1955	3,000						Aerial/Peak
1956	1,380						Aerial/Peak
1957	1,500*						Aerial/Peak
1958	2,500*			4,500		2,500	Aerial/Peak
1959	4,000*						Aerial/Peak
1960	Poor						Aerial/Peak
1961	Poor						Aerial/Peak
1962				25	81	216	Aerial/Peak
1963							Aerial/Peak
1964							Aerial/Peak
1965	3,050	200 G	50 G	100	18	37	Aerial/Peak
1966		14 G	150 G	267	150	300	Aerial/Peak
1967		250 G		600	350	300	Aerial/Peak
1968		1,100 E	800 E	640	230	450	Aerial/Peak
1969		3,300 E	800 E				Aerial/Peak
1970		1,200 E	530 E	10	25	26	Aerial/Peak
1971		1,400 E	320 E	165		473	Aerial/Peak
1972	1,000	130 G	150 G	103	80	280	Aerial/Peak
1973	2,000	100 G	200 G	200		300	Aerial/Peak
1974	1,800	235 G	120 G	20	4	900	Aerial/Peak
1975	1,800			15		274	Helicopter
1976	3,000	341 G	620 G	40		725	Helicopter
1977	3,850	580 G	573 E	18		650	Helicopter
1978	1,620	490 G	550 E		21	624	Helicopter
1979	2,110	430 G	750 E	9		857	Helicopter
1980	4,500	450 G	905 E	158		1,531	Helicopter

G = water glacial; E = water clear

*Counts of total river not conducted - comparison made from carcass weir enumeration.

Table 3. Estimates of spawning abundance of chinook salmon for selected Southeas' Alaska systems (cont.).

Stikine River

Year	Little Tahltan R.	Mainstem Tahltan R.	Andrews Creek	Method
1956	493			Air
1957	199			Air
1958	790			Air
1959	198			Air
1960	346			Air
1967	800			Air
1975	700	2,908 E		Helicopter
1976	400	129	436(w)	Helicopter
1977	800	G	448(w)	Helicopter
1978	632	756 G	430(w)	Helicopter
1979	1,166	2,118 G/E	433(w)	Helicopter
1980	2,137	960 G	593(w)	Helicopter

G = water glacial; E = water clear; (w) = weir count

Situk River

Year	Chinook	Method	Year	Chinook	Method
1928	1,224	Weir	1950	2,011	Weir
1929	3,559	Weir	1951	2,780	Weir
			1952	1,459	Weir
1930	1,455	Weir	1953	1,040	Weir
1931	2,967	Weir	1954	2,101	Weir
1932	1,978	Weir	1955	1,571	Weir
1933					
1934	1,486	Weir	1971	964	Float
1935	638*	Weir	1972	400	Float
1936	816	Weir	1973	510	Float
1937	1,290*	Weir	1974	702	Float
1938	2,663*	Weir	1975	1,180	Float
1939	2,117	Weir	1976	1,933	Weir
			1977	1,872	Weir
1940	903	Weir	1978	1,103	Weir
1941	2,594	Weir	1979	1,754	Weir
1942	2,543	Weir			
1943	3,546*	Weir	1980	1,125	Weir
1944	2,906	Weir			
1945	1,458	Weir			
1946	4,284	Weir			
1947	5,077	Weir			
1948	3,744	Weir			
1949	1,978	Weir			

*Weir was washed out part of the time.

Table 3. Estimates of spawning abundance of chinook salmon for selected Southeast Alaska systems.

King Salmon River (Admiralty Island)

Year	Chinook	Method
1957	200	Foot
1961	117	Foot
1971	94	Foot
1972	90	Foot
1973	211	Foot
1974	104	Foot
1975	42	Foot
1976	65	Foot, Helicopter
1977	134	Foot, Helicopter
1978	57	Foot, Helicopter
1979	88	Foot, Helicopter
1980	70	Foot, helicopter

Blossom River

Year	Chinook	Method
1961	68	Foot
1963	825	Air
1972	500	Air
1974	166	Helicopter
1975	153	Helicopter
1976	68	Helicopter
1977	112	Helicopter
1978	143	Helicopter
1979	54	Helicopter
1980	89	Helicopter

Unuk River

Year	Chinook	Method
1961	673	Foot
1962	331	Air
1963	1,070	Air
1968	650	Air
1969	475	Air
1972	885	Air
1973	182	Air
1975	55	Helicopter
1976	198	Helicopter, weir-foot
1977	1,166	Helicopter, weir-foot
1978	1,765	Helicopter, weir-foot
1979	576	Helicopter, weir-foot
1980	1,052	Helicopter, weir-foot

Keta River

Year	Chinook	Method
1948	500	Foot
1950	210	Foot
1951	120	Foot
1952	462	Foot
1953	156	Foot
1954	300	Air
1955	1,000*	Air
1956	1,500*	Air
1957	500*	Air
1961	44	Foot
1975	203	Helicopter
1976	84	Helicopter
1977	230	Helicopter
1978	392	Helicopter
1979	426	Helicopter
1980	192	Helicopter

*Probably mixed chinook & chum salmon

Chickamin River

Year	Chinook	Method
1961	336	Foot
1962	775	Air
1963	450	Air
1969	345	Air
1972	860	Air
1973	229	Helicopter
1974	176	Helicopter
1975	351	Helicopter
1976	122	Helicopter
1977	235	Helicopter
1978	181	Helicopter
1979	140	Helicopter
1980	261	Helicopter

MINIMUM ESCAPEMENT GOALS FOR CHINOOK SALMON RUNS TO SELECTED SOUTHEAST ALASKA SYSTEMS, ESTIMATED POTENTIAL CHINOOK SALMON HARVEST FROM ALL SOUTHEAST ALASKA SYSTEMS FROM MINIMUM ESCAPEMENT GOALS AND FROM CURRENT ESCAPEMENT LEVELS.

Table 4. Minimum chinook salmon escapement goals and percent achievement in 1980 for selected spawning systems in Southeast Alaska (ADF&G-80).

System (Tributary)	Type of Count [1]	Minimum Escape. Goal [2]	1980 Survey Escapement Estimate	1980 Survey % of Minimum Escape. Goal
Major Producers (runs of 10,000 and greater - 3 systems)				
Alsek (Kluckshu)	Weir/Total	3,200 [3]	1,401	44%
Taku (Nakina)	Aerial/Peak	9,000	4,500	50%
Stikine(Little Tahltan)	Aerial/Peak	2,100	2,137	100%
			Average	65%
Medium Producers (runs of 1,500 to 10,000 - 8 systems)				
Situk	Weir/Total	5,100	1,125	22%
Unak	Aerial/Peak	1,800	1,052	58%
Chickamin	Aerial/Peak	900	261	29%
Wilson/Blossum	Aerial/Peak	800	89	11%
Keta	Aerial/Peak	500	192	38%
			Average	32%
Minor Producers (runs of 1,500 and less - 22 systems)				
King Salmon	Aerial/Peak	200	0	35%

Note: Management escapement goals are currently established only for the above tributaries of the major producing systems since these tributaries have been most consistently and extensively surveyed. These tributaries are currently thought to account for approximately 64%, 40% and 25% respectively of total system production.

1/ "Weir/Total" counts are counts of fish moving past a weir and are generally considered total counts of spawning fish within the range of precision normally associated with the weir counts, say ±10%. "Aerial/Peak" counts are aerial survey estimates of fish on the spawning grounds during the peak spawning period. These estimates generally account for 50% or more of the total spawning population surveyed depending on physical characteristics of the watershed and migration and spawning characteristics of the particular stock. "Aerial/Peak" counts are used as indices or relative measures of total spawner abundance.

2/ The minimum escapement goals are maximum escapements observed during surveys conducted generally since the 1950's (except for the Situk River). These are not considered estimates of optimum escapement, but represent current minimum management goals.

3/ Similarities in early historical catch patterns for the Alsek, Taku and Stikine terminal fisheries suggest that the current minimum escapement goal for the Alsek may be proportionately lower than the optimum level than for the Taku and Stikine.

Table 5, Estimates of potential average annual harvest from current minimum escapement goals for natural chinook salmon runs to Southeast Alaska systems (cont. p. 1/2) (ADF&G-80).

Assumptions								
Average Counting Rate for Aerial/ Peak Surveys 1/	Average Return Per Spawner Ratio (Harvest Rate)	Major Systems (3 Total) Alsek	Taku	Stikine	Subtotal	Medium Systems (8 Total)	Minor Systems (22 Total)	All Systems Total
50%	1.5:1 (33%)	2,500	15,000	8,400	25,900	9,500	4,400	39,800
	2:1 (50%	5,000	30,000	16,800	51,800	19,100	8,800	79,700
	2.5:1 (60%)	7,500	45,000	25,200	77,700	28,600	13,200	119,500
	3:1 (67%)	10,000	60,000	33,600	123,600	38,200	17,600	179,400
	3.5:1 (71%)	12,500	75,000	42,000	129,500	47,800	22,000	199,300
75%	1.5:1 (33%)	2,500	15,000	5,600	23,100	7,200	3,000	33,300
	2:1 (50%)	5,000	30,000	11,200	46,200	14,400	5,900	65,500
	2.5:1 (60%)	7,500	45,000	16,800	69,300	21,600	8,900	99,800
	3:1 (67%)	10,000	60,000	22,400	92,400	28,800	11,800	133,000
	3.5:1 (71%)	12,500	75,000	28,000	115,500	36,000	14,800	166,300
				Average	75,500	25,100	11,000	111,700
				High	129,500	47,800	22,000	199,300
				Low	23,100	7,200	3,000	33,300
				Approximate Percent Contribution	70%	20%	10%	

1/ Unless specified otherwise in the explanatory notes below.

Table 5. Estimates of potential average annual harvest from current minimum escapement goals for natural chinook salmon runs to Southeast Alaska systems (cont. p. 2/2) (ADF&G-80).

Notes on Computations and Assumptions

1) Major Systems

Alsek - An average Kluckshu contribution of 64% is assumed based on the average observed Kluckshu escapement compared to escapement to other tributaries. Thus the total minimum escapement goal for the Alsek system is 3,200 ÷ .64 = 5,000 fish.

Taku - An average Nakina contribution of 40% is assumed. An aerial/peak survey counting rate of 75% is assumed he Nakina tributary Thus, the total minimum escapement goal for the Taku system is (9,000 ÷ .40) ÷ .75 = 30,000 fish.

Stikine - An average Little Tahltan contribution of 25% is assumed. Thus, the total minimum escapement goal for the Stikine system is 2,100 ÷ .25 = 8,400 plus an adjustment for the aerial/peak counting rate.

2) Medium Systems

The weir/total minimum escapement goal of 5,100 fish is used for the Situk River. Based on the other four medium systems surveyed, an average aerial/peak minimum escapement goal per system of 1,000 fish is assumed. At a 50% counting rate for aerial/peak surveys, this yields a total minimum escapement goal of 19,100 fish for all eight medium systems while a 75% counting rate yields 14,400.

3) Minor Systems

An average aerial/peak minimum escapement goal per minor system of 200 fish is used. At a 50% counting rate for aerial/peak surveys, this yields a total minimum escapement goal of 8,800 fish for all 22 minor systems while a 75% counting rate yields 5.900.

Table 6. Estimates of potential average annual harvest from average 1978-80 escapements to chinook salmon systems in Southeast Alaska (cont. p. 1/2) (ADF&G-80).

Assumptions

Average Counting Rate for Aerial/ Peak Surveys 1/	Average Return Per Spawner Ratio (Harvest Rate)	Major Systems (3 Total) Alsek	Taku	Stikine	Subtotal	Medium Systems (8 Total)	Minor Systems (22 Total)	All Systems Total
50%	1.5:1 (33%)	1,620	4,570	5,250	11,440	3,500	1,580	16,520
	2:1 (50%	3,250	9,140	10,500	22,890	7,010	3,170	33,070
	2.5:1 (60%)	4,880	13,710	15,750	34,340	10,520	4,760	49,620
	3:1 (67%)	6,500	18,280	21,000	45,780	14,020	6,340	66,140
	3.5:1 (71%)	8,120	22,850	26,250	57,220	17,520	7,920	82,660
75%	1.5:1 (33%)	1,620	4,570	3,500	9,690	2,560	1,060	13,310
	2:1 (50%)	3,250	9,140	7,000	19,390	5,110	2,110	26,610
	2.5:1 (60%)	4,880	13,710	10,500	29,090	7,660	3,160	39,910
	3:1 (67%)	6,500	18,280	14,000	38,780	10,220	4,220	53,220
	3.5:1 (71%)	8,120	22,950	17,500	48,470	12,780	5,280	66,530
				Average	31,710	9,090	3,960	44,760
				High	57,220	17,520	7,920	82,660
				Low	9,690	3,500	1,060	13,310
			Approximate Percent Contribution		70%	20%	10%	

1/ Unless specified otherwise in the explanatory notes below.

Table 6. Estimates of potential average annual harvest from average 1978-80 escapements to chinook salmon systems in Southeast Alaska (cont. p. 2/2) (ADF&G-80).

Notes on Computations and Assumptions

1) Major Systems

Alsek - An average Kluckshu contribution of 64% is assumed based on the average observed Kluckshu escapement compared to escapements to other tributaries. The average 1978-80 weir/total escapement to the Kluckshu was 2,082 fish. Thus the estimated total 1978-80 average escapement to the Alsek system is 2,082 ÷ .64 = 3,253.

Taku - An average Nakina contribution of 40% is assumed. An aerial/peak survey counting rate of 75% is assumed. The average 1978-80 aerial/peak escapement to the Nakina was 2,743 fish. Thus the estimated total 1978-80 average escapement to the Taku system is (2,743 ÷ .40) ÷ .75 = 9,143.

Stikine - An average Little Tahltan contribution of 25% is assumed. The average 1978-80 aerial/peak escapement to the Little Tahltan was 1,312 fish. Thus the estimated total 1978-80 aerial/peak escapement to the Stikine system is 1,312 ÷ .25 = 5,248 plus an adjustment for the assumed aerial/peak counting rate.

2) Medium Systems

The average 1978-80 weir/total escapement for the Situk River is 1,327. The average 1978-80 aerial/peak escapement per system for the four medium systems thus surveyed is 406. Expanding these rates to all eight systems yields average 1978-80 total escapement estimates of 7,011 assuming a 50% aerial/peak counting rate and 5,114 assuming a 75% counting rate.

3) Minor Systems

The average 1978-80 aerial/peak escapement for the King Salmon River is 72 fish. Expanding this to all 22 minor systems yields 3,168 if a 50% counting rate is assumed and 2,112 if a 75% counting rate is assumed.

ESTIMATED POTENTIAL INCREASE OF CHINOOK SALMON SPAWNERS
TO SOUTHEAST ALASKA SYSTEMS FROM PROPOSED REGULATIONS
AND PROJECTED FUTURE INCREASES IN CHINOOK SALMON
HARVESTS FROM INCREASED ESCAPEMENTS AND FROM
SUPPLEMENTAL PRODUCTION

Table 7. Estimated Potential Increase of King Salmon Spawners to Southeast Alaska Systems in 1981 from Proposed Harvest Regulation Changes (ADF&G-80)

Proposed Regulation Changes	1978-80 Average Period Catch Mature and Immature of all Origins	Est. Mature of Alaskan Origin	Est. Increase of Alaskan King Spawners in 1981
1) May 15 opening date for troll fishery in outer coastal areas (compared to April 15 in 1980)	20,100	3,350	2,510
2) Eleven fishing days in May for troll fishery in intermediate corridor areas 9, 10, 12 and 14 (compared to 19 fishing days in 1980)	2,780	2,080	1,560
3) Move inner boundary of Taku R. gillnet fishery outward to Bishop Pt./Cooper Pt. area during first 3 weeks of sockeye fishery (Compared to Jaw Pt. in 1980)	1,270	640	480
4) Juneau area sport fishery closure from May (1) to (14).	400	300	220
		TOTAL	4,770

Notes and Assumptions

1) It is assumed that (i) one third of the kings harvested in outer coastal areas during Mid-April to mid-June are of Alaskan origin, (ii) 50% of the Alaskan kings are mature and (iii) 75% of the mature Alaskan kings will evade corridor and terminal area fisheries and spawn.

2) It is assumed that (i) 75% of kings harvested in corridor areas 9, 10, 12 and 14 in early May are mature spawners and (ii) 75% of these spawners will evade other corridor and terminal area fisheries and spawn. (A sample of king salmon harvested by troll gear in late April 1980 in the inside portion of district 14 (Icy Straits) consisted of 80% mature fish.)

3) It is assumed that (i) 50% of kings harvested incidentally during the first three weeks of the Taku/Snettisham gillnet sockeye fishery beginning the third Monday in June are mature spawners and (ii) 75% of these will evade this fishery and the Canadian river fishery and spawn. (A sample of 1,491 kings harvested in 1980 by the Taku/Snettishan gillnet fishery consisted of 47% mature fish.)

4) It is assumed that (i) 75% of kings harvested in the Juneau area sport fishery during early May are mature fish of Alaskan origin and (ii) 75% of these will evade other terminal area fisheries and spawn.

Table 8. Estimated Potential Increase in Chinook Salmon Spawners to Southeast Alaska Systems Per 10,000 Fish Reduction in the Harvest of Immature Fish (ADF&G-80).

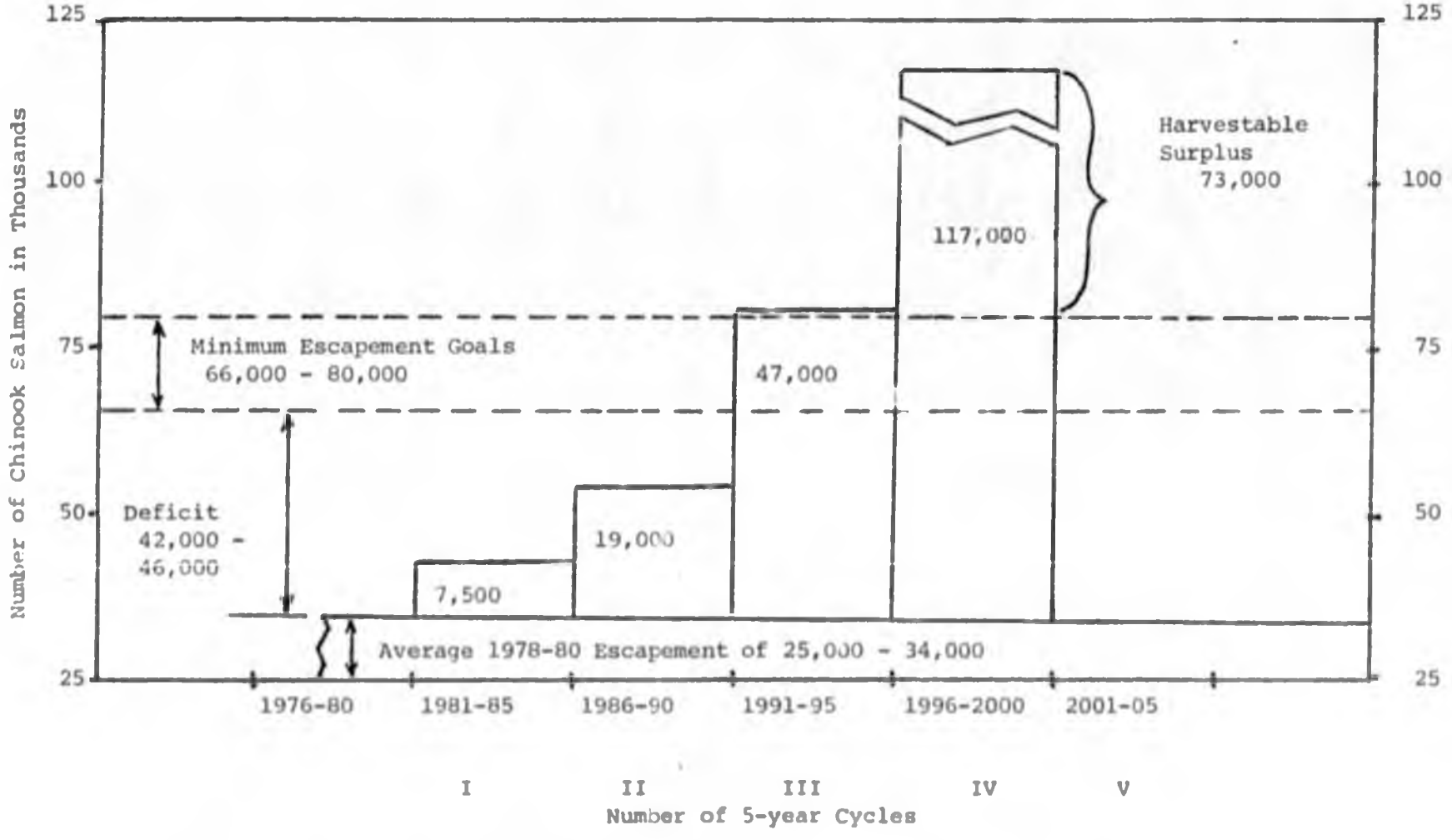
	Assumed Percent of Immature Fish of Alaskan Origin		
	10%	20%	30%
	10,000	10,000	10,000
1.) Reduction due to Non-Alaskan stocks	9,000	8,000	7,000
	1,000	2,000	3,000
2.) Reduction due to Natural Mortality @ 33% per year	333	666	999
	667	1,334	2,000
3.) Reduction due to Harvest of Mature Alaskan spawners @ 25% 1/	167	334	501
Remaining Alaska Spawners	500	1,000	1,500
Estimated number of Alaska spawners from a reduction of 27,000 in the immature harvest	1,350	2,700	4,050

1/ The assumed harvest rate of 25% for mature Alaskan spawners is based on the fishery regulations proposed by ADF&G for the 1981 season.

Table 9. Estimated Increase in Chinook Salmon Spawners to Southeast Alaska Systems in 1981 and Subsequent Years from Proposed Reductions of Mature and Immature Harvests by Southeast Alaska Fisheries.

Proposed Reduction of Southeast Alaska Chinook O.Y. by 10% or 32,000 Fish	Year of Expected Increase 1981	1982	1983	1984	1985
Estimated increase in spawners due to proposed regulations to reduce the harvest of mature fish by approximately 5,000 fish	4770	4770	4770	same as 1983	
Estimated increase in spawners due to proposed reduction of immature salmon harvest by 27,000 beginning in 1981					
1. Assume 30% of immature fish are of Alaskan origin	0	2025	4050		
Est. total increase in spawners	4770	6795	8820		
2. Assume 20% of immature fish are of Alaskan origin	0	1350	2700		
Est. total increase in spawners	4770	6120	7470		
3. Assume 10% of immature fish are of Alaskan origin	0	675	1350		
Est. total increase in spawners	4770	5445	6120		

Figure 7. Projected Average Increases in Chinook Salmon Escapements to Southeast Alaska Systems from Proposed 10% Reduction of the Southeast Alaska Commercial Chinook Salmon Harvest Ceiling from 320,000 to 288,000 in 1981.



Note: The projected increases in escapements are based on an assumed 3:1 adult return per spawner ratio adjusted downward to 2.5:1 for harvest in fisheries not currently limited by the O.Y. Catch ceiling.

Figure 8. Projected Future Increases in Southeast Alaska Chinook Salmon Harvests from Proposed Increased Escapements to Southeast Alaska Systems Beginning in 1981 and from Planned Supplemental Hatchery Production

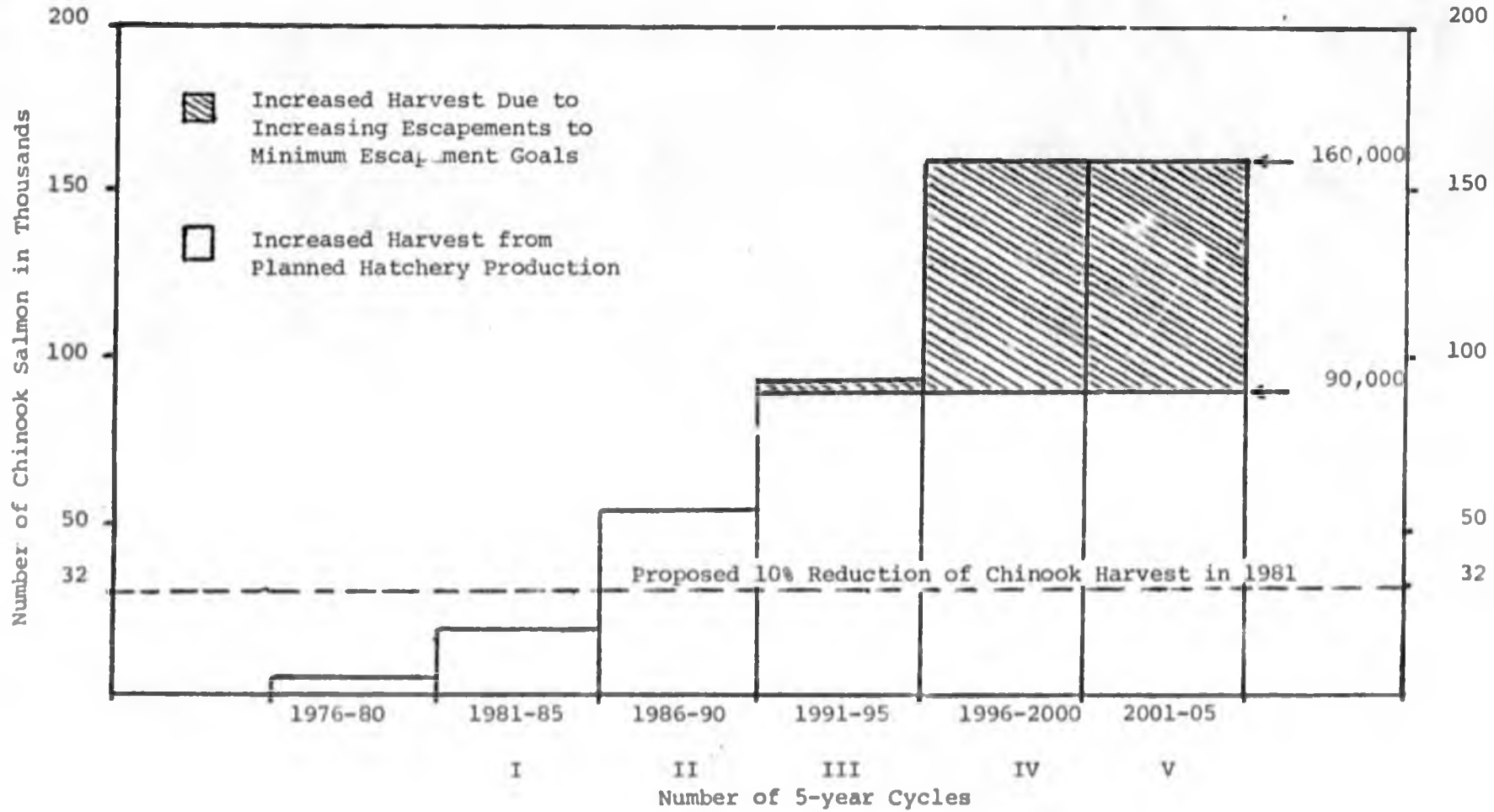
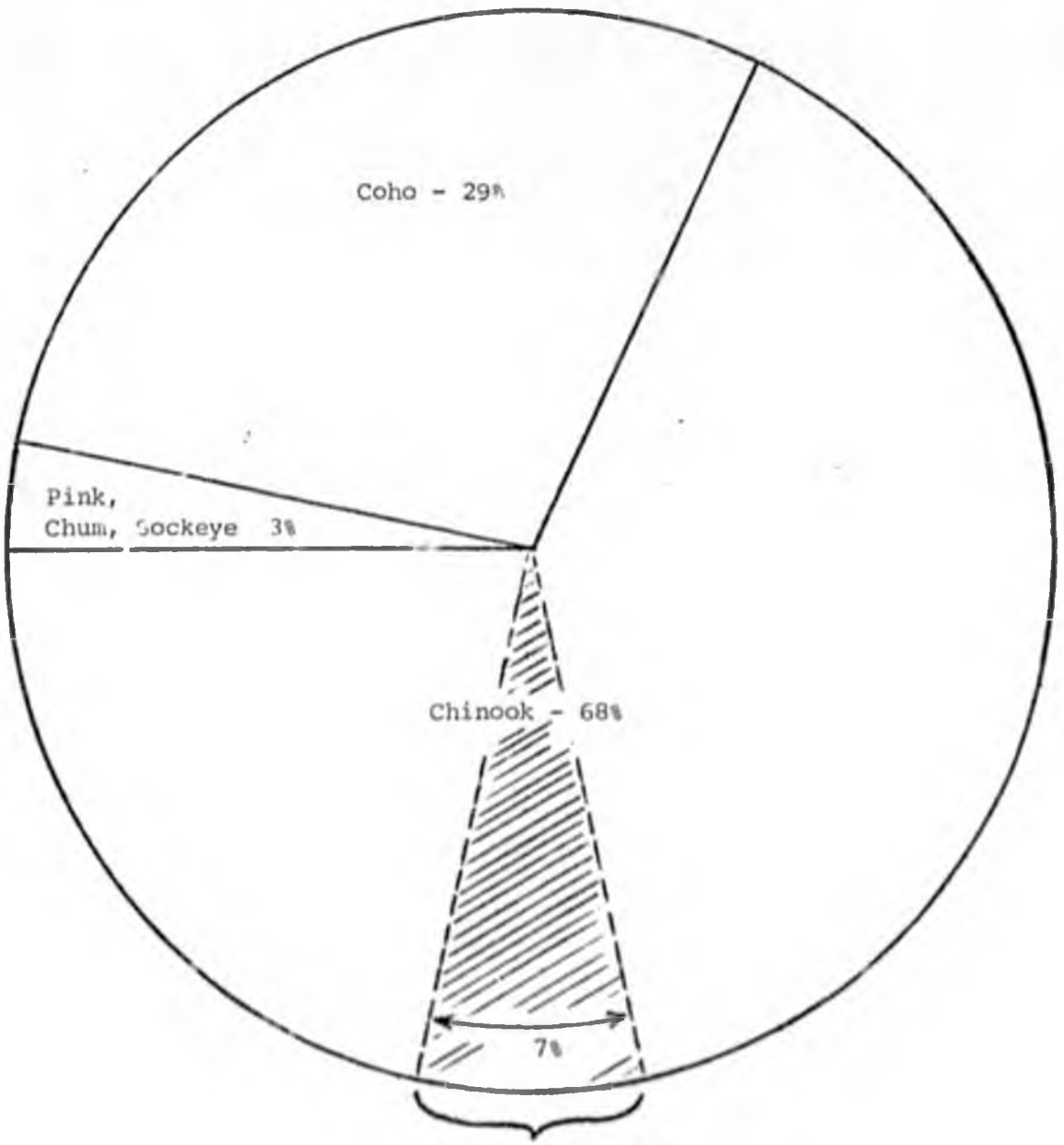


Figure 9. Relative Value to Fishermen of Chinook, Coho and Other Species of Salmon Harvested in the Southeast Alaska Troll Fishery in 1980 (Preliminary Data)

	Chinook	Coho	Pink, Chum & Sockeye	Total
Catch in 1000's lbs.	4,786	4,598	1,042	10,426
Value in $1000's	$10,768	$4,598	$456	$15,822
Percent of Total Value	68%	29%	3%	100%



Relative Value of Proposed 10% Reduction in Numbers of Chinook Salmon to be Harvested in 1981.

REPORT TO THE BOARD OF FISHERIES

1981 SOUTHEAST ALASKA SALMON TROLL FISHERY

By:

Region I Staff

Southeast Region
Alaska Department of Fish and Game
Commercial Fisheries Division
November 1981

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INTRODUCTION

The troll fishery in Southeast Alaska occurs in State and Federal waters from Cape Suckling southeast to Dixon Entrance (figure 1). Target species are primarily chinook and coho salmon although an increasing number of fishermen also target on pink salmon. Catches of chinook for the period 1970-1980 have averaged 301,000. The 1981 chinook catch by the troll fishery was 247,000. Catches of coho for the period 1970-1980 averaged 619,000. The 1981 coho catch was 861,000. Catches of other species by the troll fishery in 1981 included 576,000 pinks, 9,000 chums and 7,600 sockeye. Annual salmon catches by the troll fishery since 1970 are shown in Table 1. Fishing periods and period catches of chinook and coho for the 1981 seasons are shown in Table 2.

Historically trollers fished coastal and inshore waters but in the last 20 years a trend of increased fishing effort in offshore and coastal waters has occurred. Seventy-two percent of the 1981 troll catch of chinook was taken in coastal State and offshore Federal waters with 26% of the catch reportedly taken in offshore Federal waters (FCZ) only.

Troll gear, which annually harvests approximately 95% of the total all-gear chinook catch and 65% of the all-gear coho catch, is separated into two gear types; power and hand troll gear. The Alaska Commercial Fisheries Entry Commission currently issues 973 power troll permits and 2,150 hand troll permits. Preliminary estimates of gear actually fished during the 1981 season include approximately 850 power troll and 1,150 hand troll units. Hand troll gear permit holders accounted for approximately 13% of the chinook troll catch and 21% of the coho troll catch in 1981.

In recent years, several changes have occurred in the troll fishery that have affected management decisions and consequently the conduct of the fishery.

First, chinook salmon production from Southeast Alaska river systems has remained depressed as a result of decreased spawning escapements. In spite of severe curtailment of terminal area net fisheries, inside troll fisheries and sport fisheries beginning in the mid-1970's, escapements did not initially increase as increased effort by the troll fishery apparently offset inside and terminal area fishery restrictions. In 1980 and 1981, when more restrictive regulations were also extended to the troll fishery, some improvement in escapements occurred although the improvement was generally limited to two major systems, the Taku and Stikine Rivers. Escapements to many of the non-Alaskan chinook systems contributing to the S.E. Alaska troll fishery are also currently below optimum levels.

Second, coho escapements and production have generally declined although not as severely as chinook.

Third, increases in troll fishing effort have occurred. Increased numbers of participants during the 1970's as well as increased actual fishing power due to vessel and gear improvement produced this overall increase in fishing effort.

Fourth, recent restrictions placed on fishing time, gear and areas have resulted in more intense fishing effort during open periods.

Fifth, fishing restrictions, which were initially applied to terminal and inshore areas for the purpose of increasing escapements, transferred more fishing effort to coastal and offshore areas. As more fishermen became aware of better availability of fish in outer coastal areas, this outward shift of effort increased further. This further compounded mixed stock management problems. Harvests remained high in these areas while catches in inside fisheries and escapements of chinook and coho declined.

1981 Season Summary

Prior to the 1981 troll season, several regulatory changes were adopted by the Alaska Board of Fisheries and the North Pacific Fisheries Management Council. The two regulations that most influenced management strategy of the Department in 1981 were the reduction of the optimum yield or guideline harvest range for chinook and specification of the policy to curtail the outside coho catch to allow more fish to reach corridor and terminal areas.

The commercial chinook harvest guidelines established by the Board and Council for the 1981 season differed in that the range specified by the Board required approximately a 10% reduction over the 1980 range of 286,000 to 320,000 while the range specified by the Council required a 15% reduction. In numbers of fish, the Board's range was 272,000 to

285,000[1/] and the Council range was 243,000 to 272,000. Since both of these ranges were significantly below recent years' chinook troll catches, but applied to both net and troll gear, the harvest ceilings represented a major step toward rebuilding Alaska's chinook stocks through providing increased escapements.

Winter and summer seasons were established for purposes of maintaining the traditional winter troll fishery and to facilitate enumeration of catches. The winter troll season was established as October 1 through April 14. To provide maximum benefit to depressed Alaskan stocks of chinooks the Board also specified a closure of the troll fishery to occur from April 15 to May 14. The summer season was established as May 15 thorugh September 20.

A major problem complicating effective coho troll fishery management is the magnitude of catch that occurs in outer areas prior to the time the stocks are segregated and run strength can be assessed. A progressively larger segment of the annual catch has been taken in recent years from coastal and offshore areas as the fish migrate from the offshore feeding areas to the terminal areas and spawning streams. This phenomenon has resulted in more restrictive measures imposed on all gears in the terminal areas to insure escapement which has in turn changed the historical allocation balance of coho salmon between user groups as shown

1/ A harvest guideline of 272,000 to 288,000 initially considered by the Board at the January 1981 meeting, was shown in the 1981 Regulation booklet. However, the final harvest guideline established by the Board at the March 1981 meeting was 272,000 to 285,000.

in Figure 2 and Table 3. The Board adopted a policy in 1981 to return these inside district troll coho catches to pre-1978 levels by 1984, by specifying a 10-day troll closure to allow more coho to move further along their migration routes and to inside waters.

In-season Management Strategy

The 1981 troll fishery was managed to insure that the chinook salmon catch did not exceed the guideline harvest level established by the Board. The guideline harvest level of 285,000 fish included catches by all commercial gear types. This was the second year that a guideline harvest range was established to limit the total commercial harvest of chinook salmon in Southeast Alaska fisheries.

The Department's management plan included provisions for implementing a closure during the latter part of June, if necessary, to extend the chinook season through the end of August. This was to insure that the guideline harvest level was not achieved prior to mid-August, thereby increasing effort on coho stocks and a higher mortality on chinook hooked and released in the resulting coho only fishery. By June 15 it was apparent that the catch levels to that date were above 3 of the 4 most recent years' catches (Figure 3). This indicated that if recent years' catch patterns occurred throughout the rest of the season the harvest level would have been achieved by late July. The troll fishery was then closed for 9 days, June 26 through July 5.

The higher than normal early season catch level was due to a combination of several factors: (1) unusually good weather which allowed access to prime fishing grounds for all of the 42 days between May 15 and June 25, and (2) increased early season effort in numbers of vessels fishing due to predicted poor returns of chinook in Washington and Oregon and corresponding closures, and the reduction of the guideline harvest level in Alaska.

Following the reopening of the troll fishery on July 5, chinook and coho catches were monitored on a weekly basis. Catch projections based on fish ticket accounting systems and port sampling of deliveries were used to estimate fishery performance for chinook and coho.

A system was devised whereby normal fish ticket accounting and early landing reports from major ports were combined. This system provided weekly fishery performance estimates. These weekly estimates were then compared to the 77-80 fishery performance weekly averages and projections were made on chinook total catch and coho run strength.

By the first week of August it appeared that the chinook harvest was comparable to previous years and catch projections indicated that the chinook catch would probably reach the guideline harvest level by the first week of September. Coho returns to inside areas, as determined from inshore and terminal area catches, were poor and below the 10 year average while coho catches by the troll fishery in outer areas were relatively strong compared to recent years (Figure 4).

The troll fishery was closed again on August 10 for 10 days for the purpose of allowing more coho to reach inside areas. The National Marine Fisheries Service issued a similar regulation for the FCZ, but did not reopen the FCZ to trolling for the remainder of the 1981 season because of projections that the Council OY ceiling of 272,000 chinook would be met and significant mortality due to hook and release of chinook would occur during any coho directed fishery.

During the period from August 20 when the fishery reopened to September 3, catches of chinook and coho were monitored closely because catches appeared to be approaching the harvest ceiling for chinook and several districts continued to exhibit poor coho catches.

Historically, effort levels in numbers of vessels targeting on chinook in coastal waters have produced substantial catches during late August and early September. Numbers of vessels continuing to fish during this time period, in 1981, were greater than normal and the Department projected that the guideline harvest level would be achieved by the first week of September. The troll fishery was closed to the taking of chinook salmon in all areas and certain districts were also closed to trolling entirely for coho conservation on September 4. Districts closed to coho fishing to protect weak coho runs were 5, 6, 7, 8, 10, 15 and portions of 9 and 12.

Between September 4 and 10 concerted efforts were made to collect all fish tickets from remote buyers and landing ports to tabulate the chinook catch. By September 10 preliminary figures indicated that the catches of chinook were at the low end of the Board's guideline harvest range of 272,000-285,000. In order to prevent hooking and release mortality of chinook salmon during the ongoing coho fishery, the troll fishery was reopened to the taking of chinook in those areas opened to coho fishing. The fishery remained opened in those areas until the close of the summer season on September 20.

In addition to the foregoing description of actions taken by the Department during the 1981 troll season in Southeast Alaska, the following management measures were also taken.

The waters of District 9 in the near proximity to Little Port Walter and Big Port Walter were not closed on September 4 to allow harvest of coho returns resulting from a surplus of hatchery and lake stocking experiments.

In the Yakutat area, the weekly fishing period for trolling specified in the regulations was extended to seven days for the area between Dangerous River and Sitkagi Bluff in August when it appeared coho returns to the Situk River were near average and catches by troll gear were minimal. Following the opening of the area to 7 day per week fishing by troll gear a period of mild weather and reductions in fishing areas elsewhere in Southeast Alaska resulted in increased effort in the Yakutat area to more than triple from 6 to 20 power troll vessels and 18 hand troll vessels. Coho availability in the area was good and catches by power

troll vessels of 150-200 coho per day were reported. Trolling was returned to the weekly fishing period specified in the regulations on August 31 when the high effort levels and good catches began to affect inriver net fishery management before coho run strengths could be assessed.

Evaluation of In-season Management Strategy

The primary management goals in 1981 for the troll fishery were: (1) Increase chinook escapement and reverse the trend in declining production from systems in Southeast Alaska; (2) provide for a harvest of chinook by all gear types within the range established by the Board; and (3) reverse the trend of declining escapements of coho and increase the numbers of coho reaching inside areas while providing for a harvest level determined by in-season assessment of run strength.

Preliminary estimates of the total chinook catch by all gear, including that portion of the winter troll fishery from October 1 to December 31, 1980, indicate that a harvest of approximately 268,100 fish was achieved. This includes an estimated 19,500 fish taken incidentally in net and trap fisheries as shown in Table 4. It appears, therefore, that the final catch will probably be near the lower end of the Board harvest guideline range and the upper end of the Council range (Figure 5).

Based on catch projections made in late August and early September, a slightly larger total season chinook harvest near the mid to upper end of the Board range of 272,000 to 285,000 had been expected. The lower catch apparently occurred due to several factors, including differences between preliminary in-season catch estimates and final catches tabulated by computer from fish tickets, and lower than expected late season catch rates resulting from reduced availability of chinook combined with a shift of effort to the relatively strong coho runs in some areas. Other factors included the impact of the FCZ being closed from August 10 through the remaining part of the season and an apparent reduction in the number of boats holding and freezing fish during the season to be sold at the end of the season.

Chinook escapements to two of the three major river systems in Southeast Alaska were increased in 1981 (Table 5). The major Taku River tributaries, the Nakina River and the Nahlin River, showed substantial improvement. The major Stikine River tributaries, the Tahltan River and Little Tahltan River, also showed significant improvement. Escapements to several other lesser producing chinook salmon systems including the Chilkat River and the Farragut Bay streams appeared to have improved over recent years.

In the southern portion of Southeast Alaska, escapements to the medium sized streams in Behm Canal were mixed. The Blossom River and Keta River escapements were approximately twice the 1980 escapements, however, the Unuk River escapement was less than 1980 and the Chikamin River escapement showed little improvement. Escapements to the Behm Canal systems were all substantially below minimum escapement goals.

It appears that, for northern Southeast Alaska streams, the fishing restrictions between April 15 and May 14 contributed to the increased escapements. In the southern districts, which have slightly later run timing, the closure did not contribute significantly to increasing the escapements. The Department has submitted proposals to delay the fishing season opening in portions of District 1. These proposals, if adopted, should increase the chinook escapements to southern Southeast streams.

Coho escapements in 1981 appear to have generally improved over recent years, however, surveys are still being conducted and a more complete assessment will be provided at the Board meeting. Exceptions to these improvements were in the middle districts (5-10) where some systems declined in escapements. The northern and southern systems showed generally good escapements. Primary reasons for the increases in coho escapements were the August 10-20 troll closures and the late season net gear restrictions.

Special Problems

The periodic closures during the 1981 season reportedly caused some crowding of boats into certain areas. Many skippers reported that they could not move into distant areas because of the short time during openings. The result was concentrations of 100-200 vessels in several coastal areas. Additionally, problems were reported in landing of the catch when all of these boats came to port following a closure. Difficulties in unloading, re-icing and re-supplying were a direct result of

overcrowding. Processors reported difficulty in maintaining production quality when large volumes of fish were unloaded at the start of a closed period. Some problems also arose during the time beginning August 20 when the federally managed Fishery Conservative Zone remained closed to fishing while state waters were open. Many fishermen were confused regarding the exact delineation of boundaries for the FCZ area.

Observations on Marked or Scarred Fish

A number of chinook and coho caught in the 198 troll fishery were observed to be scarred. The Department will present a short report with visual aids on this subject at the Board and Council joint session in January.

The incidence of these external scars was about 1% for chinook and 3% for coho overall, although there were incidences as high as 10% for some deliveries sampled. The scars appear to be caused from encounters with predators and/or fishing gear, possibly nets, of unknown origin. The Department and National Marine Fisheries Service is continuing to investigate the possible sources of these scars.

FIGURES AND TABLES

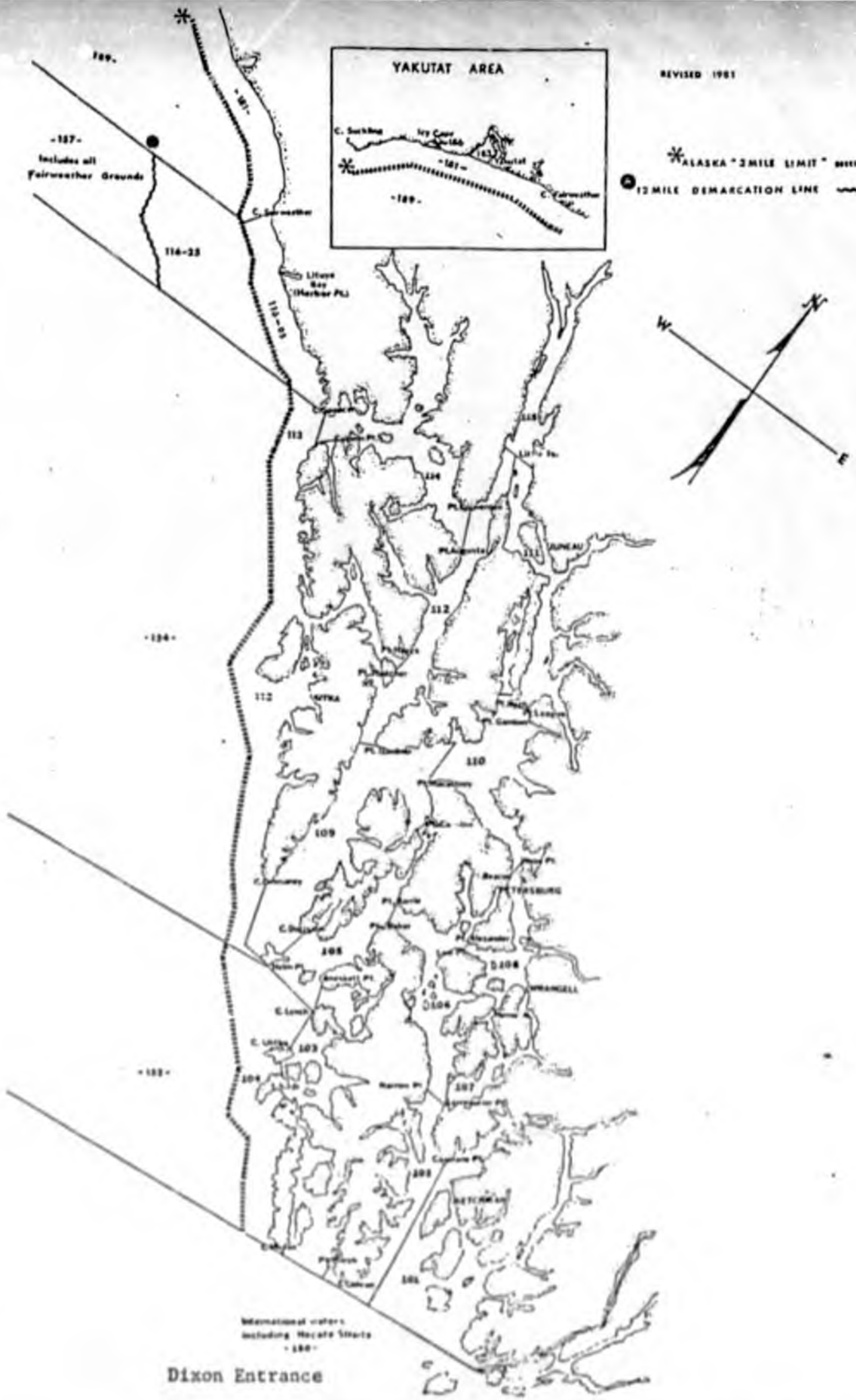


Figure 1 . Southeast Alaska Troll Fishery Statistical Areas

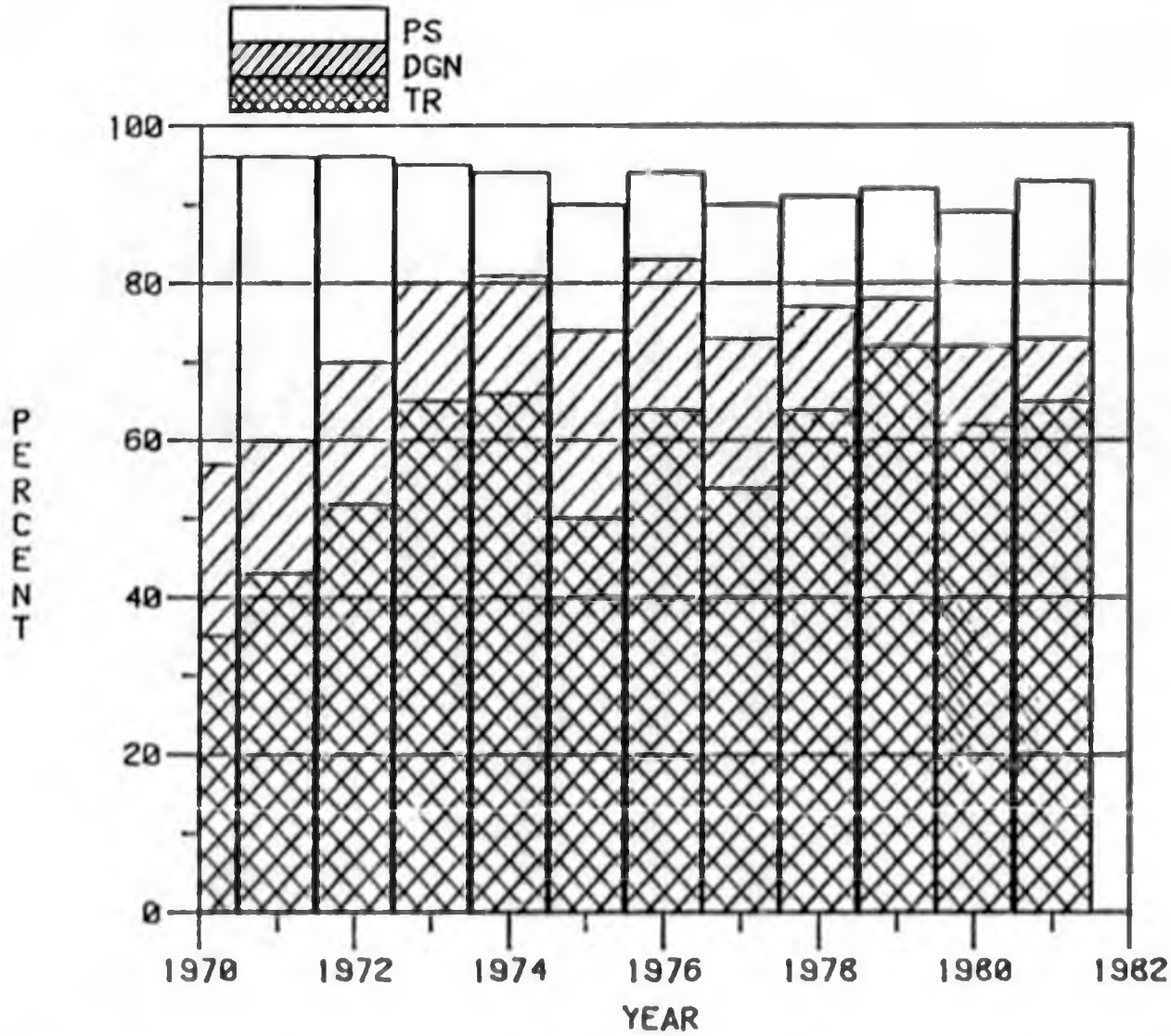


FIGURE 2. PERCENT OF TOTAL SOUTHEAST ALASKA REGION COHO SALMON HARVEST TAKEN BY PURSE SEINE(PS), DRIFT GILLNET(DGN) AND TROLL(TR) GEAR, 1970-81 (ADF&G)

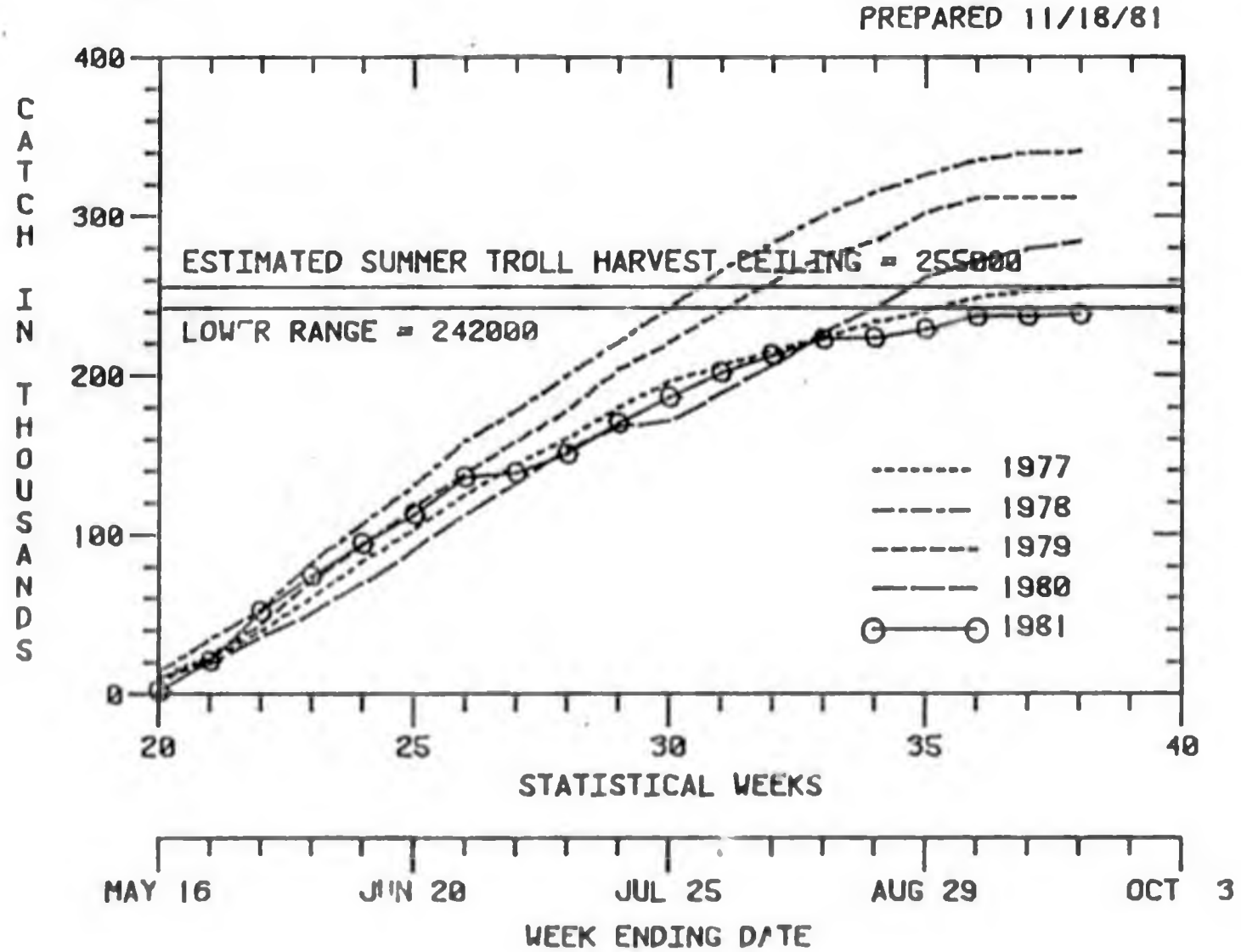


FIGURE 3. SOUTHEAST ALASKA TROLL FISHERY CUMULATIVE CHINOOK SALMON HARVEST BY WEEK BEGINNING MID-MAY, 1977-81 (ADF&G). (1981 DATA PRELIMINARY)

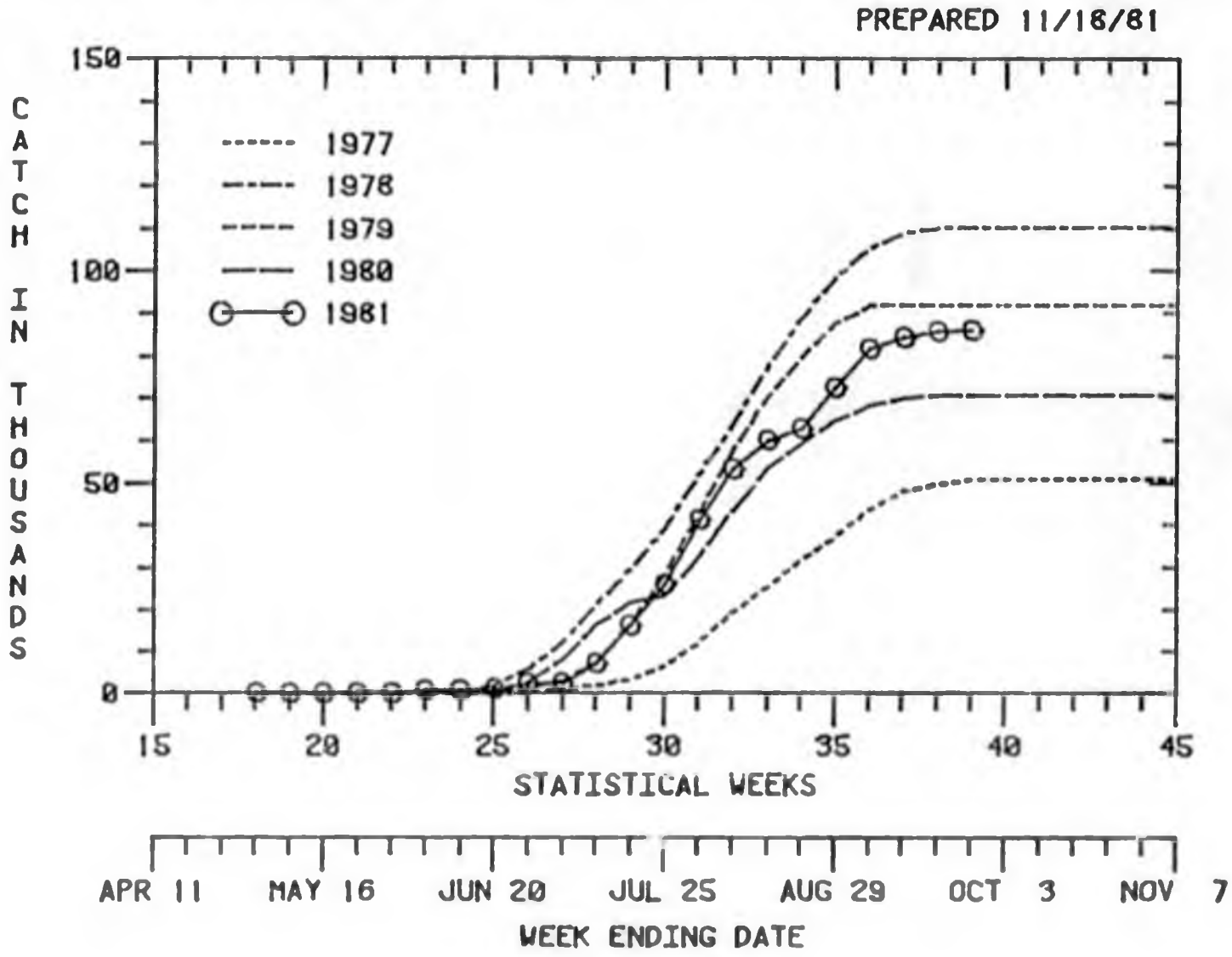


FIGURE 4. SOUTHEAST ALASKA TROLL FISHERY CUMULATIVE COHO SALMON HARVEST BY WEEK BEGINNING MID-MAY, 1977-81 (ADF&G). (1981 DATA PRELIMINARY)

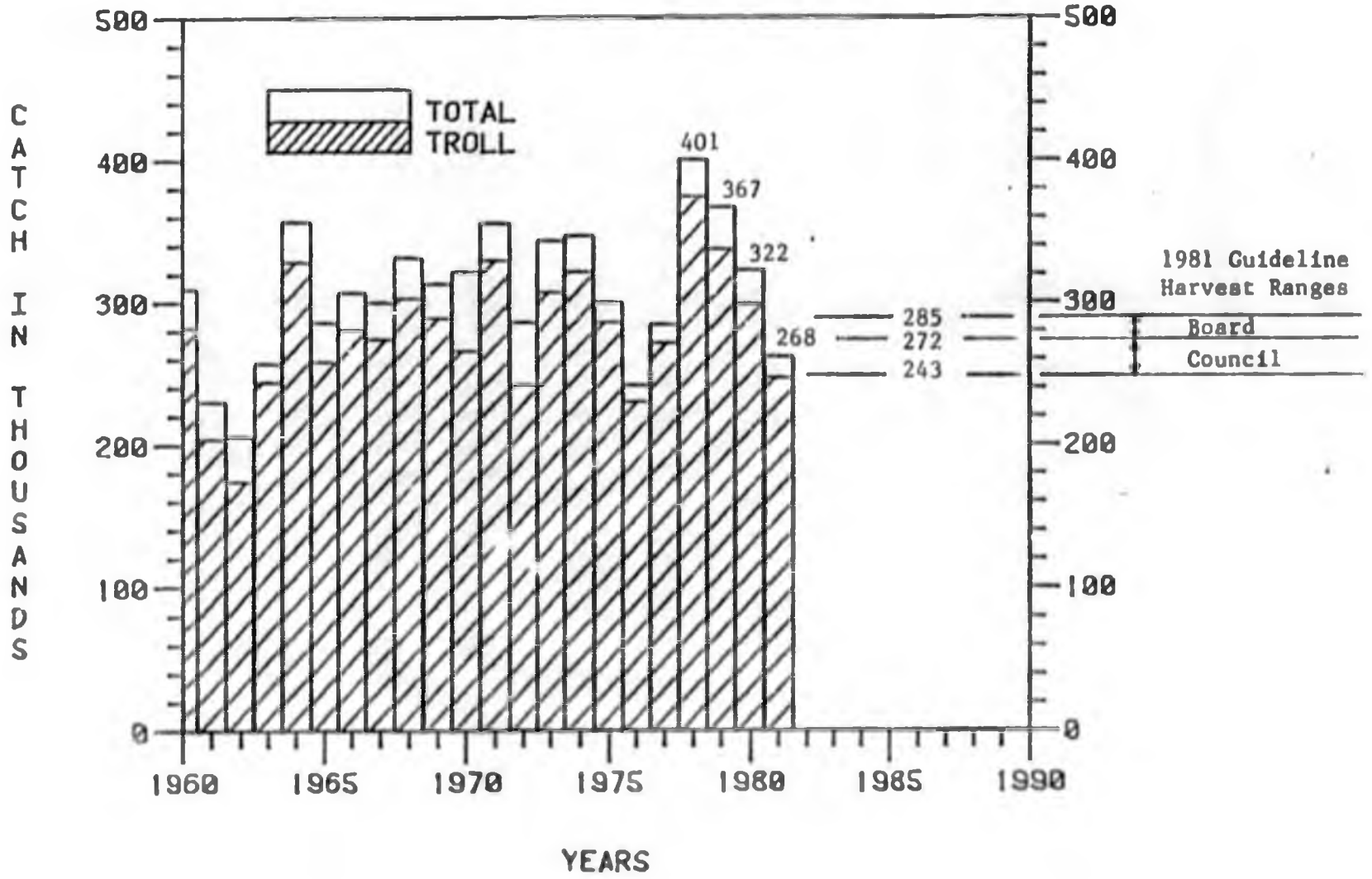


FIGURE 5. SOUTHEAST ALASKA COMMERCIAL CHINOOK SALMON CATCHES, 1960-81

Table 1 . Southeast Alaska region annual commercial salmon catches in numbers by species, 1970 to present (ADF&G 11/12/81).

Gear troll

Year	Chinook	Coho	Sockeye	Pink	Chum	Total
1970	305431	267763	477	70076	2804	646551
1971	333738	391569	936	104633	7672	838548
1972	242095	791668	1068	166853	11680	1213364
1973	307815	540104	1222	134585	10466	994192
1974	322208	846620	2606	263e03	13819	1448856
1975	287348	214254	1103	77207	2825	582737
1976	231282	524992	1274	193777	4635	955960
1977	271777	506927	5701	281286	11617	1077308
1978	375624	1102066	2804	617817	26211	2124522
1979	338219	918596	6455	629192	24703	1917165
1980	299930	706521	2902	267465	12213	1289031
Average 1970 to present	301405	619189	2413	255136	11695	1189839
1981(Prelim.)	247000	860900	7600	576000	9000	1700500

Footnotes: (1) Most recent years data should be considered preliminary.

Table 2 . Preliminary 1981 Southeast Alaska Troll Fishery
Chinook and Coho Salmon Catches by Fishing Period
(ADF&G 11/81)

Closed Periods (Days)	Open Periods (Days)	Chinook	Coho
Winter Season			
	Oct. 1 - Dec. 31, 1980	1,600	
	Jan. 1 - April 14, 1981	8,000	
Winter Season Subtotals		9,600	
Summer Season			
April 15 - May 14 (30)			
	May 15 - June 25 (41)	138,900	23,400
June 26 - July 4 (9)			
	July 5 - Aug. 9 (36)	83,400	577,500
Aug. 10 - 19 (10)[1]			
	Aug. 20 - Sept. 3 (15)	15,000	240,800
Sept. 4 - 12 (9)[2]			
	Sept. 13 - 20 (8)	1,700	19,200
Sept. 21 - 30 (10)			
Summer Season Subtotals (68)	(100)	239,000	860,900
Season Totals[3]		248,600	860,900

Notes: [1] Federal FCZ waters remained closed to fishing after Aug. 10.

[2] The Sept. 4-12 closure included all districts for chinook salmon and districts 5-10, and portions of 12 and 15 for coho salmon. These coho closures remained in effect to the end of the coho season on Sept. 20.

[3] Troll fishery harvest of other species included 576,000 pinks, 9,000 chums, and 8,000 sockeye.

Table 3 . Southeast Alaska region annual commercial salmon catches by gear in numbers and (percent), 1970 to present (ADF&G 11/04/81).

Species Coho

Year	Seine	Drift Gillnet	Set Gillnet	Troll	Trap & Misc.	Total
1970	294624 (39)	166413 (22)	30279 (4)	267763 (35)	2510 (0)	761589 (100)
1971	326423 (36)	159240 (17)	37683 (4)	391569 (43)	12 (0)	914927 (100)
1972	390643 (26)	275527 (18)	46298 (3)	791668 (52)	4688 (0)	1508824 (100)
1973	129593 (15)	124369 (15)	41776 (5)	540104 (65)	557 (0)	836399 (100)
1974	166687 (13)	186583 (15)	77556 (6)	846620 (66)	1011 (0)	1278457 (100)
1975	70201 (16)	102237 (24)	37403 (9)	214254 (50)	3262 (1)	427357 (100)
1976	87613 (11)	156223 (19)	51744 (6)	524992 (64)	3089 (0)	823661 (100)
1977	160519 (17)	183702 (19)	92228 (10)	506927 (54)	1374 (0)	944750 (100)
1978	245074 (14)	223341 (13)	139500 (8)	1102066 (64)	4527 (0)	1714508 (100)
1979	177010 (14)	83214 (6)	95885 (7)	918596 (72)	9608 (1)	1284313 (100)
1980	194268 (17)	112608 (10)	119571 (11)	706521 (62)	2800 (0)	1135768 (100)
Average 1970 to present	203878 (19)	161223 (15)	69993 (7)	619189 (59)	3040 (0)	1057323
1981(Prelim.)	266000(20)	99700(8)	91000(7)	860900(65)	4200(0)	1321800

Footnotes: (1) Average percent harvest by gear type calculated from average harvest in numbers by gear type.
(2) Percents may not sum exactly to 100 due to rounding.
(3) Seine and drift gillnet catches include salmon harvested by Annette Island Reserve fisheries.

Table 4 . Preliminary 1981 Southeast Alaska Commercial Chinook Salmon Catches by Gear (ADF&G 11/81)

Fishery	Preliminary Catch
Troll Fishery	248,600 1/
Seine Fishery (incidental harvest)	9,700
Gillnet Fishery (incidental harvest)	8,800
Trap and miscellaneous	1,000
Est. Total Commercial Harvest	268,100

1/ Includes approximately 1,600 fish harvested during that portion of the winter season from Oct. 1 through Dec. 31, 1980.

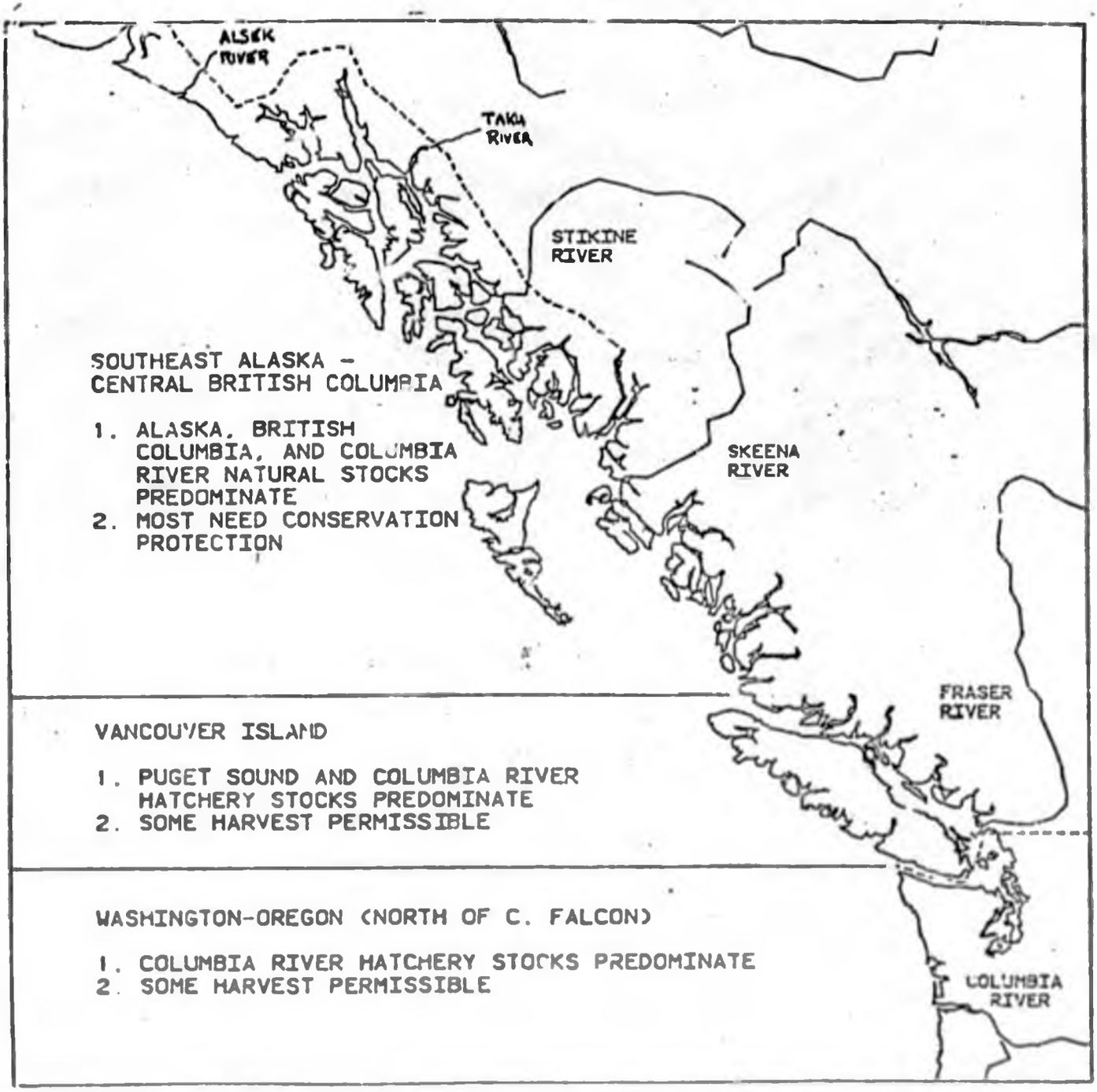
Table 5. Preliminary estimates of 1981 chinook salmon escapements to selected Southeast Alaska systems (ADF&G 11/81).

Note: Over 30 chinook salmon producing systems exist in Southeast Alaska. However, due to poor surveying conditions in many systems only those included below are currently surveyed in a consistent manner each year to provide a relative measure or index of total chinook salmon escapements to Southeast Alaska systems.

System - Tributary	Type of Survey[1]	Escapements			Minimum Escapement Goal[2]
		Ave. 1975-80	1980	1981	
		Major Systems (3 Total)			
Taku - Nakina	(1)	2,810	4,500	5,100	9,000
- Nahini	(1)	780	1,530	2,940	2,500
Taku Subtotal		3,590	6,030	8,040	11,500
Stikine - Little Tahltan	(1)	620	2,140	3,330	(2,100)
Alsek - Kluckshu	(2)	2,130	1,400	2,110	3,200
		Medium Systems (8 Total)			
Situk	(2)	1,490	1,120	810	(5,100)
Behm Canal Systems					
Keta	(1)	250	190	330	500
Blossum	(1)	100	90	160	800
Chickamin	(1)	220	260	280	900
Unuk	(1)	800	1,050	730	1,800
Behm Canal Subtotals		1,370	1,590	1,500	4,000
		Minor Systems (22 Total)			
King Salmon	(1)	76	70	100	200

[1] Type of Survey Codes (1) - Helicopter peak spawning count (primary method).
(2) - Weir total count.

[2] These minimum escapement goals, established in 1980, represent maximum escapements observed since the 1950's (except for the Situk) when Southeast Alaska chinook stocks were seriously depressed. Revision of goals for some systems, in particular the Situk and Stikine, is expected pending further data analysis.



GENERALIZED CHINOOK STOCK MANAGEMENT CONCERNS

Results of a joint technical staff meeting on
1981 chinook salmon resource status from Oregon to Southeast Alaska

December 22, 1981

Seattle, Washington

INTRODUCTION

A variety of formal working groups on the Pacific coast were given assignments in late 1981 dealing with coastwide chinook salmon management concerns. These groups include:

1. U.S.-Canada chinook working group.
2. North Pacific Fishery Management Council Salmon Team.
3. Pacific Fishery Management Council Salmon Team.
4. Technical Committee; Confederated Tribes of the Columbia River v. Secretary of Commerce M. Baldridge.
5. Internal assignments within Canadian, U.S. and tribal fishery management agencies.

The timing for output from these groups was generally in accord with the common request for: first, general stock and management information by approximately mid-December for decision points occurring in January, 1982 and second; refinements to this information for decision points in March, 1982. Much of the work assigned to each group was also common to more than one of these groups. For this reason a joint technical staff meeting was undertaken on December 22, 1981 at the Northwest and Alaska Fisheries Center (NMFS), Seattle, Washington, to address these common technical issues on a coordinated, coastwide basis. The list of participants is presented in Appendix I.

A variety of detailed material dealing with chinook stock status in the broad geographic zone from Oregon to Southeast Alaska was presented (Appendix II). Additionally, information on the 1981 fishery status and 1981 regulatory impact was presented (Appendix II). Expectations for the 1982 season in

terms of both expected run sizes and management regimes will generally be presented at various regulatory meetings to be held in January through March.

OVERVIEW

It was generally felt that the overall condition of hatchery stocks was not a conservation problem. Cases of underescaped hatchery stocks were noted as were a number of depressed runs but generally speaking most are producing harvestable surpluses at this time. Thus, harvest opportunity in both ocean and inside fisheries exists while still meeting egg take escapement needs. The condition of natural stocks, particularly for several major producers, is by-in-large severely depressed coastwide and, consequently, harvest opportunity is also severely limited if optimum spawning escapements are to be achieved.

It should be noted that positive chinook management measures have been implemented in various Pacific coast jurisdictions in recent years. Each terminal area management entity has responded to these natural chinook problems with nearly complete elimination of directed terminal fisheries within their own jurisdictions. Puget Sound and some Columbia River runs, where hatchery stocks predominate, are the only major exceptions where significant terminal fisheries exists and some of these have been severely restricted to minimize incidental harvest of depressed natural stocks. In addition, varying levels of restrictive ocean management have also been implemented.

A general consensus was reached that major natural chinook stocks, on a coastwide basis (Columbia River to Cape Suckling, Alaska) are still viable but are currently achieving escapements which are far below optimum or even minimum goals. In some cases escapements are continuing to decline while in

others escapements have stabilized at very depressed levels. Improving escapements are the rare exception rather than the rule. Overall exploitation rates on these depressed and declining stocks are currently much too high and to date severe restrictions on terminal area harvest (most frequently complete closures of directed harvest) have been inadequate by themselves to provide sufficient protection. Coastwide 1981 ocean fishery management measures in addition to these terminal area measures have proved insufficient to reverse the trend of declining natural run sizes in most areas (a small number of Southeast Alaska, Washington coastal stocks, and Puget Sound stocks appear to be the only exceptions). Fishery managers have few options to rebuild these important stocks. Major infusions of money or new hatchery production are unlikely and may not be desirable. The only effective action available is to further reduce total harvest rate.

SPECIFIC AREA STOCK STATUS REPORTS

Oregon coastal stocks: Escapement estimates are unavailable, indexes are available, however. Fall chinook stocks are generally in a favorable status as indicated by spawning ground index counts. Hatchery returns in 1981, however, appear to be less than adequate for many coastal stations.

Columbia River stocks: Upriver spring and summer stocks remain in a severely depressed state. Runs of both were at record low levels in 1979, 1980, and 1981. Upriver fall stocks: The hatchery stock is depressed but still producing harvestable surpluses; the natural stock is severely depressed realizing a record low return in 1981. Lower river fall stocks: are predominantly hatchery fish and returned at below average levels in 1981 but a harvest opportunity was available. Lower river spring stocks: are predominantly

hatchery stocks and returned in 1981 in sufficient numbers to allow a harvest opportunity and still achieve desired hatchery egg take requirements.

Washington coastal stocks: Hatchery fall chinook stocks are providing limited harvest opportunity and this condition is expected to continue. Natural spring, summer, and fall stocks on the north Washington coast are generally returning at levels which have and should continue to produce small harvest surpluses and still meet spawning escapement requirements. Grays Harbor natural spring and fall chinook are returning well below escapement goals and target harvest opportunity will probably not exist in the near future.

Puget Sound stocks: Summer/fall stocks, which comprise approximately 98% of Puget Sound chinook, remained at a stable, healthy abundance level in 1981. Run size is currently estimated to be the same as the 1975-1980 mean. Egg take at Puget Sound hatcheries was 80 million. Run size estimates for spring chinook in 1981 are not available, but escapement was presumed to be less than desired, as has been the pattern in recent years.

Canadian stocks: Natural stocks remain the predominant production unit and almost all are experiencing a greatly depressed stock condition. River returns of virtually all the 350 British Columbia chinook stocks (approximate number) are remaining very depressed or continuing to decline despite elimination of all directed terminal area fisheries. Overall, natural escapements are now at about 35% of the optimum escapement goals.

Southeast Alaska stocks: Natural stocks remain the predominant production unit and almost all are depressed below minimum escapement levels. It appears the decline in some of these stocks, in particular those originating in the Taku and Stikine Rivers has been reversed due to elimination of all directed terminal area fisheries and 1981 ocean harvest restrictions designed to begin

rebuilding consistent with a management plan currently in progress.

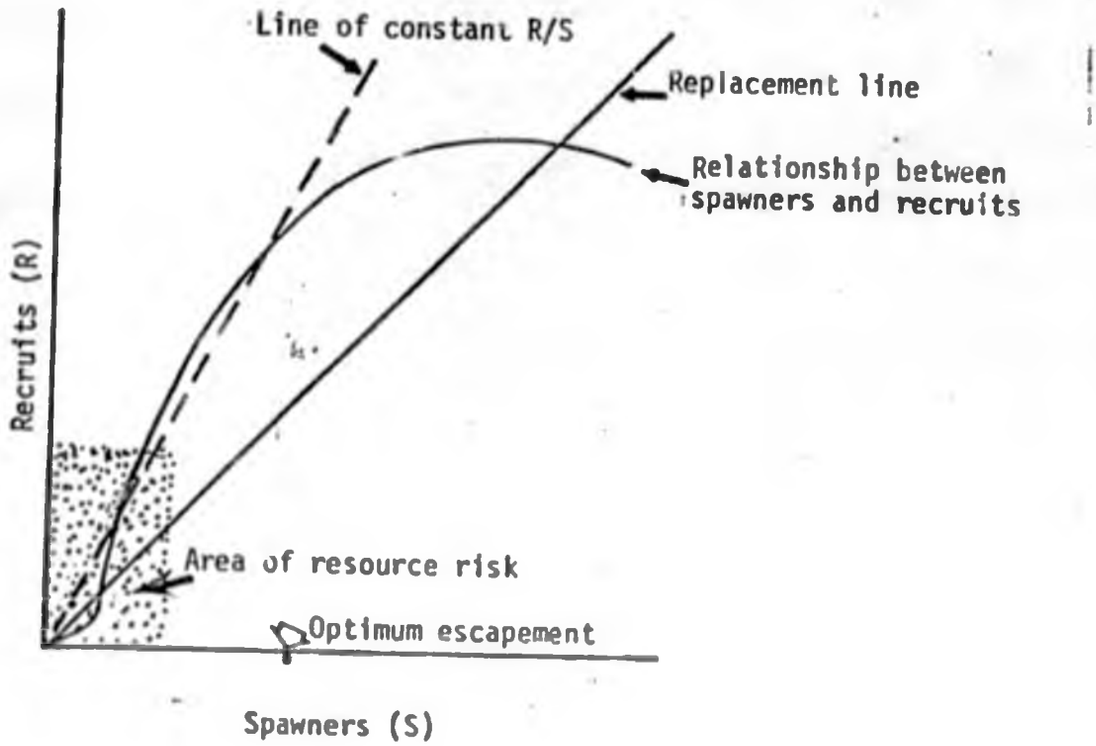
BENEFITS TO BE DERIVED FROM ACHIEVING ESCAPEMENT GOALS

The obvious purpose or objective for rebuilding depressed chinook salmon runs is to remove the risk that stocks or sub-stocks will be depressed below a viability or the biological extinction point and to obtain future benefits in the form of increased catches from present levels. Return to "healthy" population sizes will automatically ensure stock viability thus providing a base for fishery stability and the opportunity for increasing commercial fishery revenues, recreational harvest opportunity, and economic returns to support industries.

Long-term benefits can be realized only at the cost of reduced catches in the short or near term, however, long-term benefits will exceed short-term costs in total. It is recognized that short-term costs and long-term benefits may accrue unevenly to present and future participants in the fisheries.

Order of magnitude estimates of additional benefits expected from rebuilding chinook runs from current depressed levels can be made to provide some perspective on these long-term benefits. These can be derived by applying average recruits per spawner (R/S) production rates to present escapement levels and to current escapement goals. Then, by examining the differences in allowable catches at each escapement level, some idea of annual harvest loss resulting from underescapement can be generated.

While average R/S production rates will vary over different escapement levels, a relatively constant rate would be expected over the range of escapements corresponding to the ascending portion of a R/S curve between low and current escapement goals.



Selection of an appropriate average R/S ratio must be inferred at this time. Existence of substantial and fluctuating ocean fisheries makes a definitive determination impossible. Experience with other species, not substantially harvested in ocean areas, indicates an adult R/S ratio of 4 or 5 adults per spawner is reasonable. Additionally, some natural chinook river return information is available from Washington river systems (Table 1).

Table 1. River return per spawner ratios for some Washington and Columbia River natural chinook salmon runs.

Brood Year	River Return Per Spawner					
	Quillayute[1]	Hoh[1]		Queets[1]		Columbia River[2]
	Fall	Spring-Summer	Fall	Spring-Summer	Fall	Brights
1961						4.7
1962						1.4
1963						6.4
1964						1.9
1965						4.0
1966						2.3
1967					2.3	3.5
1968	1.7	2.2	6.0	2.0	1.9	2.2
1969	2.4	0.7	1.7	1.5	1.7	1.8
1970	3.5	1.0	1.5	0.9	1.0	4.1
1971	1.8	1.0	1.7	0.7	1.7	1.8
1972	1.7	1.0	3.7	1.0	1.6	2.3
1973	1.3	3.3	0.9	2.0	1.0	2.5
1974	1.9	2.8	3.3	3.4	3.0	3.1
1975	3.8	2.6	3.5	2.1	2.6	3.8
1976						1.4[3]
Mean	2.3	1.8	2.8	1.7	1.9	3.0

[1] Quinault tribe analysis.
[2] Washington Department of Fisheries data base.
[3] Preliminary.

Experience with chinook coded-wire tag experiments indicates that ocean harvest rates of approximately 66% (WDF March, 1981 report to the NPFMC) are not unreasonable. Thus, 2-3 R/S to the river represents approximately 1/3 of the total production. River R/S ratios can be expanded by another 66% to infer that overall R/S ratios might currently lie within the range of 6-9 fish per spawner in cases where there is substantial immature harvest in the ocean. A high R/S ratio such as this may represent overfishing and therefore, sustainable ratios would be lower.

For our purposes we have chosen to evaluate benefits to be derived from achieving escapement goals at R/S ratios of 4:1 and 5:1 (Table 2). These are in accord with experiences with other species, observed Washington river returns (even with high ocean harvests) and considering coded-wire tag results. The lower ratio would be conservative and the higher one would reflect, in a very approximate fashion, affects of immature harvests in the ocean.

It appears that an approximate 1.3 to 1.7 million fish harvest opportunity is being lost each year due to current underescapements of chinook salmon from the Columbia River to Cape Suckling, Alaska.

MANAGEMENT NEEDS

A general consensus was reached that, due to the severe conservation challenge confronting us with natural stocks significant catch reductions in ocean fisheries will be required to even halt the decline in chinook spawning escapements, much less begin the rebuilding process. These management measures will be needed throughout the oceanic range of these depressed stocks. The management principles of:

a) providing first for spawning escapement needs,

b) equitable distribution of the conservation measures across all users, and

c) extending restrictive management measures outside of terminal areas would ensure rebuilding and eventual resource health as well as a fair distribution of the conservation-management burden.

Table 2. Annual benefits to be derived from achieving current chinook salmon escapement goals from the Columbia River to Southeast Alaska (number of fish x 1,000).

Production Unit[1]	Base Period	3:1 C/S[2] Catch at: Base Period	Goal	Change from base	4:1 C/S[2] Catch at: Base Period	Goal	Change from base
Southeast Alaska[3]	77-80	90	219	129	120	292	172
British Columbia							
Northern	1981	340	584	244	453	778	325
Southern	1981	68	165	97	90	220	130
Georgia St.	1981	186	417	231	248	556	308
Fraser	1981	210	465	255	280	620	340
B.C. Subtotal		804	1,631	827	1,071	2,174	1,103
Washington Coastal[4]	1981	97	131	35	129	175	46
Columbia River[5]	1981	371	653	282	495	871	376
Oregon Coastal[6]		-	-	-	-	-	-
Washington/Oregon Subtotals		468	784	317	624	1,046	422
Total		1,362	2,634	1,273	1,815	3,512	1,697

[1] Production unit (spawner base) not harvest area.

[2] C/S = catch/spawner = R/S - 1

[3] Source: Proposed Management Plan for Southeast Alaska Chinook Salmon Runs in 1981. ADF&G. January, 1981. An average counting rate for aerial peak escapement surveys of 62.5% is assumed.

[4] 1981 data preliminary; calculations for natural stocks omitted for areas managed for hatchery stocks; calculations omitted for areas with unidentified escapement goals; WDF goals used where differences of opinion between the state and tribes exist; Quinault River data omitted because data were not available; 1981 Grays Harbor spring chinook escapement estimate not available, therefore, used 1980.

[5] 1981 data preliminary; calculations for natural stocks omitted for areas managed for hatchery stocks; calculations omitted for areas with unidentified escapement goals; for upriver stocks optimum production benefits assume resolution of both overfishing and environmental problems.

[6] Escapement goals not presently available, therefore, Oregon coastal stocks omitted.

APPENDIX I

List of Participants

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APPENDIX II

Detailed Technical Material Presented

Oregon Coastal Chinook Stocks

Oregon coastal chinook stocks primarily contribute to the ocean fisheries off Oregon, Washington, British Columbia and Southeastern Alaska. Portions of some runs are also harvested off northern California.

Oregon Coastal Fall Chinook

These stocks remain in a generally favorable status showing recent upward trends in spawning escapement. Preliminary spawning survey counts for 1981 indicate a continuing stable trend in these stocks even though hatchery returns at this time are less than adequate for fall chinook at many coastal stations.

Elk River fall chinook contribute to Alaskan fisheries in small numbers (2-22% of mark recoveries have occurred in Alaskan fisheries).

Trask River fall chinook contribute substantial numbers to the Alaskan catch (28 to 44% of marks recovered were from Alaskan fisheries).

Observed 1980 catches of 1976-brood Salmon River fall chinook also suggest a substantial catch in Alaskan and British Columbian waters.

Groups of 1977 or 78 brood Nestucca, Salmon, Yaquina, Alsea, Siuslaw, Coos, Rogue, Elk and Chetco fall chinook stocks are tagged and were recovered in the ocean fisheries during 1981.

Oregon Coastal Spring Chinook

Oregon coastal spring chinook contribute low numbers to the Alaskan catch. Generally less than 3% of the Umpqua and 1% of the Rogue spring chinook marks reported have been from Alaska.

Columbia River Chinook Stocks

Columbia River chinook are the predominate chinook stocks found north of Cape Falcon.

Upriver Spring - Summer Chinook

Upriver stocks of spring and summer chinook remain in a depressed state. Runs of both stocks were at record low levels in 1979, 1980, and 1981.

Lower River Spring Chinook

The major lower river Oregon run of spring chinook originates in the Willamette river system. From 6 to 35% of the total Willamette spring chinook marks reported caught in the ocean fisheries from various marked groups were recovered in Alaska.

Brood Year	Species	Stock	Release Location	Mark or CWT #	Release Date	Release Size #/lb	Release Number	Est. % Recovered Through 1978 Catc AK	BC	Wash.	Ore. Col.	Calif
	Oregon Coast											
70	CHF	Trask	Trask	PK-YW	11-15-71	9.0	51,389	42	46	12	0	0
70	CHF	Trask	Big. Cr.	PK-Rd	11-15-71	7.3	51,800	43	44	13	0	0
71	CHF	Trask	Big Cr.	PK-Bu	11-20-72	6.1	42,325	30	50	10	0	0
73	CHF	Trask	Trask	7-10-10	11-1-74	8.4	36,513	24	59	17	0	0
73	CHF	Trask	Alsea	7-10-11	10-31-74	11.6	33,893	23	61	12	4	0
74	CHF	Trask	Trask	7-11-13	10-22-75	10.1	38,232	44	48	8	0	0
74	CHF	Trask	Alsea	7-11-14	10-21-75	9.8	25,578	38	41	13	8	0
71	CHF	Elk	Elk	D-LP	11-3-72	6.6	105,397	2	26	24	43	5
73	CHF	Elk	Elk	7-10-13	11-1-74	10.0	39,660	3	38	16	41	1
73	CHF	Elk	Alsea	7-10-12	10-31-74	9.9	38,030	9	59	15	17	0
73	CHF	Elk	Wright Cr.	7-10-14	4-23-75	7.1	13,000	14	33	28	25	0
74	CHF	Elk	Elk	7-10-15	10-20-75	10.9	24,541	7	28	13	52	0
74	CHF	Elk	Elk	7-12-9	10-20-75	11.5	35,325	12	35	5	48	0
74	CHF	Elk	Alsea	7-11-15	10-21-75	10.1	32,538	22	49	22	7	0
74	CHF	Elk	Coos	7-11-9	10-21-75	11.2	26,30[illegible]	8	65	8	19	C
71	CHS	Umpqua	Umpqua	Ad-LV-RV	3-1-73	5.0	69,022	3	5	29	41	22
	Willamette System											
70	CHS	Eagle Cr.	Eagle Cr.	PK-GN	5-10-72	7.0	25,303	49	12	39	0	0
71	CHS	Clackamas	Clackamas	D-LV-RV	5- -73	10"	99,303	7	19	33	41	0
70	CHS	Santiam	Santiam	D-LP	11-17-71	7.2	20,731	6	12	32	0	C
70	CHS	Willamette	Willamette	D-RP	4- -72	9.0	120,317	9	50	18	23	C
70	CHS	Willamette	Willamette	D-LV	4- -72	----	286,258	35	32	30	3	0
71	CHS	Willamette	Willamette	D-LV	3- -73	----	101,358	12	51	25	9	3
71	CHS	Willamette	Willamette	D-RV	3- -73	5.9	290,045	13	63	15	9	0

WASHINGTON COASTAL STOCKS MAKING FAR NORTHERLY MIGRATIONS

Prepared by:

Salmon Harvest Management Division
Washington State Department of Fisheries

INTRODUCTION

Commercial net and river sport fisheries historically occur in Willapa Bay, Grays Harbor and several north Washington coastal rivers. No treaty Indian fishig rights have been established in Willapa Bay, where only non-Indian sport and commercial net fisheries exist, but stocks originating from the region are subject to equal opportunity criteria when present in tribal, usual and accustomed fishing areas. The Willapa Bay salmon harvest is managed exclusively by the Washington Department of Fisheries (WDF).

A treaty Indian net fishery occurs in Grays Harbor along with non-Indian commercial net and recreational fisheries based upon conservation and U.S. District Court sharing principles. In addition an on-reservation Indian net fishery operates on the Chehalis River (Grays Harbor tributary).

The north Washington coastal net fisheries are currently treaty Indian fisheries. Non-Indian recreational fisheries occur on most river systems. Management of salmon harvest in Grays Harbor and north Washington coastal rivers is shared by WDF and tribal governments, depending upon the specific fishery, participating fishermen, and location. Proposals on fishery schedules, allowable harvest, and escapement needs are presented to the U.S. District Courts Fishery Advisory Board (FAB) and agreed to by all parties, wherever possible, prior to commencement of each fishery.

The catch statistics presented here are necessarily preliminary. In some cases, the fisheries were ongoing at the time of compilation of the statistics and may change significantly by seasons end. Historical catch figures reflect WDF catch records for these fisheries. Where possible, these statistics have been reconciled with tribal records.

Stock Status

Willapa Bay - The summer season for sturgeon and non-local chinook started July 6 and continued through August 20. A total of 4,600 chinook were taken during this period.

Fishing for local salmon stocks began August 24 and continued through November 30. Preliminary catches for this local season are 12,250 chinook. Catches for 1971-1981 are shown in Table 1. Catch of local chinook was 32% above the 1971-1975 average and similar to 1979 and 1980.

Grays Harbor - The early season gillnet fishery for sturgeon and non-local chinook began July 6 and continued through August 14 for non-Indian fishermen and until August 26 for treaty Indian fishermen. A total catch of 1,450 chinook by non-Indian fishermen and 150 chinook by treaty Indian fishermen was made during this time period.

Preseason predictions indicated no harvestable local chinook would be available in 1981 so no directed fisheries on local chinook stocks were allowed. A total of 4,100 chinook (Table 2) were taken incidental to coho and chum fisheries. Total tribal catches were 3,500 chinook, non-Indian catches totalled 600 chinook.

Sport fishing in Grays Harbor and its tributaries was severely restricted in 1981. With the exception of later season openings in the Humptulips and Satsop Rivers designed to harvest extra hatchery fish, all other sport fishing was limited to fish less than 24" total length to meet allocation and conservation concerns.

Chehalis River (Grays Harbor Tributary) - An Indian gillnet fishery is conducted by the Chehalis Tribe on their reservation near Oakville on the Chehalis River. Spring/summer chinook fishing was severely restricted in 1981 to improve declining escapements, although catch of this run was similar to 1980. Catches of fall chinook will likely be below average (Table 3).

Quinault

Spring/summer stocks - Quinault spring summer/chinook are managed to achieve natural escapement goals. The Quinault tribe has established an escapement goal of 850 for spring/summer chinook.

The tribe has identified July as the primary spring/summer chinook management period. The fishery operated five days per week during this period. Season catch was 148 chinook. Escapement for this stock in 1981 is unknown.

Fall stocks - Quinault fall chinook are managed on the basis of hatchery production, while providing adequate natural escapement to utilize the natural rearing environment. The fall fishery yielded a season catch of 5,462 chinook.

Queets River

Spring/summer stocks - The spring/summer chinook stocks are managed for natural production. A three day per week evaluation fishery commenced June 1, continuing for three days per week for four weeks. The in-season estimator showed a run size of 1,343. A dispute between the State and the tribe about the appropriate escapement goal for this stock resulted in a ruling by the FAB chairman for an escapement goal of 1,050 for 1981. The tribe harvested the balance of the catch in brief fisheries during July and August. Final season catch was 299.

Fall stocks - Queets fall chinook are managed for natural production. The tribe operated a fall stock fishery for five days per week beginning September 1. The five days per week evaluation fishery commenced on September 28 and continued for two weeks. The in-season estimators showed a strong chinook run and a poorer than expected coho run. The tribe conducted brief fisheries in October with large mesh gear, targeting on chinook. Small numbers of coho and chum were also taken. The season catch was 4,398 chinook, 3,951 coho, and 151 chum.

Hoh

Spring/summer stocks - Hoh spring/summer chinook are managed for natural production. The tribe initiated a three day per week evaluation

fishery on June 1 continuing through June. This fishery yielded an estimated run size of 1,919. The disputed escapement goal was resolved by a ruling from the FAR chairman, who set the 1981 goal at 1,500. The additional chinook [illegible] available for harvest by this decision were taken in three weeks of fishing time during July. Final season catch was 428.

Fall stocks - The fall chinook and coho fishing season commenced on September 1, ranging from three to five days per week through September 25. The major objective of this fishery was to harvest hatchery coho, which have a somewhat earlier run timing than natural coho.

The evaluation fishery commenced September 28 for two weeks. The in-season estimator showed run sizes of 2,200 chinook.

Quillayute

Spring/summer stocks - Spring/summer chinook are managed for natural production in this river. The spring chinook fishery commenced May 3 and continued through June at 5 days per week. Because of an expected poor run size of summer chinook the fishery was reduced from five to 2-4 days per week during July and early August. The tribe commenced a fishery targeted on coho on August 9. For the season 962 spring/summer chinook were taken. Soleduck hatchery achieved 76% of its broodstock requirements for spring/summer chinook.

Fall stocks - The management season for fall chinook began September 1. The fall coho management period began September 20. Chinook were taken along with summer coho in a five day per week fishery through Septembe 18. A three day fishery was conducted during the week of September 20.

The evaluation fishery began on September 28. In-season run size estimates were 16,000 coho and nearly 5,000 chinook. The fishery closed on October 12 because of the need to protect fall chinook. A subsequent fishery scheduled for September 18-21 was terminated due to excessive chinook catches. Season catch was 1,282 fall chinook.

Evaluation of 1981 Management

Willapa Bay - Willapa chinook are managed based on hatchery run strength. Escapements, even with additional restrictions in 1981, will not meet the needs of the hatchery program. Terminal run size information for 1973-1980 is presented in Table 4.

Grays Harbor - Grays Harbor chinook are managed based on natural run strength. It does not appear that the escapement goal will be met, nor will hatchery requirements for eggs take needs. Terminal run size information for 1973-1980 is presented in Table 5.

North Washington Coast - Natural spring/summer chinook and fall chinook have shown encouraging upward trends in terminal run size in recent years. This trend is primarily a response to increased escapements, commencing with the 1977 brood. Reductions in marine fisheries have also contributed. The escapement goal of

1,500 for spring chinook in the Hoh was achieved, while escapement in the Queets was at the 1981 goal of 1,050. However, it should be stated that these were interim goals set by FAB ruling. Preliminary in-season estimates of fall chinook escapement indicated that the goals would not be achieved in the three systems managed for natural fall chinook production. However, it is expected that post-season escapement estimates will be above the preliminary figures. The Quinault is managed for hatchery production and estimates of natural escapement are not available. Historical terminal run size information is presented in Tables 6-8.

1982 Washington Coastal Chinook Outlook

Willapa Bay - Hatchery releases of 1978 brood chinook, which will make up the bulk of the 1982 return to Willapa Bay, were 3.23 million, down from the 4.32 million 1977 brood releases though still above the recent 5-year average. The 1979 brood releases, which will contribute as 3-year-olds in 1982, were 3.4 million. Based on these releases, the 1982 run is not expected to be as good as 1981.

Grays Harbor - The 1982 chinook returns to Grays Harbor will result primarily from the wild escapements in 1978 and 1979. Both these years were well below the desired escapement level, though the 1979 escapement was the best since 1979 which may provide some optimism. Based on this, an improved natural run of chinook is expected in 1982, but it will still not be sufficient to provide a directed chinook fishery. Hatchery returns will likely continue to provide no substantial harevst, as they will be needed to develop hatchery brood stock programs.

North Coast

Chinook - Natural chinook stocks on the north coast are expected to return to the terminal areas in above-average strength for 1982, as indicated by juvenile abundance indices. Returns of hatchery chinook should be comparable to 1981 returns.

Table 1. Willapa Bay chinook catches in numbers of fish by gill net gear, 1971-1980.

Year	Early season[a/]	Regular fall season
1971	2,059	7,830
1972	2,376	8,562
1973	27,857	12,586
1974	4,997	8,727
1975[b/]	6,791	8,620
1971-75 average	8,816	9,265
1976[b/]	15,678	13,340
1977[b/]	21,934	9,420
1978	3,781	7,599
1979[c/]	5,482	12,696
1980[c/]	11,850	12,900
1981[c/]	4,600	12,250

[a/] Prior to August 26.

[b/] Includes Indican catches although no treaty rights have been adjudicated in this area.

[c/] Preliminary (subject to change).

Table 2. Grays Harbor treaty Indian and non-Indian commercial chinook catches in number of fish by gill net gear, 1971-1981.

Year	Early season[a/]	Fall Season		
		Non-Indian	Indian	Total
1971	449	8,880	-	8,880
1972	440	10,113	-	10,113
1973	6,054	10,476	-	10,476
1974	1,735	7,941	70	8,011
1975	401	7,013	1,294	8,307
1971-75 average	1,816	8,885	-	9,157
1976	5,280	2,874	3,086	5,960
1977	13,536	1,840	4,006	5,846
1978	901	703	2,674	3,377
1979[b/]	881	0	95	95
1980[b/]	1,550	3,508	5,652	9,160
1981[b/]	1,600[c/]	600	3,500	4,100

[a/] Prior to August 16.

[b/] Preliminary (subject to change).

[c/] Includes 1,450 non-treaty and 150 treaty chinook.

Table 3. Chehalis Indian Reservation catch, 1971-1981.

Year	Spring chinook	Fall chinook
1971	609	487
1972	855	1,652
1973	799	2,236
1974	275	511
1975	149	578
1971-75 average	537	1,093
1976	388	386
1977	864	1,317
1978	616	1,069
1979[a/]	764	1,413
1980[a/]	301	1,229
1981[b/]	250	650

a/ Preliminary.

b/ Through November 22, 1981.

Table 4. Estimated terminal run size, catch, and escapement for Willapa Bay chinook, 1973-1980.

	Catch		Escapement		
Year	Gill net	River sport[a/]	Natural	Hatchery	Total
1973	12,600	N.A.[b/]	2,500	5,500	20,600
1974	8,700	300	2,700	5,400	17,100
1975	8,600	200	800	4,000	13,600
1976	13,300	300	3,400	2,900	19,900
1977	9,400	500	3,000	5,800	18,700
1978	7,600	600	6,700	3,700	18,600
1979	12,700	N.A.[b/]	5,000	3,900	21,600
1980	12,900	300	4,900	4,100	22,200

[a/] Adult fish only; no jacks included.

[b/] Sport catch data in 1973 and 1979 cannot be separated by sepcies and area. Total run size estimates for these 2 years are minimum values.

Table 5. Estimated terminal run size, catch, and escapement for Grays Harbor chinook, 1973-1980.

		Catch		Escapement		
Stock	Year	Gill net	River sport[a/]	Natural	Hatchery	Total
Fall	1973	12,700	N.A.[b/]	7,200	0	19,900
	1974	8,500	1,100	4,200	0	13,800
	1975	8,900	700	4,300	0	13,900
	1976	6,300	800	1,800	0	8,900
	1977	7,200	1,000	5,200	200	13,600
	1978	4,400	2,000	4,600	200	11,200
	1979	1,500	N.A.[b/]	9,400	100	11,000
	1980	10,300	800	11,700	1,100	23,900
Spring	1973	800	0[c/]	250		1,050
	1974	300	0	350		650
	1975	150	0	450		600
	1976	400	0	650		1,050
	1977	850	0	850		1,700
	1978	600	0	1,050		1,650
	1979	750	0	350		1,100
	1980	300	0	250		550

[a/] Adults only; jacks not included.

[b/] Sport catch data in 1973 and 1979 cannot be separated by species and area. Total run size estiamts for these 2 years are minimum values.

[c/] Less than 50 fish per year.

Table 6. Estimated in-river run size, catch, and escapement of Queets River chinook stocks, 1973-1981.

Stock	Year	Catch[a/]			Escapement		Terminal run size		
		Gill net	Ceremonial and subsistence	River sport[b/]	Natural	Hatchery	Natural	Hatchery	Total
Spring/summer	1973	459	NA	80	NA	-	NA	-	NA
	1974	381	NA	82	NA	-	NA	-	NA
	1975	345	NA	122	NA	-	NA	-	NA
	1976	148	NA	144	NA	-	NA	-	NA
	1977	364	NA	151	732	-	1,247	-	1,247
	1978	229	NA	85	1,110	-	1,424	-	1,424
	1979	479	31	150	989	-	1,649	-	1,649
	1980	108	?	149	1,138	-	1,404	-	1,404
	1981[c/]	299	NA	75	969	-	1,343	-	1,343
Fall	1973	3,629	NA	88	3,541	-	7,258	-	7,258
	1974	3,063	NA	109	1,540	-	4,712	-	4,712
	1975	2,052	NA	115	2,393	-	4,560	-	4,560
	1976	1,274	NA	107	1,167	-	2,548	-	2,548
	1977	1,935	NA	128	3,422	-	5,485	-	5,485
	1978	901	NA	135	2,063	-	3,099	-	3,099
	1979	860	13	160	5,653	-	6,786	-	6,786
	1980	2,621	NA	100	3,841	-	6,562	-	6,562
	1981[c/]	3,797	NA	300	4,179	-	8,276	-	8,276

a/ Gill net and ceremonial/subsistence catch from tribal records.

b/ Predominantly jacks.

c/ Preliminary.

Table 7. Estimated in-river run size, catch, and escapement of Hoh River chinook stocks, 1973-1981.

Stock	Year	Catch[a]			Escapement		Terminal run size		
		Gill net	Ceremonial and subsistence	River sport[b]	Natural	Hatchery	Natural	Hatchery	Total
Spring/summer	1973	717	50	371	NA	-	NA	-	NA
	1974	623	50	261	NA	-	NA	-	NA
	1975	495	75	522	546	-	1,638	-	1,638
	1976	484	50	229	621	-	1,384	-	1,384
	1977	871	30	118	1,015	-	2,034	-	2,034
	1978	937	90	111	1,351	-	2,489	-	2,489
	1979	653	115	264	1,442	-	2,474	-	2,474
	1980	115	44	154	842	-	1,155	-	1,155
	1981[c]	386	42	200	1,520	-	2,086	62	2,148
Fall	1973	2,187	75	226	1,966	-	4,454	-	4,454
	1974	820	75	208	563	-	1,666	-	1,666
	1975	677	150	267	400	-	1,494	-	1,494
	1976	483	25	215	469	-	1,192	-	1,192
	1977	1,619	30	193	1,191	-	3,033	-	3,033
	1978	788	55	111	797	-	1,751	-	1,751
	1979	445	35	313	1,750	-	2,543	-	2,543
	1980	481	35	382	2,127	-	3,025	-	3,025
	1981[c]	801	40	150	2,000	-	2,991	-	2,991

[a] Gill net catches and ceremonial/subsistence catch from tribal records.

[b] Predominantly jacks.

[c] Preliminary.

Table 8. Estimated in-river run size, catch, and escapement of Quillayute River stocks, 1973-1981.

Stock	Year	Catch		Escapement			Terminal run size		
		Gill net	Ceremonial and subsistence	River sport[a/]	Natural[b/]	Hatchery	Natural	Hatchery[c/]	Total
Spring/summe	1973	292	NA	1,465	NA	20	NA	NA	NA
	1974	117	NA	375	NA	-	NA	NA	NA
	1975	2,256	35	900	1,064	1,420	1,013	4,662	5,675
	1976	2,513	40	1,523	1,120	1,767	2,491	4,472	6,963
	1977	2,595	40	590	2,492	926	1,213	5,430	6,643
	1978	3,201	50	340	2,195	666	3,244	3,208	6,452
	1979	2,473	40	238	1,958	228	3,908	1,029	4,937
	1980	1,000	15	154	948	448	1,742	823	2,565
	1981[d/]	965	10	100	830	305	1,668	542	2,210
Fall	1973	5,035	NA	346	4,690	-	10,071	-	10,071
	1974	3,849	NA	259	2,307	-	6,415	-	6,415
	1975	2,290	25	707	2,072	20	4,565	549	5,114
	1976	2,246	20	643	2,083	19	4,598	413	5,011
	1977	5,297	50	316	2,973	242	7,260	1,618	8,878
	1978	1,357	15	506	4,607	251	6,385	351	6,736
	1979	2,610	25	353	4,610	81	7,459	245	7,704
	1980	1,415	22	[illegible]	6,631	41	7,842	739	8,581
	1981[d/]	1,295	20	227	5,200	118	6,46[illegible]	393	6,860

[a/] Predominantly jacks.

[b/] Includes hatchery strays.

[c/] Excludes hatchery strays.

[d/] Preliminary.

COLUMBIA RIVER STOCKS

prepared by:

Columbia River Technical Advisory Committee

Decmeber 14, 1981

INSIDE FISHERIES

Columbia River

(Oregon and Wash)

Restrictive regulations placed upon the in-river recreational and commercial fisheries in 1981 essentially eliminated any non-treaty targeted harvest of chinook salmon originating above Bonneville Dam due to need to protect spawning escapement and provide for allocation as set forth in the "Management Plan" adopted by the U.S. District Court in February, 1977.

The most restrictive commercial season ever adopted for the treaty-Indian fishery also occurred in 1981. Although all in-river runs originating below Bonneville Dam were of sufficient size to allow harvest, the only upriver origin in-river run with harvestable numbers was the Bonneville Pool Hatchery origin fall chinook "Tule" stock.

For management purposes, the various Columbia River salmon runs are separated by seasons which reflect run timing through the standard treaty and non-treaty fishing zones, both above and below Bonneville Dam.

Table II-37 shows the current status of each of the major salmonid runs.

Table II-37. Estimate of runs into Columbia River of adult salmon and steelhead destined to migrate above Bonneville Dam (in thousands of fish), 1971-81.

Year	Spring Chinook	Summer Chinook	Sockeye[a/]	Fall Chinook	Coho[b/]	Steelhead
1971	146.5	66.3	150.5	244.8	76.0	224.6
1972	269.5	63.6	123.3	188.6	65.9	225.6
1973	223.8	35.3	61.3	249.3	54.6	187.8
1974	99.8	39.0	43.9	176.9	61.0	144.8

(cont.)

Table (cont.)

1975	97.9	33.0	58.2	311.6	58.3	84.1
1971-75 Average	167.5	47.4	87.4	234.2	63.2	173.4
1976	63.9	43.8	43.7	260.4	51.9	122.4
1977	138.4	34.1	90.8	199.0	19.4	196.1
1978	127.0	39.7	18.4	193.8	52.6	105.0
1979[c/]	48.6	27.7	52.6	172.4	45.3	114.2
1980[c/]	61.0	27.0	59.4	174.9[d/]	21.7	129.8
1981[c/]	69.0	27.0	56.0	158.0[d/]	29.5	159.0

a/ Includes adult and jack salmon.
b/ Bonneville Dam count only.
c/ Preliminary.
d/ Includes Bonneville Dam count and estimated catches of upriver fish in September fisheries below Bonneville based on mark recoveries for 1980 and 1981 only.

Winter Season (Jan-March). The "Management Plan" does not set forth that catch sharing will occur during the "winter season". This is essentially due to the fact that the lower river fishery is designed to primarily harvest the early arriving segments of spring chinook salmon destined for several lower river tributaries, with Willamette River fish predominating. The 1981 lower river commercial "winter" season was not as short as the record 1980 1-day season but was significantly below the more than 12-day average season allowed through the early 1970's. In 1981, 6 days were allowed downstream of the mouth of the Willamette River during which 7,300 spring chinook were caught. The 1981 Treaty Indian "winter" season was from Feb. 1 to April 1. Unlike 1980, a treaty Indian commercial fishery above Bonneville Dam was allowed during the last two weeks of March, catching 1,500 spring chinook. The lower river sport harvest through March was an estimated 3,700 fish, essentially of lower river stock origin. Table II-38 denotes 1971-1981 "winter" season catches of spring chinook during Feb-March below Bonneville Dam.

Table II-38. Columbia River winter season chinook landings (in thousands), 1971-81. Zone 1-5 only.[b/]

Year	Commercial		Sport
	Numbers	Pounds	Numbers
1971	13.4	278.0	6.5
1972	15.8	3[illegible].0	0.2
1973	17.2	337.5	7.4
1974	13.3	277.0	2.2
1975	9.1	184.8	2.3
1971-75 Average	13.8	281.7	3.7
1976	4.7	96.1	3.2
1977	6.8	132.5	3.1
1978[a/]	13.5	264.7	5.0
1979[a/]	5.5	111.8	1.7
1980[a/]	0.4	7.6	0.8
1981[a/]	7.3	141.4	3.7

[a/] Preliminary.
[b/] A portion of catches shown for Non-Treaty fishery are of upriver origin.

Spring Season (April-May). The 1981 upriver spring chinook run to the Columbia River showed some improvement over the near record low return experienced in 1980 although it was still significantly below the escapement objective as defined in the "Management Plan". The run was not of sufficient size to allow a targeted harvest by treaty Indian or non-treaty fishermen.

Both commercial and recreational seasons were eliminated during April & May. In addition, significant steelhead sport fisheries in the mainstem Columbia River were also curtailed due to the impact from the incidental catch and handling of spring chinook which would unavoidably occur.

Although no Spring Season harvests as such occurred in 1981, Table II-39 denotes historical harvests since 1971 for reference purposes. Included within this table are the Feb.- May above Bonneville Dam treaty Indian commercial catches and April-May below Bonneville Dam commercial

catches. As set forth in the "Management Plan" the ceremonial & subsistance catches by Treaty Indians was limited to a maximum of 2000 fish due to low run size. Table II-39 does not include ceremonial & subsistence catches.

Table II-39. Columbia River upriver spring chinook landings (in thousands), 1971-81.[b/]

	Non-Treaty			Treaty	
	Commercial		Sport	Commercial	
Year	Numbers	Pounds	Numbers	Numbers	Pounds
1971	22.6	363.3	19.9	12.7	162.5
1972	69.9	1,076.5	24.4	42.8	637.9
1973	60.5	928.5	30.3	34.2	533.9
1974	8.4	135.1	14.0	17.5	270.8
1975	0	0	0	0	0
1971-75 Average	32.?	500.7	17.7	21.4	321.0
1976	0	0	0	0.4	7.2
1977	9.3	123.8	14.8	17.2	234.6
1978	0	0	0.1	2.6	55.4
1979[a/]	0	0	0	0.5	10.8
1980[a/]	0	0	0	0	0
1981[a/]	0	0	0	1.5	22.3

a/ Preliminary.
b/ A portion of catches shown for Non-Treaty fishery are of lower river origin. Table also does not include portion of upriver origin spring chinook caught during lower river Winter Season.

Summer Season (June-July). No recreational fisheries or treaty and non-treaty commercial net fisheries were allowed to target on summer miging salmon runs, either chinook or sockeye in 1981. In accordance with the "Management Plan" the treaty Indian ceremonial & subsistence catches were limited to 2000 chinook & 2000 sockeye salmon. The 1981 summer chinook run was 27,000 adults (Table II-37). The 1981 sockeye run was 56,000 fish (Table (II-37).

Fall Chinook Seasons Above and Below Bonneville. The upriver adult fall chinook run totaled approximately 158,000 adult fish (205,500 including jacks) in 1981. This was near the preseason forecast of 163,500 adult fish entering the river and one of the smallest runs ever recorded. With only lower river incidental catches and passage losses at Bonneville Dam, it was projected that the run entering the upriver fishery would be 150,000 adult fish. The upriver bright component of this upriver fall chinook run was a new record low 63,900 adult fish (1980 previous record) and only slightly above the preseason forecast of 63,500 adult fish at the river mouth.

The new data base established for in-river fall chinook management in 1980 was again used successfully in 1981. This new data base reflected revised stock timing data made available from recent micro-tagging experiments, ability to differentiate the Bonneville passage count into the two major run components and the ability to estimate harvest by stock of origin, again through use of micro-tag data obtained from the fishery. As occurred in 1980 the objectives of the 1981 fall chinook management was to achieve the 40,000 adult escapement goal over McNary Dam by maximizing harvest opportunity for Bonneville Pool Hatchery origin fall chinook "Tule" stocks while minimizing harvest of upriver origin fall chinook "bright" stocks. It was also the objective of in-river management to reduce as much as possible the share deficit owed the treaty tribes while minimizing impact on the depressed upriver "bright" run component.

Table II-40. Columbia River commercial catch of upriver origin fall chinook (in thousands, including jacks), 1971-81.

	Non-Treaty		Treaty	
Year	Numbers	Pounds	Numbers	Pounds
1971	93.8	2,044.7	56.5	953.6
1972	96.3	2,177.5	42.9	634.5
1973	105.4	2,350.9	67.9	1,148.3
1974	52.2	1,225.6	54.9	980.1
1975	95.9	2,257.8	140.6	2,665.6
1971-75 Average	88.7	2,011.3	72.6	1,276.4
1976	33.4	746.3	135.0	2,555.0
1977	69.2	1,509.6	55.2	941.8
1978 a/	39.7	939.4	61.6	1,173.7
1979 a/	28.4	636.3	62.4	1,183.5
1980 a/ b/	38.5	N/A	35.2	N/A
1981 a/ b/	4.1	69.7	53.0	915.3

a/ Preliminary.
b/ Includes Bonneville Dam count and estimated catches of upriver fish in Sept.-Nov. fisheries below Bonneville Dam based upon mark recoveries for 1980 & 1981 only.

Controversey surrounded the establishment of the actual harvest deficit owed the treaty tribes going into the 1981 season as set forth by the "Management Plan". This controversey occurred due to questions of foregone harvest opportunity, straying of upriver origin salmon into lower river hatcheries and thus not destined to return to upriver harvest areas, and harvest estimates for subsistence catches. Regardless of this controversey, the upriver origin run was not of sufficient size to eliminate the deficit, however calculated, using traditional harvest methods or fishing areas due to the depressed status

of upriver bright run component. The harvest deficit owed the treaty tribes for fall chinook was ultimately declared by the U.S. District Court to be 25,300 adult fish prior to 1981 harvests. The long-term status of the share deficit is yet to be adjudicated.

Due to the anticipated and ultimate status of upriver "bright" fall chinook as well as the question of allocation deficit between treaty and non-treaty fisheries, no lower river mainstem Columbia River commercial fishery was allowed to target on fall chinook.

Like the question of harvest deficit, the treaty Indian season for the area above Bonneville Dam was set by U.S. District Court action due to inaction by the Columbia River Compact. A decision could not be reached by the Columbia River Compact since conservation could not be defined and applied to fisheries management. The joint Oregon/Washington technical staffs had indicated that the upriver "bright" run size was not of sufficient size to achieve the 40,000 escapement goal, due to anticipated large inter-dam losses, and also sustain a targeted harvest by the treaty Indian fishery. Thus, a fishery only in the Bonneville Pool area was recommended where harvest would target on hatchery origin fall chinook while reducing upriver "bright" harvest to an incidental level. If an incidental harvest was allowable, it was argued that a targeted harvest of similar magnitude could also occur and therefore, the closure of 2/3's of the treaty fishery area was not justified since a showing of "reasonable and necessary for conservation purposes" had not been

made. Such reasoning, obviously, would not allow for maximum harvest opportunity for hatchery origin fall chinook "Tule" run component. This conflict in management strategy was left unanswered by the Columbia River Compact, making U.S. District Court action necessary.

Although indicating the season was adopted without precedence for future season considerations, the season established by the U.S. District Court did allow a targeted harvest of upriver "bright" fall chinook despite the fact that the escapement goal was not to be achieved and seemed to place a higher priority on the treaty fishing location than the future status of the resource. With a mesh restriction imposed to minimize harvest of steelhead, the Court adopted season was noon September 1 to noon September 3 (2 days) in all 3 dam pools, noon September 7 to noon September 11 (4 days) in Bonneville Pool only and noon September 14 to noon September 16 (2 days), again in all three pools. The latter could be curtailed by tribal technical staff's option, if necessary (first 6 hours of this fishing period was eliminated by tribal action after first closing totally then reopening at 6 pm on September 14). Since it had been previously announced that the second fishing period in all three pool areas was being curtailed by tribal action and it was determined that excess returns of "Tule" stock fall chinook would occur at the Spring Creek Federal Hatchery in Bonneville Pool, the Columbia River Compact acted to allow 2 additional days of fishing time in a restricted area adjacent to the hatchery. Subsequent action to re-open the total treaty fishery by the treaty tribes meant that the Columbia River Compact action resulted in only 1 additional day being provided

Table II-41. Columbia River in-river harvest of individual fall chinook stocks (adults) in 1981[a/].

Fishery	Upriver Bright	Bonneville Pool Hatchery	Upriver Total	Lower River Natural & Hatchery	Total
Lower River (non-treaty)					
Tributary Terminal Gillnet Fisheries	300	500	800	23,200	26,000
Mainstem Fall Coho Season	700	100	800	4,400	5,200
Mainstem Sport	350	0	350	650	1,000
Total Lower River Catch	1,350	2,600	3,950	28,250	32,200
Upper River					
Treaty Indian Above Bonneville	NA	NA	45,100	-0-	45,100
Total River Catch	--	--	49,000	28,300	77,300

[a/] Preliminary (as of December 14, 1981).

adjacent to Spring Creek Federal Hatchery. In summary, 3.75 days of fishing occurred in all three dam pools (5 days in 1980) with 4 additional days in Bonneville Pool only and 1 day in the restricted area adjacent to Spring Creek Federal Hatchery.

The Columbia River catch of upriver fall chinook is summarized in Table II-40. The fishery was managed based upon the strength of the two components of the upriver fall chinook run as well as the need to reduce, in as much as was possible, the sharing deficit owed the treaty tribes under the Columbia River Management Plan. This plan requires that a zero deficit be achieved after 5-years. This year was the fifth year of management under the Columbia River Management Plan. In summary, the only commercial harvest of fall chinook below Bonneville Dam occurred in select stock restricted terminal fishing areas and incidental to targeted coho harvests. Despite the almost total lower river harvest curtailment, the treaty-Indian fishing season was one of the most restrictive ever adopted and the catch was considerably below recent years average although above the catch made in 1980.

Escapement at McNary Dam was the smallest in recent two decades and a allocation deficit is still owed the treaty tribes. Table II-41 shows the in-river harvest by fall chinook stocks which occurred in 1981.

Fall Coho Season

The Fall Coho Season is established in the region below Bonneville Dam to harvest hatchery origin stocks.

The total coho catch in 1981 was second only to the record low 1977 catch as being an all-time record low since the early 1960's. A total of 46,600 coho were caught during the fall coho season with an additional 9,700 coho caught in the lower river terminal fishing areas. Since a mainstem fall chinook fishery did not occur below Bonneville, no coho were caught during that traditional fishing period (Aug-early Sept.).

The lower river non-treaty commercial fall coho season opened on September 27, one day earlier than the record late opening date in 1980, and occurred as scheduled for a total of 25 fishing days, running through November 12 (2-four-day fishing periods followed by 3 3 day fishing periods and then 2 - 4 day fishing periods). The initial open area was restricted to below Longview/Rainier highway bridge to further minimize upriver fall chinook incidental harvest. After initial 2 days open fishing time, area was expanded upstream to Lady Island due to low level chinook harvests and potential to increase coho harvests. The fishing area was not expanded further during the duration of the season. A targeted coho harvest is not allowed in the treaty fishing area due to need to minimize incidental catches of upriver origin steelhead under terms of the "Management Plan". A maximum 7 inches mesh restriction was imposed throughout lower river fall coho season to provide further protection for chinook salmon (9 inches and greater mesh size was allowed for targeted sturgeon fishery). The only mainstem lower river commercial harvest of fall chinook occurred

incidental to a mainstem coho fishery as well as in the Youngs Bay and 5 Washington Terminal river fishery areas. Lower river fall chinook and coho catches are shown in Table II-42.

Table II-42. Columbia River commercial landings of lower river fall chinook and coho (in thousands), 1971-81.

Year	Chinook		Coho[a/]	
	Numbers	Pounds	Numbers	Pounds
1971	122.1	2,027.3	264.3	2,191.5
1972	43.4	715.4	131.3	1,177.5
1973	165.3	3,201.4	183.7	1,823.2
1974	44.7	748.5	261.0	2,391.0
1975	77.4	1,478.1	156.6	1,530.8
1971-75 Average	90.6	1,634.1	199.4	1,822.8
1976	114.9	2,174.2	168.4	1,298.4
1977	97.9	1,721.7	39.0	308.9
1978[b/]	70.3	1,213.9	132.7	1,074.1
1979[b/]	74.2[c/]	1,283.7	127.6	1,065.7
1980[b/]	78.4[c/]	NA	149.5	NA
1981	27.6[c/]	NA	59.0	NA

[a/] Includes small number of August season landings, except in 1980 which includes terminal fishery catches.

[b/] Preliminary.

[c/] The chinook catch for 1980 & 1981 is an estimate of lower river stocks caught in all fisheries below Bonneville Dam, September-October.

III Evaluation of 1981 Management

Introduction

Escapement

Columbia River Chinook

Upriver Spring Chinook

The upriver run of spring chinook destined for areas above Bonneville Dam was 62,800 adults, a slight improvement over the record low runs of 1979 & 1980 (Table III-9). The escapement of adults into the Snake River at Lower Granite Dam showed considerable improvement over the disaster 1979 and 1980 escapements but still less than 50% of the minimum 30,000 adult escapement goal as set forth in "Management Plan". The Priest Rapids Dam count of 14,500 adults, which measures upper Columbia River escapement above the confluence of the Yakima & Snake rivers also showed considerable improvement (11,000 1971-80 ave.). Although these stocks are known to contribute to the ocean fisheries and only minor inriver harvests has occurred in recent years, the major cause for failure to meet in-river escapement goals was due to in-river environmental problems directly related to Snake River and Columbia River hydroelectric dam projects. Historically, the Snake River component of the upriver Spring chinook run represented the major segment. Based upon comparison of Priest Rapids and Ice Harbor Dam counts, the Snake River component represented a maximum of 48% of the run originating above McNary Dam (maximum percentage since comparison does not include run destined for Yakima River and WDF Hatchery complex below Priest Rapids Dam). The same comparison indicates the 1971-75 average was maximum 81% Snake River origin for run destined to return above McNary Dam.

Table III-9. Estimates of in-river run size and escapement of upriver adult spring chinook, 1971-81.

Year	Run Size	Escapement	Snake River Escapement[c/]
1971	146,500	96,800	21,800
1972	296,500	136,400	38,500
1973	223,800	101,200	52,800
1974	99,800	61,900	15,500
1975	97,900	97,900	16,100
1971-75 Average	167,500	98,800	28,900
1976	63,900	63,700	15,900
1977	138,400	98,600	36,200
1978	127,000	124,700	40,700
1979	48,600	48,100	6,800
1980	53,100	53,100	5,500
1981[a/]	62,800	61,300	13,100
Goal[b/]	250,000	100,000-120,000	30,000 (minimum)

a/ Preliminary.
b/ Set forth in "Management Plan".
c/ Upper most Snake River Dam.

Upriver Summer Chinook

Despite the continued almost total lack of in-river harvest, the Columbia River summer chinook run continues in a depressed state. The 1981 run as measured by the Bonneville Dam count was 27,000 fish, the smallest run ever recorded (Table III-10). Previous record low run size was 1980. The major components of summer chinook originate from the Snake River and the Columbia River above Priest Rapids Dam. The principle reason for not achieving the escapement goal is in-river environmental problems which, like spring chinook, is manifesting itself more in the Snake River than other production areas. However, the problem is further aggrevated by harvests in the ocean fisheries. The 1981 Snake

River escapement was only 25% of the 1971-75 average while the upper Columbia River escapement was 75% of the 1971-75 average.

Table III-10. Estimates of in-river run size and escapement of upriver summer chinook, 1971-81.

Year	Run Size	Escapement	Snake River Escapement	Upper Columbia Escapement
1971	89,500	72,100	26,800	17,700
1972	77,500	66,400	20,500	14,800
1973	48,900	43,400	12,000	14,300
1974	34,000	34,000	8,800	13,700
1975	44,400	44,400	8,600	22,200
1971-75 Average	59,600	52,100	15,300	16,500
1976	42,100	42,100	9,900	19,300
1977	41,200	41,000	8,400	19,600
1978	43,400	43,000	11,800	21,200
1979	34,400	34,200	3,600	22,700
1980	31,200	31,100	3,400	18,700
1981[a/]	27,000	27,000	3,800	12,300
Goal	-	80,000-90,000[b/]	-	-

[a/] Preliminary
[b/] Goal was set in 1963, subsequently incorporated into "Management Plan".

Upriver Fall Chinook

The upriver fall chinook run was only 158,00 adult fish, the smallest run ever observed since the construction of Bonneville Dam in 1938 (Table III-11). The 1981 run consisted of 63,900 adult upriver "brights" and 94,100 adults of Bonneville Pool Hatchery complex (Tule stock) origin. The escapement of 21,000 adults over McNary Dam was the smallest count

recorded in the recent decade. In 1980, an abnormally large inter-dam loss occurred, reducing the possibility of achieving the escapement goal at McNary Dam. This to-date unexplained loss occurred again in 1981 such that the in-river fall chinook run was not of sufficient size to achieve the escapement goal. Inter-dam loss of over 50% has now occurred in two successive years. The Columbia River Technical Advisory Committee and others are reviewing this problem and will seek funding for research to identify the source (s) of this extreme in-river mortality. Since this factor alone has such a large impact upon achievement of escapement goals, ability to harvest more abundant stocks, and to allocate in-river harvest, it is imparative that another year not be lost before research is begun to address this problem. The Snake River component of the upriver "bright" fall chinook run was a record low 700 fish (Ice Harbor count of adults). Like spring and summer chinook runs, a weak Snake River component is typical of this run in recent years.

Table III-11. Estimates of in-river run size and escapement of upriver origin adult fall chinook, 1971-81.

Year	Run Size	Bonneville Escapement[a/]	McNary Count
1971	244,800	102,000	49,000
1972	188,600	55,200	37,600
1973	249,300	91,100	46,600
1974	176,900	74,100	34,600
1975	311,600	97,200	29,600
1971-75 Average	234,200	83,900	39,500
1976	250,400	107,200	28,800
1977	199,000	85,700	37,600

(cont.)

River escapement was only 25% of the 1971-75 average while the upper Columbia River escapement was 75% of the 1971-75 average.

Table III-10. Estimates of in-river run size and escapement of upriver summer chinook, 1971-81.

Year	Run Size	Escapement	Snake River Escapement	Upper Columbia Escapement
1971	89,500	72,100	26,800	17,700
1972	77,500	66,400	20,500	14,800
1973	48,900	43,400	12,000	14,300
1974	34,000	34,000	8,800	13,700
1975	44,400	44,400	8,600	22,200
1971-75 Average	59,600	52,100	15,300	16,500
1976	42,100	42,100	9,900	19,300
1977	41,200	41,000	8,400	19,600
1978	43,400	43,000	11,800	21,200
1979	34,400	34,200	3,600	22,700
1980	31,200	31,100	3,400	18,700
1981[a/]	27,000	27,000	3,800	12,300
Goal	-	80,000-90,000[b/]	-	-

a/ Preliminary
b/ Goal was set in 1963, subsequently incorporated into "Management Plan".

Upriver Fall Chinook

The upriver fall chinook run was only 158,00 adult fish, the smallest run ever observed since the construction of Bonneville Dam in 1938 (Table III-11). The 1981 run consisted of 63,900 adult upriver "brights" and 94,100 adults of Bonneville Pool Hatchery complex (Tule stock) origin. The escapement of 21,000 adults over McNary Dam was the smallest count

Table (cont.)

1978	183,800	89,500	27,300
1979[b/]	172,100	84,000	31,200
1980[b/]	174,900[c/]	98,100	29,700
1981[b/]	158,000	101,500	21,000
Goal[d/]	300,000	100,000	40,000

a/ Bonneville Dam count minus Indian harvest.

b/ Preliminary.

c/ Derived from new methodology for stock separation by origin of stock.

d/ As set forth in "Management Plan".

Lower River Spring Chinook

One of the major components of the lower river spring chinook run originates from the Willamette River. The other major component is the Cowlitz River run. The Willamette run was 48,600 fish in 1981 and the escapement of 30,100 adults was at the low range of the desired level of 30-35,000 escapement over Willamette Falls (Table III-12). Escapement to the Cowlitz River was 38,100 fish, including a preliminary estimate of 13,000 recreational catch.

Table III-12. Estimates of in-river run size and escapement of lower Columbia River spring chinook, including jacks, 1971-81.

Year	Run Size	Willamette River (Willamette Falls Count)	Cowlitz
1971	67,400	44,600	11,000
1972	47,100	26,200	9,200
1973	54,500	42,000	13,700
1974	71,800	44,500	27,800
1975	32,600	19,100	45,200
1971-75 Average	54,700	35,300	21,400
1976	40,700	22,200	53,000
1977	58,000	40,000	35,800

(cont.)

Table (cont.)

1978	71,400	47,500	35,700
1979[a/]	44,600	26,600	17,200
1980[a/]	42,500	27,000	30,000
1981[a/]	48,600	30,100	38,100
Goal	-	30,000-35,000	-

a/ Preliminary.

Lower River Fall Chinook

The returns of lower river fall chinook was below average in 1981. The only targeted harvest occurred by recreational fishery (minor) and commercial fishery in select stock tributary river/bay fisheries (restricted area terminal fisheries). Washington terminal area commercial fisheries caught 21,000 chinook while Youngs Bay (Oregon) caught 5,000 chinook (Table II-42).

Hatchery Chinook

Returns of adult chinook to Columbia River stations since 1971 are shown in Table III-13. In general, egg take needs were met for all stocks of salmon except upriver fall chinook "brights". Spring chinook eggs were again obtained from federal hatcheries located in Washington to meet Snake River hatcheries production goals. To meet system wide program goals, exchange of eggs occurred between hatchery stations wherever common desired stocks were available.

Table III-13. Adult chinook and coho returns to Columbia River hatcheries (thousands), 1971-80. Includes hatcheries operated by all agencies.

	Chinook					
	Spring		Fall		Coho	
Year	Below Bonneville	Above Bonneville	Below Bonneville	Above Bonneville	Below Bonneville	Above Bonneville
1971	16.9	8.2	55.7	17.1	187.6	20.4
1972	9.3	20.5	41.2	9.6	91.3	6.2
1973	15.1	19.8	50.1	20.4	68.2	4.6
1974	33.2	6.4	34.2	14.2	152.8	10.0
1975	25.9	12.0	34.8	36.8	85.4	16.7
1976	29.9	14.8	51.6	25.8	117.3	14.4
1977	30.2	20.1	41.6	22.2	37.1	2.0
1978	25.2	14.1	59.4	20.1	131.4	7.8
1979[a/]	19.2	9.3	46.8	21.2	101.4	7.7
1980[a/]	28.4	11.2	36.3	30.2	120.4	3.4
1981[a/]	33.1	11.8	53.0	24.6	65.3	11.0

Columbia River and Oregon Coastal Coho

Measured escapements of coho salmon for the Oregon Production Index (OPI) area totaled 186,000 in 1981. The 1981 OPI escapement of coho was _____ the preseason objective of _____. This escapement is below the 1978-80 average of 305,700. The 1981 OPI escapement figure included a run size of 151,200 to the Columbia River and an escapement of _____ resulting from Oregon coastal hatchery production. The 1981 run of 151,200 to the Columbia River was the smallest in-river run size since the 1977 run when problems with OPI production were first identified. This year's in-river run was considerably below the 1978-80 runs and far below the 1971-75 average of 360,100 (Table III-14). Despite little in-river harvest of early coho, hatchery escapement of 65,300 Columbia River coho in 1981 was second only to the 1977 escapement in being the smallest in the recent decade. Early stock coho (Aug-Sept.) salmon are largely unfishable in the mainstem Columbia river due to the mixed species conflicts with chinook management needs during this period. This problem will exist as long

as lower river harvest constraints exist for fall chinook of upriver origin, subject to treaty Indian allocation. Required egg takes have been

Table III-14. Estimated in-river run size, catch and escapement of Columbia River adult coho, 1971-80 (in thousands).

	Catch	Escapement			
Year	Gill Net Below Bonneville	Hatcheries Below Bonneville	Bonneville Count	Willamette Count	Minimum Run Size
1971	264.3	187.6	53.8	17.4	523.1
1972	131.3	91.3	34.2	10.0	266.8
1973	183.7	68.2	25.8	5.2	282.9
1974	261.0	152.8	31.6	1.5	446.9
1975	156.6	85.4	32.8	5.9	280.7
1971-75 Average	199.4	117.1	35.6	8.0	360.1
1976	168.4	117.3	35.5	2.3	323.5
1977	39.0	37.1	9.3	1.0	86.4
1978	132.7	131.4	30.2	1.7	296.0
1979[a/]	127.6	101.4	29.6	1.8	260.4
1980[a/]	143.3	120.4	12.7	1.3	277.7
1981[a/]	59.0	68.2	23.0	1.0	151.2

[a/] Preliminary.

Required egg takes have been achieved for this stock and surpluses were available although not of the same magnitude as observed in past years especially when the fact is considered that an Aug-Sept. lower river fishery was not allowed in 1981. The dominant stock produced by Washington hatcheries is the late coho (Oct.-Jan.) salmon of Cowlitz River origin. Program goals for these fish is directed at achieving a run timing such that the majority of these fish contribute to the October to mid-November in-river management window, a time after most necessary chinook harvest constraints and before winter steelhead begin entering the river in significant numbers. The proper egg-taking pattern was achieved for the 1978-81 brood cycle and therefore, it is not anticipated that a large late returning (Dec.- Jan.) surplus of adults will occur in 1981 as occurred in 1980.

Declines have been noted in the abundance of natural spawning stocks of coho in the Columbia River. However, the decline is not unexpected since coho management in the Columbia River is based upon hatchery production which would tend to overharvest the natural stocks.

IV OCEAN MANAGEMENT OF SALMON IN 1982

STATUS OF CHINOOK AND COHO RESOURCE FOR 1982

Columbia River Chinook Stocks

Columbia River chinook salmon are the predominant chinook stocks found north of Cape Falcon off Oregon and along the Washington coast. Of these stocks originating from the Columbia River, the fall chinook "Tule" stock is the largest single contributor to the Oregon-Washington coastal fisheries with spring and summer & upriver "bright" fall chinook stocks contributing lesser amounts.

Status of specific stocks of Columbia River chinook is presented by current in-river management components as follows:

Lower River Spring Chinook

The major lower river spring chinook runs originate in the Willamette and Cowlitz Rivers with minor runs also originating in the Lewis, Kalama Rivers and Sandy rivers. The Willamette run is expected to be above average, about 65,000 fish in 1982 compared to the 1971-75 average of 46,100 fish.

The Cowlitz run is also expected to be as large as the 1981 run of 38,100 fish, and likely will be below the 1971-75 average of 21,400 fish.

Upriver Spring-Summer Chinook

Despite the achievement of desired spawning escapement goal for Snake River spring chinook run component in 1977 & 1978, the 1982 run is projected to be 49,000 fish, a run of the magnitude observed in 1979 (record low). This projection is based upon relationship between returning numbers of jacks and adult brood year production. There are no indications that the summer chinook will improve above record low runs seen since 1979.

Upriver Fall Chinook

Based on a relationship between a jack index at The Dalles, and John Day dams and the returning adult run of the same brood, the preliminary forecast for the Upriver Bright fall chinook return to the river is 63,000 adults, a record low. This follows record low adult returns of 77,800 in 1980 and 63,900 in 1981.

A relatively large return of two-year-old males of the Bonneville Pool Hatchery stock occurred in 1981. However, no strong relationship exists between jacks and adult production within the same brood for this stock. Therefore, the Bonneville Pool Hatchery stock run to the river in 1982 is not expected to be significantly greater than that experienced in recent years (the 1979-1981 average is 92,600 adult fish).

Lower River Fall Chinook

The status of the Lower River Hatchery stock is similar to the Bonneville Pool Hatchery stock - while the return of jacks in 1981 may be above average, the run in 1982 is not expected to be significantly greater than the poor returns of recent years. The 1979-80 average run to the river was 106,000 adult fish; the 1981 return is not available at this time.

The status of the Lower River Wild stock is not expected to be significantly different than recent year runs. The 1979-80 average run to the river was 28,600 adult fish, the 1981 return is not available at this time.

Columbia River Coho (Oregon staff)

The return of jacks to Columbia River counting areas in 1981 is about 35,000. The Columbia & Oregon Coastal jack index is about 45,000 and indicates a record low production in the OPI area for 1982, exclusive of private hatchery contribution.

EVALUATION OF 1981 MANAGEMENT FOR UPPER COLUMBIA RIVER "BRIGHT" FALL CHINOOK

Prepared by:

Salmon Harvest Management Division
Washington State Department of Fisheries

Presently, the one major chinook stock with conservation problems where sufficient information is available to evaluate the effect of 1981 ocean regulations with the National Bureau of Standards/Washington Department of Fisheries catch regulation analysis model ("the model") is the Upper Columbia "bright" fall chinook stock. Preliminary evaluation of 1975 brood bright stock coded-wire tag results permitted inclusion of this stock in the regualtory analysis presented to the North Pacific Fishery Management Council in March 1981. Post-season update of that analysis is presented here to evaluate the regulatory actions of 1981. More detailed analysis of 1982 options must await further anlaysis of upriver bright tagging data plus analysis of tagging data from other stocks.

Essentially, two types of information are required to develop a picture of the 1981 ocean catch distrubtion of the upriver brights: (1) estimates of fishing rate changes for each fishery of concern plus regulatory measures enacted (e.g. size limits), and (2) an estimate of stock abundance.

The principal fisheries that harvest brights are (not necessarily in order of importance) the Southeast Alaska troll fishery, the British Columbia troll, net and sport fisheries, the Washington/Oregon troll and sport fisheries and the Columbia River net fisheries.

Since direct measures of fishing rates are difficult to obtain, fishing rate changes are usually inferred through examination of changes in fishing effort (e.g. days fished, angler trips, etc.). Comparison of present effort levels with those during the base period (1974-76) when the stock tag data were collected form the basis for estimatng fishing rates changes.

Preliminary 1981 Washington ocean troll and sport effort statistics are available and were compared with 1974-76 averages. Effort data for 1981 Oregon coastal catch areas are not available at this time; therefore, observed changes in Washington Statistical Area 1 (Columbia River mouth) were assumed to apply to the Oregon fisheries in that area. Other southerly, marine fishing rates (Oregon south of Cape Falcon; California; Puget Sound; Washington coastal net) were left unchanged from 1981 pre-season expectations.

The 1981 effort statistics for the British Columbia troll fishery are not yet available. To project a picture of 1981 fishing rate changes, a mean of 1979 and 1980 troll-days-fished statistics was employed for each major management area on a monthly basis. Since an odd-year pink salmon run was expected in 1981, the 1979 statistics were felt to be representative of effort distribution and levels under this condition, while 1980 effort statistics represented the most recent overall level of effort in the fishery. The mean of 1979-80 days fished was then compared with the mean of 1974-76 days fished and adjusted for an October closure. No additional adjustments were made for localized short-term closures in Statistical Areas 1, 21, and 23. Angler effort data for the British Columbia sport fishery are not available at this time. However, the new 45-cm sport-caught chinook size limit imposed in 1981 was used in the fishery model simulation runs.

The Southeast Alaska troll fishery presents a difficult challenge in this regard due to a lack of effort statistics. To obtain some idea of the magnitude of fishing rate changes in the Southeast Alaska troll fishery, the average troll

chinook catch during the period 1974-76 was compared to the catch during the period 1977-80. This was done separately for both the total Southeast Alaska region and the outside catch areas and then averaged. The key assumption here is that the overall abundance of stocks contributing to the Southeast Alaska troll fishery had remained relatively stable. If stock abundance had increased during the latter period, fishing rates would be over-estimated and, conversely, if stock abundance had decreased, fishing rates would be under-estimated. The fact that fishery managers coastwide have observed depressed if not declining abundance levels is the rule for chinook stocks contributing to Southeast Alaska plus the fact that statistics show intercepting fisheries (e.g. British Columbia troll) have probably increased their harvest share of these stocks make it more likely fishing rates have been under-estimated rather than the reverse. One additional occurrence pertaining to this problem is the effect of a size limit increase in the Southeast Alaska troll fishery from 26" to 28" beginning in 1977. Simulation studies with the model were used to adjust for this effect.

To describe the effect of 1981 regulations on fishing rates in Southeast Alaska, the 1981 troll chinook catches were compared to the average 1977-80 troll catches on a monthly basis. Again, the key assumption is that overall chinook stock abundance in Southeast Alaska has not changed.

After fishery model simulations with estimated 1981 fishing rate changes, the next task was to relate actual 1981 stock abundance to model results. The mechanism for accomplishing this is to compare the 1981 terminal run size in the Columbia River (Bonneville Dam plus estimated lower river catch) with the model terminal run size (ages 3-5 escapement and in-river net catch). The terminal run size serves as a benchmark for annual comaprison of stock abundance changes. The ratio of actual terminal run size to model terminal run size enables the user to scale model recruit population up or down accordingly. Using this recruit scale factor in addition to the above fishing rate changes, model simulations were generated to describe the 1981 ocean catch distribution of brights.

The objective with respect to the bright stock is to increase terminal run size to achieve the spawning escapement objective (i.e. 40,000 adult fall chinook at McNary Dam). In 1981 only 21,000 fish were passed over McNary out of a total run size of 63,900. Under 1981 management conditions in the Columbia River and assuming no harvest of upriver brights above Bonneville Dam by treaty Indian fishermen, a run size of approximately 102,100 would have been needed to achieve the escapement goal. If the harvest rate by treaty fishermen observed in 1981 is assumed, the goal in 1981 would have been 120,500. Both objectives assume:

1. approximately 40% survival of unharvested fish between Bonneville and McNary Dams;

2. approximately 1% lower river interception rate in fisheries directed at stocks other than upriver brights; and

3. a 16% overall harvest rate by treaty Indian fishermen above Bonneville Dam (second objective only).

Table 1 presents the results of model simulation runs. Of the regulatory options considered, only a complete closure of the Southeast Alaska/northern British Columbia troll fisheries or coho-only fisheries in Southeast Alaska to central British Columbia, plus an additional coastwide June closure in all other areas, yielded terminal run sizes within the range of objectives.

Table 1. Results of model simulations of 1981 ocean fishery regulatory impacts on upper Columbia River "bright" fall chinook.

Area	Number of fish (X 1,000) Run 1	Run 2	Run 3
Southeast Alaska	37.9	0	0
Northern British Columbia	27.1	1.3	1.3
Central British Columbia	8.0	0.8	9.5
Northwest Vancouver Island	4.0	4.0	4.9
Southwest Vancouver Island	10.3	10.3	12.5
Other British Columbia[1/]	2.5	2.6	2.9
Washington/Oregon	4.6	4.8	4.8
Columbia River[2/]	63.9	106.0	106.0

Run 1: 1981 fishing regulations and intensities scaled to 1981 terminal run size

Run 2: Alaska to central British Columbia - no chinook retention - all other troll closed additionally in June (assuming no effort shifts)

Run 3: Alaska and northern British Columbia completely closed (assuming no effort shifts)

1/ Other British Columbia includes Georgia Strait, Johnston Strait, Strait of Juan de Fuca, and Washington coast.

2/ Columbia River ages 3-5 only.

1982 UPPER COLUMBIA RIVER "BRIGHT" FALL CHINOOK RUN SIZE EXPECTATIONS

Salmon Harvest Management Division
Washington Department of Fisheries

Prepared with information available through December 8, 1981, and, therefore, subject to change. This run size expectation constitutes the best available estimate at this time; while it will be superseded by a more accurate run prediction by July 1982 it does reflect the continuing decline of this resource.

December 9, 1981
Olympia, Washington

The Washington Department of Fisheries' (WDF) technical staff has developed a technique for making accurate per-season adult in-river run size predictions for the upper Columbia River chinook known as upriver brights by utilizing relationships oetween age group abundance within a brood year. At this time complete information about the most recently returned year class (1981) is unavailable, nevertheless, an expectation for 1982 in-river abundance is needed for guiding management in both North Pacific and Pacific council management areas.

An early pre-season projection was made of the 1981 in-river run size by quantifying the trend in adult abundance for the years 1975 to 1980 (WDF report, March 1981). The 1981 expectation of 69,400 adults compares with the preliminary estimated 1981 return of 63,900 adults (Figure 1). Though the difference between actual and projected is no greater than the error expected of such a trend line, continued reliance upon such a method should be avoided if additional or more appropriate information is available.

A similarly declining trend to that seen in adult run size is observed of the in-river return of age-two upper Columbia River brights. Upriver bright jacks are enumerated at The Dalles, John Day, and McNary dams, however, a consistent measure of relative age-two population size is found by combining the annual jack counts at John Day and The Dalles dams. To reflect the abundance of a single adult year class, jack counts from brood years of the major three contributing adult age groups (3-5) are combined and averaged. A relationship between jack and adult returns assumes that most of the variability in brood year production occurs prior to the return of two-year-olds and that the maturity schedule of different broods is relatively constant. Though the 1981 jack count increased from the 1980 count, the three-year index corresponding to the 1982 adult run is less than the index of 1981 previously the lowest index within the data base (Table 1).

Upriver bright adult run size is regressed against the jack index for the years 1975 to 1981 to produce a predictive relationship for the 1982 run size. A predicted adult run size of 62,900 is slightly less than the record low run size of 1982 (Figure 2).

LITERATURE CITED

Review of 1981 NPFMC Preferred Options and Refinements to the Analysis of Upper Columbia River "Bright" Fall Chinook Management Needs and Opportunities for 1981. Washington Department of Fisheries March 12, 1981.

Figure 1. Upriver bright adult run size, 1975-1981.

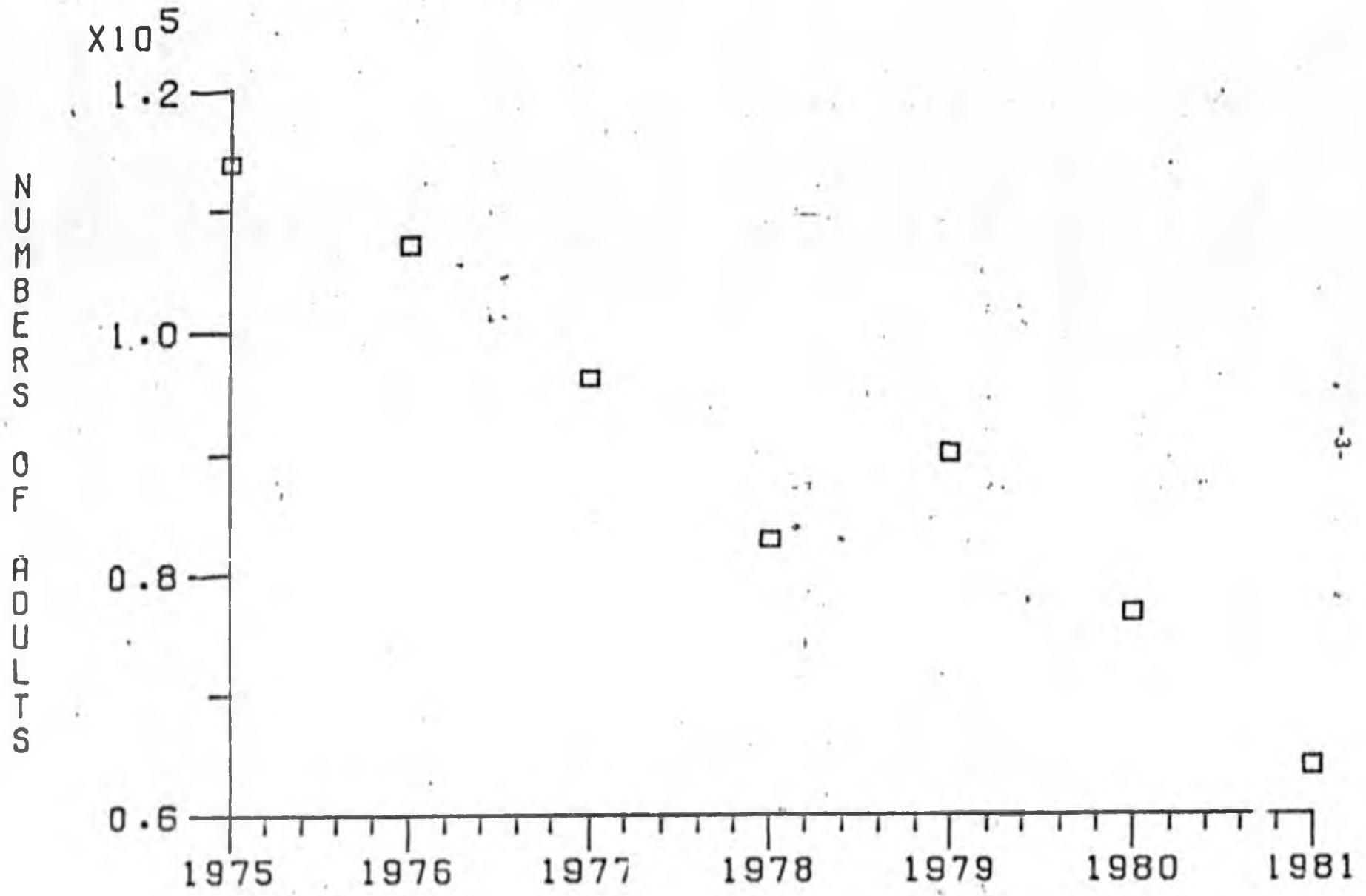
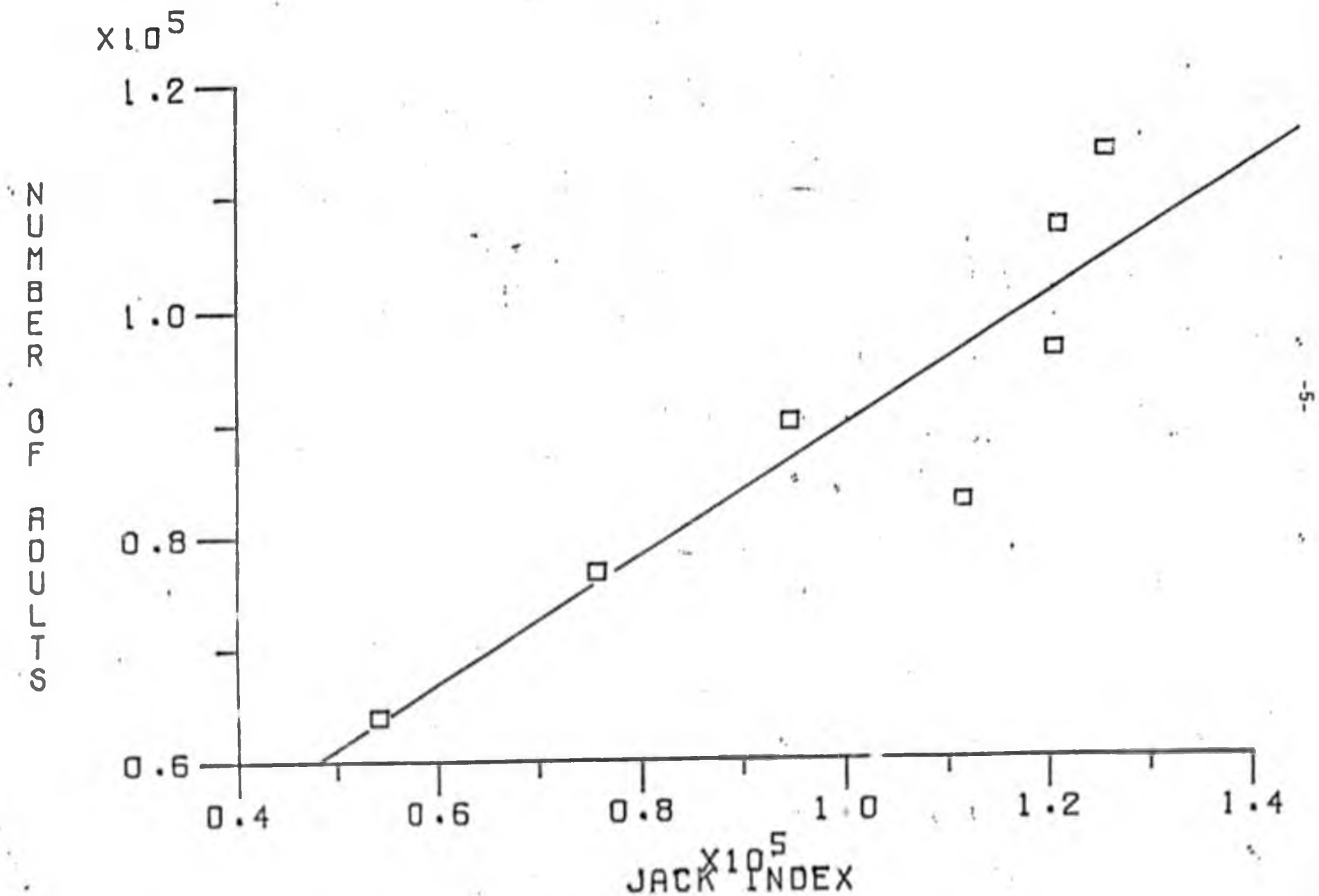


Table 1. Upriver bright adult run size, annual jack count at The Dalles and John Day dams(combined), and the jack index of adult return, 1975-1982.

Year	adults	jack count	jack index
1975	113900	111900	125700
1976	107200	128500	121000
1977	96300	94200	120400
1978	82800	61000	111500
1979	90000	71900	94600
1980	76700	29400	75700
1981	63900	59200	54100
1982			53500

Figure 2. Relationship between jack index and upriver bright adult run size, 1975-1981.



State of Washington
DEPARTMENT OF FISHERIES

PROGRESS REPORT NO. 129

1981 PUGET SOUND SPRING CHINOOK STATUS AND RECOMMENDATIONS FOR MANAGEMENT

Prepared by
Harvest Management Division

February 1981

INTRODUCTION

The staff of the Washington Department of Fisheries has prepared this report for the purpose of facilitating management of the Puget Sound spring chinook resource. This report includes information on allowable harvest levels, desired escapements, brood year natural escapements, hatchery releases, and predicted returns of natural and hatchery stocks.

Methodology employed in the calculation of predicted returns remains unchanged from the procedures followed last year. Anyone desiring further knowledge of those methods are referred to Progress Report Numbers 41, 81 and 98, where predictive techniques have been presented in detail.

ALLOWABLE HARVEST LEVELS

Numbers of spring chinook expected to reach Puget Sound, excluding treaty Indian troll, ceremonial and subsistence catches, and Puget Sound marine sport catch, are shown in Table 1. A quick scan of the column entitled, "Allowable Harvest" shows that desired escapements are not expected to be met in any of the Puget Sound spring chinook streams in 1981. Sport fishing regulations reflect conservation needs with all river sport salmon seasons being closed throughout the spring chinook management period.

SPAWNING GROUND ESCAPEMENT GOALS

Natural stock escapement goals for Puget Sound streams are the same as given in the 1980 status report, Progress Report Number 98, with the exception of the Duwamish-Green River. The Duwamish-Green River natural spring chinook stock has been removed from the report due to its non-viability.

During the period from July 9-17, 1980, WDF personnel conducted a survey of upper Green River areas where spring chinook would be expected to hold. A total of 16.9 miles of stream between R.M. 44.0 and R.M. 60.9 were surveyed by sections by a team of snorkel-equipped swimmers. Although the surveys were not a complete census of the early-run chinook in the upper river holding area, they are probably indicative of the relative run strength in the Green River. A total of five (5) live and two (2) dead adult chinook were observed over the 16.9 miles of river surveyed. Hatchery plantings may have contributed to the returns to the river in 1980, and if chinook of natural stock origin were present in these upper river holding areas during 1980, they were so few in number that they cannot be viewed as a viable management entity.

PREDICTIONS AND MANAGEMENT RECOMMENDATIONS

Puget Sound natural spring chinook runs in 1981 are expected to have no harvestable numbers of fish and are described as poor. Information from Canadian fisheries personnel states that Fraser River spring chinook returns this year will be very similar to 1980 levels, which were termed poor also. Since both Puget Sound and Fraser River natural spring chinook stocks are in need of protection in 1981, the following harvest recommendations are made:

Areas 4B, 5, 6, 6A, 6C, 7, 7A and 7D

There should be no fisheries directed at spring chinook in these management areas from April 15 through June 15.

Elwha River

Confirmation of remaining natural spring chinook in the Elwha River has yet to be made. In the absence of conclusive evidence confirming their absence, no fishery should take place prior to July 22.

Dungeness River

Area 6D and the Dungeness River should remain closed prior to July 1 to protect both the natural and hatchery origin spring chinook, which are comingled. All adult returns of the hatchery stock will be needed for enhancement efforts. Upstream resting/holding pools and spawning areas should be protected by restricting fishing until spawning is completed around mid-September.

Nooksack River

On- and off-reservation fisheries in Bellingham Bay and the Nooksack River should be curtailed for the duration of the 1981 spring run from April 15 through June 30 for protection of the natural run. In addition, hatchery stocks are anticipated to produce small numbers of fish that will be totally required for further enhancement. Furthermore, based on recent return rates experienced at Nooksack hatchery, the predicted hatchery run size is probably overly optimistic.

Skagit River

Skagit River spring chinook are predicted to return at a level that is only a fraction of the desired escapement level. Therefore, complete protection for the natural stock is required, and there should be no commercial fishing in Skagit Bay, the Skagit River and all tributaries according to the following schedule:

Area 8 (Skagit Bay) - April 15 through June 15, all waters of Skagit Bay and Saratoga Passage north of the Area 8/Area 8A boundary line.

Skagit River No. 1 and below - April 15 through June 15, from the mouth of the North and South Forks to Gilligan Creek.

Skagit River No. 2 - April 15 through June 18, from Gilligan Creek to Hamilton.

Skagit River No. 3 - April 15 through July 7, from Hamilton to "Old Faber Ferry Landing" above C ncrete.

Skagit River No. 4 - April 15 until spawning is finished in all areas above "Old Faber Ferry Landing", including all tributaries.

Return rates for hatchery releases in this river system must be viewed as questionable at this time. It is felt that the values used for Puget Sound as a whole are probably optimistic for this stock; but regardless of the rate, all returns of artificially reared stock will be needed for continued enhancement.

A certain amount of cautious optimism can be expressed at the 1980 spring chinook escapement in the Skagit River system. Last year's estimated escapement and return per spawner were at the highest level that we have seen for the last eight years. Escapements for the last three years show a reversal of the previous downward trend. Optimism must be tempered, however, by pointing out that escapement last year was only slightly more than half the desired goal.

Stillaguamish and Snohomish Systems

There should be no fishery in Area 8A, the Stillaguamish River below the confluence of the North and South Forks, or the Snohomish River below the confluence of the Skykomish and Snoqualmie rivers prior to July 1. Both forks of the Stillaguamish River and all resting pools and spawning areas of the Skykomish and Snoqualmie rivers should remain closed until the conclusion of spawning.

Duwamish-Green River

Surveys of the principal resting areas during 1980 have shown that very few early-run chinook were present last year and support the suspected absence of a viable natural run. The potential for returns to the Green River in 1981 depends on a fry plant of spring chinook stock of the 1977 brood. Lacking definitive data on return rates for such plants of spring chinook in the Puget Sound area, it is impossible to predict the magnitude of the run; but experience drawn from chinook fry plants woulo tend to suggest that a minimal return can be expected.

Puyallup River

The extremely tenuous status of the Puyallup River spring chinook run necessitates closing of the Puyallup River and Area 11A, including reservation waters, through June 30. In addition, the White River, including reservation waters, should also be closed through July 31. WDF has committed its efforts to preserve this stock through development of an egg-bank, which may be used as a source in the future to enhance this run.

Minter Creek

Small numbers of White River stock of the 1977 and 1978 broods may return to Minter Creek this year as part of a program to assure the existence of the stock through development of an egg-bank source. All adult returns are essential for brood stock and require complete protection. Therefore, there should be no commercial fishing in Area 13A prior to July 22, and Minter Creek should be closed to fishing through July 31.

Hood Canal

Whether or not there is a natural run of spring chinook in Skokomish River still remains undetermined. In the case of the hatchery run of spring chinook in Hood Canal, planting records indicate releases of Hood Canal Hatchery stock in the Dosewallips River and on-station at Finch Creek. However, return timing data shows this stock to exhibit migration characteristics of summer/fall chinook. Therefore, no predicted return has been calculated for this stock in the spring chinook status report. Instead, these release and return data for the Hood Canal Hatchery stock will be incorporated in future summer/fall chinook status reports.

PREDICTION METHODS

Comments included in the introductory section of this report addressed the question of methodology employed in predictive calculations and told where method details could be located. The only change from 1980 involves updating "the most recent 10-year" data base for the Skagit River.

Predicted returns to the Skagit River are calculated by multiplying the most recent 10-year average return per spawner times the brood or cycle year natural escapement. For 1981, this calculation, (1.04) x (716), gives an expected return value that is approximately 25% of the desired escapement goal of 3,000 spawners for the river system. If, however, the return per spawner realized in 1981 is more similar to recent values observed in 1978-80, we may realize a natural run which is twice as large as the previously calculated return but still only one-half of the desired goal.

Escapements in the Skagit River system should perhaps be viewed positively. As pointed out earlier in this report, returns for the 1978-80 seasons show a promising upward trend. The 1981 return will be of great interest, because it will result mainly from the 1977 brood, which is the weakest parent brood in recorded data for the Skagit River.

Use of return per spawner data for the Puyallup River continues to be meaningless at current stock level. It is probably safe to say that the return to the Buckley trap in 1981 will number less than 50 fish, as has been the case in recent years. Also, contributions of hatchery-reared native stock remains questionable because of possible downstream passage problems encountered by out-migrating smolts.

Table 1. 1981 Puget Sound spring chinook predictions, desired escapements and allowable harvests.

	Predicted total return	Desired escapement	Allowable harvest	Brood or cycle year natural escapement	Artificial production yearling releases (numbers) 1977 brood	Comments
Strait of Juan de Fuca						
ELWHA - natural	unknown	undetermined	-	unknown		Presence of natural spring chinook has yet to be confirmed.
DUNGENESS - natural	few	undetermined	-	unknown		
- hatchery	200	see comments	0		11,800	All adults are needed for enhancement.
Nooksack-Samish						
NOOKSACK - natural	few	500	0	unknown		
- hatchery	200	see comments	0		118,649[1/]	Complete protection required for natural stock. All hatchery returns needed for enhancement.
Skagit						
SKAGIT - natural	750	3,000	0	716		
- hatchery	200	see comments	0		51,080	Complete protection required for natural stock. All hatchery returns needed for enhancement, but success of this program has yet to be substantiated. Therefore, return rates must be questionable at this point for hatchery releases.
Stillaguamish-Snohomish						
STILLAGUAMISH - natural	few	undetermined	-	unknown		
SNOHOMISH - natural	few	undetermined	-	unknown		
Duwamish-Green						
GREEN - hatchery	few	0	-		2/	Returns from fry plant are questionable.
Puyallup						
PUYALLUP - natural	few	undetermined	-	unknown		All adult returns are needed for enhancement efforts to perpetuate the run through development of an egg-bank source.
Minter						
MINTER CREEK - hatchery	few	see comments	0		20,461[3/]	All adult returns to Minter Creek will be required for enhancement. Return rate is uncertain for this program.
Hood Canal						
FINCH CREEK - hatchery	see footnotes indicated under Artificial Production				158,136[1/4/]	

1/ Although listed in hatchery production tables as "spring chinook", the stock planted exhibits characteristic summer/fall chinook timing.
2/ Fry plant only, totaling 116,250.
3/ Another 960 transferred to NMFS Manchester Pens. Total 1977 brood year artificial production 21,421.
4/ An additional 49,840 planted as fry.

State of Washington
DEPARTMENT OF FISHERIES

PROGRESS REPORT

No. 130

1981 Status of Puget Sound Summer/Fall Chinook and Pink Salmon and Recommendations for Management

Harvest Management
Division

April 1981

Progress Reports are printed by the Department of Fisheries to document progress being made in various projects and programs. They are primarily for internal use and often contain preliminary data and conclusions that may be later revised.

These reports of progress are not considered as scientific publications, but they may be cited when referring to the material contained in them unless specifically noted.

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DEPARTMENT OF FISHERIES
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INTRODUCTION

The Washington Department of Fisheries presents these management considerations for 1981 summer/fall chinook and pink salmon returns to Puget Sound in order to facilitate resource management. Data, methods, and recommendations are similar to those of recent years. Techniques utilized to determine escapement goals and escapement estimates are similar to those used in the past (see Washington Department of Fisheries Technical Report No. 29). Pre-season forecasts for 1981 were developed with some changes from previous years. Any changes instituted in forecast methods for 1981 are presented in a later section of this report entitled "PREDICTION METHODS".

Predicted returns of chinook and pink salmon to Puget Sound (excluding treaty Indian troll, ceremonial, and subsistence catches, and Puget Sound sport catch) are outlined in this report by stock management unit. Desired escapements for hatchery and natural runs, allowable harvests, net fishery management recommendations, test fishing needs, and prediction methods utilized are also included. A detailed breakdown of predicted returns, desired escapements, allowable harvests, brood year escapement levels, and artificial production releases are presented by stream in the Appendix.

Puget Sound pre-season salmon forecasts should be used only as a guide for initial establishment of regulations. Even though the forecasts have been fairly reliable, actual run size may deviate from a pre-season forecast because of statistical variability, unusual survival rates, or unanticipated fishing rates in interception fisheries. Fisheries managers, therefore, depend on in-season catch data for indicators of run strength. Fishing regulations can then be adjusted, if necessary, to accommodate the size of the run that actually reaches the subject fishery. In-season adjustment methods will be presented in a separate report and will be similar to those used in recent years.

Chinook stocks in the Skagit, Stillaguamish-Snohomish, Lake Washington, and Duwamish-Green systems will be managed on the basis of natural run escapement requirements. Other systems will continue to be managed to provide full hatchery fish harvest. With the exception of small pink salmon runs destined for Hoodsport, Port Gamble, Chambers Creek, and Minter Creek, this species will be managed for natural run escapement requirements.

FISHERY MANAGEMENT RECOMMENDATIONS

Summer/fall chinook and pink salmon returns to Puget Sound in 1981 are expected to range from small natural runs that cannot withstand directed fisheries to returns of hatchery and natural fish that can be harvested at high rates (Table 1). Although each of the six major production systems will have some harvestable fish returning to Puget Sound this year, some mixed-stock areas will remain closed to protect weak Canadian and/or Puget Sound stocks. Likewise, some extreme terminal areas will not have directed chinook or pink fisheries.

Management recommendations are presented in two ways. First, basic management considerations for each of the numbered management/catch reporting areas and each of the rivers are given in Table 2. This is followed by a more detailed discussion of management recommendations for each stock management unit.

Harvestable numbers represent fish available for harvest by all U.S. commercial net fisheries in Puget Sound. The harvest should be limited to those management/catch reporting areas as outlined herein.

In several stock management areas, allowable harvest is the difference between predicted return and the biologically determined escapement goal. In an area where a hatchery stock returns simultaneously with natural fish that

Table 1. Summary of predicted Puget Sound net fishery harvests of chinook and pink salmon, 1981.

Region of origin	Expected harvest	
	Chinook	Pink
Strait of Juan de Fuca tributaries	1,100[1/]	102,000
Nooksack-Samish	86,200	58,000
Skagit	12,500	705,300
Stillaguamish-Snohomish	14,800	811,900
South Sound	30,500	82,700
Lake Washington	-2,700	NA
Duwamish-Green	-6,900	NA
Puyallup	-3,900	77,400
Minter Creek-Carr Inlet	-8,800	-4,300[2/]
Nisqually	-1,100	-700[2/]
Deschutes-Capitol Lake	-6,600	NA
Miscellaneous South Sound	-500	-300[2/]
Hood Canal	9,600	26,500[2/]
Total	154,700	1,786,400

[1/] Includes an incidental catch of 200 for stocks without a harvestable surplus.

[2/] Comprised totally or almost totally of incidental catch.

Table 2. 1981 summer/fall chinook and pink salmon management recommendations--Puget Sound.

Area	Management period		Relative harvest rate		Comments
	Chinook	Pink	Chinook	Pink	
4B, 5W	June 16-Aug. 29	IPSFC control	Minimal	--	IPSFC control through 9/12. Weak Canadian and Puget Sound chinook stocks will require net fishery restrictions.
5E, 6C	June 16-Aug. 29	IPSFC control	None	--	IPSFC control through 9/12. Weak Canadian and Puget Sound chinook stocks will require net fishery restrictions.
6	June 16-Sept. 5	IPSFC control	None	--	IPSFC control through 9/19. Weak Canadian and Puget Sound chinook stocks will require net fishery restrictions.
6D	July 1-Sept. 19	July 12-Sept. 12	None	Moderate	No harvestable chinook. Net fishery restrictions required.
Dungeness River	July 1-Sept. 19	July 12-Sept. 26	None	Moderate	No harvestable chinook. Net fishery restrictions required.
Elwha River	July 22-Sept. 19	July 26-Sept. 12	Low	Moderate	Success of overall program has yet to be established.
Other Strait of Juan de Fuca tribs.	July 22-Sept. 26	None present	None	--	No harvestable chinook.
6A	June 16-July 15 (summers) July 16-Sept. 5 (falls)	IPSFC control	None	--	IPSFC control through September 19. Management periods reflect timing of Skagit River chinook stocks. No directed chinook fishery warranted because of weak Canadian and Puget Sound stocks.
7, 7A	June 16-Sept. 5	IPSFC control	None	--	IPSFC control through and extending past entire period. No directed chinook fishery warranted.
6B, 9	June 16-Sept. 5	July 12-Sept. 12	Minimal	None	Nisqually pink need protection. Net fishery restrictions required. Lake Washington, Duwamish, and Hoodsport chinook stocks have low allowable exploitation rates.
7B	July 1-Sept. 5	July 19-Aug. 22	High	Moderate	
7D	July 1-Sept. 5	IPSFC control	See comment	--	IPSFC control through September 19.
7C, Samish River	July 1-mid-October	July 19-Aug. 22	High	Moderate	Area west of Oyster Creek line must close after August 8 to ensure chinook escapement needs at Samish Hatchery. Samish River and Area 7C east of the Oyster Creek line must be closed from July 1 to assure escapement from all segments of the run.
Nooksack River	July 1-Sept. 12	July 19-Aug. 29	Moderate	Moderate	Upriver management periods may need adjustment.
8	June 16-Aug. 4 (summers) Aug. 5-Sept. 5 (falls)	Aug. 2-Sept. 1	Moderate	High	Chinook harvest rate must be established to allow fishery throughout duration of run with majority of harvest taken from summer segment of run. 6-inch maximum gill net mesh required and restriction on purse seines to prevent overharvest of fall chinook segment during pink salmon fishery.
Skagit River	See text	See text	Low	Moderate	See text for management details by river section. Harvest rates dependent upon those in Area 8.

(Continued)

Table 2. (continued)

Area	Management period		Relative harvest rate		Comments
	Chinook	Pink	Chinook	Pink	
8A	July 1-Sept. 5	Aug. 2-Sept. 19	Moderate	High	Chinook harvest rate must be established to allow fishery throughout duration of run. During last 3 weeks of chinook management period, when majority of pink harvest will occur, a 6-inch maximum gill net mesh required and restriction on other net gear to prevent overharvest of this chinook run segment.
Stillaguamish River	July 1-Sept. 12	Aug. 2-Sept. 19	Low	Low	Harvest rates dependent upon rate in marine waters, but no major fishery anticipated.
Snohomish River	July 1-Sept. 12	Aug. 2-Sept. 19	See comment	See comment	No fishery anticipated.
10	July 1-Sept. 5	July 26-Sept. 12	Low	None	Nisqually pink require protection. Net fishery restrictions required.
10A	July 15-Sept. 12	None present	Low	--	
Duwamish River	July 15-Sept. 26	None present	Low	--	Harvest rate dependent upon that in marine waters.
10B	July 1-Sept. 19	None present	Low	--	No chinook fishery prior to August 1. From August 1 through September 19, a 6-1/2-inch minimum mesh restriction on gill nets to protect Lake Washington sockeye.
10C	July 31-Sept. 19	None present	None	--	Total closure to protect chinook and sockeye spawners.
10D (Lake Sammamish)	July 31-Oct. 3	None present	None	--	Harvestable chinook will be caught incidentally during prior net fisheries.
Cedar River	July 31-Jan. 2	None present	None	--	Total closure to protect chinook and sockeye spawners.
10E	July 1-Sept. 19	None present	See comment	--	No fishery anticipated.
11	July 1-Sept. 5	July 26-Sept. 12	Moderate	None	Nisqually pink require protection. Net fishery restrictions required.
11A	July 1-Sept. 5	July 26-Sept. 12	Moderate	High	Rate depends on that in prior net fisheries.
Puyallup River	July 1-Sept. 12	July 26-Sept. 19	Moderate	High	Rate depends on that in marine waters.
White River	Aug. 1-Sept. 12	None present	None	--	Harvestable will be caught in prior net fisheries.
9A	July 1-Sept. 5	July 19-Sept. 5	--	None	Small hatchery pink run. Hatchery will take all available eggs.
12, 12B	July 1-Aug. 29	July 12-Aug. 29	Low	Low	Harvest should be spread to ensure escapement of both chinook and pink salmon.
12A	July 1-Sept. 5	None present	See comment	--	No harvestable stock present. All Quilcene chinook planted at Walcott Slough.

(Continued)

Table 2. (continued)

Area	Management period		Relative harvest rate		Comments
	Chinook	Pink	Chinook	Pink	
12C	July 1-Sept. 5	July 19-Sept. 5	Low	Low	Rate depends on that in prior net fisheries. Closure near Hoodsport Hatchery required in August and September to ensure hatchery escapement.
Skokomish River	July 1-Sept. 26	None present	High	--	Harvest should be concentrated in the river to protect a weak hatchery run to Hoodsport Hatchery.
12D	July 1-Sept. 5	None present	None	--	No harvestable chinook present.
13	July 1-Sept. 12	Aug. 2-Sept. 26	Moderate	None	Nisqually pink require protection. Net fishery restrictions required.
Nisqually River	July 1-Sept. 19	Aug. 16-Oct. 3	Moderate	None	Chinook harvest rate depends on that in prior marine areas. Pink require protection. Net fishery restrictions required.
13A	July 22-Sept. 19	Aug. 2-Sept. 26	High	High	
13B	July 1-Sept. 19	None present	Moderate	--	Rate depends on that in prior net fisheries.

cannot be harvested independently and the area is managed at the hatchery exploitation rate (e.g., Nooksack River chinook), the harvestable number is higher than this amount. In these areas, the harvest rate for the hatchery stocks also determines the harvest rate for the natural stock. The spawning goal for such natural stocks technically will not be achieved in 1981.

In some stock management units there are minor returns to small streams that are not listed separately in Appendix Table 1. Each of these minor areas has been considered and has been included if it has a surplus that can be harvested. Moreover, each known plant, no matter how small, has been considered.

Effort must be spread throughout the management periods to achieve escapement and catch from all segments of the run. In addition, incidental harvest which occurs during coho fisheries must be subtracted from allowable harvest during directed chinook and pink fisheries.

U.S. Convention Waters

Chinook management period: 4B, 5, 6C - June 16 through August 29
6, 6A, 7, 7A - June 16 through September 5

Pink management period: 4B, 5, 6, 6A, 6C, 7, 7A - IPSFC control

From June 16 through June 20, all the above areas should be closed to net fishing to protect depressed Canadian and Puget Sound stocks. The Canadian status report "1981 Commercial Fishing Guide" states that "Total [chinook] return to the Fraser River expected to continue on a downward trend. Conservation measures will be imposed." Fraser River chinook escapement in 1977 was 80,000, or 52% of optimum.

The International Pacific Salmon Fisheries Commission (IPSFC) assumes control on June 21. From that date through the chinook management period, purse seines and reef nets must release chinook and drift nets must use 5-7/8-inch maximum mesh size in Areas 4B, 5, 6, 6A, 6C, 7, and 7A. Set nets must use 5-7/8-inch maximum mesh during this time period in Areas 5 (east of Pillar Point), 6, 6A, 6C, 7, and 7A.

Strait of Juan de Fuca Streams

Chinook management period: 6D and Dungeness River - July 1 through September 19
Elwha River - July 22 through September 19
Other rivers - July 22 through September 26

Pink management period: 6D - July 12 through September 12
Dungeness River - July 12 through September 26
Elwha River - July 26 through September 12

Elwha River is the only Strait of Juan de Fuca stream where chinook and pink fisheries will be warranted in 1981. Some uncertainty exists about the level of chinook harvest because the success of the overall hatchery program has not yet been established. Therefore, estimates of harvestable numbers of hatchery fish may be optimistic. The magnitude of the forecasted pink return may also be optimistic based on catches made during the 1979 fishery and the nature of the escapement estimation methodology.

Local chinook runs to all other streams will be below the desired escapement levels. This necessitates closures in all these streams except the Dungeness River, where harvestable pink are projected. In Area 6D and the Dungeness River, a restriction involving 6-inch maximum gill net mesh and release of chinook by other commercial gear will be required during the pink management period. Limited test fishing should precede any openings for coho to ensure that chinook have cleared the fishing area. Test fishing should not commence prior to the end of the chinook management period.

Nooksack-Samish

Chinook management period: 7B, 7D - July 1 through September 5
Nooksack River - July 1 through September 12
7C and Samish River - July 1 through mid-October

Pink management period: 7B, 7C - July 19 through August 22
7D - IPSFC control
Nooksack River - July 19 through August 29

A good run of fall chinook to the Bellingham Bay area in 1981 is expected to provide a harvest of approximately 86,200 fish. Allowance must be made for approximately 10% of the chinook catch occurring during the coho fishery subsequent to the chinook management period. IPSFC will have relinquished control of Area 7B prior to the start of the chinook management period, but Area 7D will be under Commission control throughout the management period. An estimated harvestable number of 58,000 pink is projected, with most of the catch occurring between July 26 and August 15.

In spite of good chinook run with a high allowable harvest rate, care must be taken to ensure sufficient escapement for perpetuation and enhancement of the run, which is predominantly of hatchery origin. Therefore, Samish River and Area 7C inside the Oyster Creek line must be closed throughout the chinook period. Area 7C outside the Oyster Creek line must close from August 9 through the chinook management period. Test fishing by the Department will ascertain chinook status in the area.

Skagit

Chinook management period: 8 - June 16-August 4 (summers)
- August 5-September 5 (falls)

Skagit River (mouth to Gilligan Creek) - June 16 through September 5

Skagit River (Gilligan Creek to Hamilton) - June 19 through September 19

Skagit River (Hamilton to Old Faber Ferry Landing) - July 8 through September 19

Skagit River (upstream of Old Faber Ferry Landing including tributaries) - continuous closure to protect spawning fish

Pink management period: 8 - August 2 through September 19

Skagit River (mouth to Gilligan Creek) - August 9 through September 19

Skagit River (above Gilligan Creek) - August 9 through October 31

Total returns of Skagit River summer/fall chinook and pink salmon this year are predicted to be 28,800 and 1,035,450 fish, respectively. This should provide a harvest of approximately 12,500 chinook and 705,300 pink. Summer and fall chinook runs to the Skagit River are not predicted separately, but the summer run predominates and should provide the bulk of the catch and escapement. About 75% (9,400) of the catch should be taken during the summer run management period. Of the 3,100 fish to be harvested in the fall management period, all should be reserved for harvest during the pink management period. Thus, Skagit Bay should be closed from the period August 5-15, when the pink run is building. Similar 2-week closures should occur in Skagit River at the start of the respective fall chinook management periods.

The large harvest of pink should start on August 16 in Skagit Bay and continue until coho catches become significant (approximately September 6 in the bay).

Admiralty Inlet-Discovery Bay

Chinook management period: 6B, 9 - June 16 through September 5
Pink management peirod: 6B, 9 - July 12 through September 12

Nisqually pink salmon require protection. Therefore, from late July (when Lake Washington sockeye have cleared) through September 5, a 7-1/2-inch minimum gill net mesh size and release of pink by other commercial gear will be required.

Chinook salmon dest ned for Hoodsport, Lake Washington, and Duwamish River have low allowable fishing rates, so chinook fishing (if any) in Areas 6B and 9 should be limited.

Stillaguamish-Snohomish

Chinook management period: 8A - July 1 through September 5
Stillaguamish and Snohomish Rivers - July 1 through September 12

Pink management period: 8A, Stillaguamish and Snohomish Rivers - August 2 through September 19

The chinook run to this area is composed of three parts, a natural segment which predominates, and artificially produced runs from Skykomish Hatchery and Tulalip Bay. This system is managed to provide for natural run escapement requirements, and harvest rates are established on that basis. As a consequence, the harvest rate for hatchery fish is dictated by the appropriate rate for the natural run. Return this year are predicted to be 25,300 of which 13,500 will be harvestable in mixed-stock areas. Any chinook harvest in the Stillaguamish River must reflect prior catches from marine waters. An additional harvest of 1,300 chinook in Tulalip Bay will depend upon success of the Tulalip Bay program.

The pink run to this area is predicted to total 1,089,900 with 811,900 harvestable. Most of this harvest should occur between August 16 and September 12.

Southern Puget Sound

Two chinook stocks within this region, Lake Washington and Duwamish-Green, are managed on the basis of natural run escapement requirements. All other stocks are managed to provide full hatchery fish harvest.

Lake Washington

Chinook management period: 10 - July 1 through September 5
10B - July 1 through September 19
10C - July 31 through September 19
10D - July 31 through October 3
Cedar River - July 31 through January 2

Pink management period: 10 - July 26 through September 12

Chinook returning to the Lake Washington system this fall are expected to number approximately 12,500. Since the Lake Washington system is managed on the basis of the natural stock, the harvest rate for hatchery fish will be determined by the rate which provides the desired natural stock escapement. Total harvest of both hatchery and natural chinook is predicted to be 2,700 fish. This harvest will be taken by chinook fisheries of low intensity in Areas 6B, 9, 10, and/or 10B and caught incidentally during fisheries for other species. Net restrictions similar to those in Areas 6B and 9 will be required in Area 10 to protect Nisqually pink.

Duwamish-Green River

Chinook management period: 10A - July 15-September 12
Duwamish-Green River - July 15-September 26

Fall chinook management in the Duwamish-Green River is keyed to attaining full natural stock escapement. The run of natural and hatchery chinook combined is predicted to number 23,500. The harvest rate for the natural stock will provide for a total harvest of 6,900 fish. Around 10% of this chinook harvest will be taken during the coho management period, so the remainder should be taken during the chinook management period. Harvest should be restricted in a manner that spreads the catch throughout the duration of the run and provides protection of Nisqually pink in Area 10.

Puyallup River

Chinook management period: 11, 11A - July 1 through September 5
Puyallup River - July 1 through September 12
White River - August 1 through September 12

Pink management period: 11, 11A - July 26 through September 12
Puyallup River - July 26 through September 19

Natural and hatchery chinook and pink salmon of Puyallup River origin are expected to total 7,100 and 96,800 fish, respectively, of which 3,900 chinook and 77,400 pink will be harvestable. Fishing rates for chinook in Area 11A and the Puyallup River will depend on harvest in prior areas. Because Puyallup pink have a higher allowable exploitation rate than chinook, care must be taken through appropriate maximum mesh restrictions to prevent overharvest of chinook (particularly during the last 2 weeks of August and first week of September, when most of the pink fishery should occur).

Nisqually River

Chinook management period: 13 - July 1 through September 12
Nisqually River - July 1 through September 19

Pink management period: 13 - August 2 through September 26
Nisqually River - August 16 through October 3

Predictions for the Nisqually River chinook run this year indicate a return of 2,200 fish can be expected. The chinook run in the Nisqually River is composed of natural and hatchery fish. The allowable harvest of the combined stocks is 1,100 fish. The predicted Nisqually River pink run of 4,500 is less than that required for escapement, so appropriate minimum mesh restrictions will be required in Area 13 and the river during any chinook fisheries.

Minter Creek-Carr Inlet

Chinook management period: 13A - July 22 through September 19

Pink management period: 13A - August 2 through September 26

The Carr Inlet fall chinook and pink runs are entirely hatchery fish from Minter Creek. Forecasts show an expected return of 9,200 chinook and 7,200 pink, with allowable harvests of 8,800 and 4,300, respectively.

Deschutes-Capitol Lake

Chinook management period: 13B - July 1 through September 19

The principal chinook stock in Area 13B is the run to the Capitol Lake-Deschutes River hatchery facility located at the lower end of Budd Inlet. Preseason forecasts indicate a return of 13,100 can be expected this fall. Hatchery escapement requirements for this stock in 1981 are 6,500 fish. The remaining 6,600 chinook will be available for harvest.

Miscellaneous South Sound

Chinook and pink management periods: incorporated in previous discussions and areas

In addition to the major chinook runs which have been discussed above, there are two minor hatchery programs not situated on large river systems. Garrison Springs, or Chambers Creek, should contribute approximately 200 chinook to various fisheries in marine waters. From a total return of 400 fish, the hatchery facility should realize an escapement of 200. Another facility on McLane Creek producing hatchery chinook is predicted to contribute 300 fish to marine area fisheries from a total return of 700.

The Chambers Creek pink run of 1,800 fish is not large enough to sustain a directed fishery. The harvest of 300 is expected to occur incidentally.

Hood Canal

Chinook management period: 12, 12B - July 1 through August 29
9A, 12A, 12C, 12D - July 1 through Septembe 5
Skokomish River - July 1 through September 26

Pink management period: 12, 12B - July 12 through August 29
12C - July 19 through September 5

The only chinook run in Hood Canal this year with a significant number of harvestable fish is the Skokomish River run. Other stocks, including the hatchery stock originating from Hoodsport, have low numbers of harvestable fish that will be caught by low-intensity chinook fisheries in Areas 12, 12B, and/or 12C and by fisheries directed at other species. (Note that Quilcene fish were planted at Walcott Slough and return rates are uncertain.) From a total return of 17,000 Hood Canal chinook, there will be 9,600 harvestable. The bulk of

this harvest, 8,300 fish, consists of Skokomish River chinook. Area closures around Hoodsport Hatchery and Dewatto Bay will be required to assure chinook escapement.

The pink salmon run to Hood Canal is predicted to total 156,200, with 26,500 harvestable. The allowable fishing rate for pink destined for Hoodsoort Hatchery is slightly higher than that for pink destined for Area 12B streams.

PREDICTION METHODS

Chinook Salmon

The 1981 prediction of summer/fall chinook runs to Puget Sound is the number expected to enter the Strait of Juan de Fuca. The prediction this year is composed of five major parts: the natural portion, two hatchery segments, and the Nooksack-Samish and Hood Canal runs.

The natural portion of each run, with the exception of Hood Canal, is predicted as the mean annual run size originating from that stream. Escapement estimates, plus estimates of natural run catch, are combined to make the natural run size.

Runs resulting from hatchery plants are predicted similarly as the mean annual hatchery run. Hatchery rack counts are added to harvest estimates of the hatchery stocks to produce the hatchery run size. The hatchery run is then divided into two parts resulting from yearling and fingerling releases. The basic procedures employed in preparation of the 1981 hatchery prediction have been discussed previously in Progress Report No. 107. Hatchery runs to Green River, Minter Creek, and Deschutes River were adjusted again this year to reflect recent success of plants.

Methods used to predict the Nooksack-Samish run were presented in the 1980 status report (Progress Report No. 107). The procedure involves calculating a total brood return to Puget Sound from a hatchery production factor (pounds X numbers). The total brood return is then separated into contribution by age group or fishery year. Total predicted return within a given year is the summation of 5-year-old, 4-year-old, and 3-year-old returns from three consecutive brood year releases.

Prediction for the Hood Canal run was made separately using a multiple regression equation. More than 37 combinations of factors involving natural escapements and hatchery releases were examined by a multiple regression program. This analysis yielded the predictive equation:

$$y = 259.85 - 1{,}091{,}787\ X_1 - 21.03\ X_2$$

where

y = natural log of run to Strait of Juan de Fuca,

X_1 = the reciprocal of hatchery fingerling pounds planted 3 years prior, and

X_2 = natural log of hatchery fingerling pounds planted 3 years prior.

Pink Salmon

The 1981 predictions of pink salmon returns to Puget Sound (Appendix Table 2) are the numbers of fish of each specific stock expected to enter U.S. waters.

The natural stock predictions are based on significant correlations of past total Puget Sound recruit/spawner rates (1965-1977) with one or more of the following variables: same brood chum salmon escapement, total precipitation in January, and/or mean sea-surface salinity at Neah Bay during spring months. The chum salmon escapement variable represents the production of chum juveniles which as competitors have been shown to have a significant effect on the survival of pink salmon. The two environmental variables have correlated significantly with past pink salmon returns. Individual stock forecasts were made by allocating the total Puget Sound prediction to each stock based on its relative proportion of 1979 parent-year escapement.

Artificial production returns were predicted using survival rates for previous broods of pink salmon released from each production site. For those release areas where no previous survival data were available, survival rates from the nearest long-term release site were used, e.g., Hood Canal Hatchery survival rates were used for the Port Gamble forecast.

Run sizes entering U.S. waters predictions for both natural and artificial stocks were based on average interception rates for the 1959-79 return years.

Appendix Table 1. 1981 Puget Sound summer/fall chinook salmon predictions, desired escapements, and expected harvests.

Stock	Predicted total return	Desired escapement	Harvest	Brood year natural escapement (1977)	Artificial production releases (1977 brood)	Comments
Strait of Juan de Fuca						
Sekiu--natural	150	250	0	Unknown		
Hoko--natural	550	850	0	Unknown		
Clallam--natural	100	150	0	Unknown		
Pysht--natural	400	650	0	Unknown		
Lyre--natural	50	100	0	Unknown		
Elwha--natural	350	250	100	Unknown		Escapement reflects same ratio to prediction as for hatchery fish.
--hatchery	2,900	2,100	800		599,992 fingerlings 482,132 yearlings	Estimate of harvestable may be optimistic because success of overall program not yet established.
Dungeness--natural	250	400	0	Unknown		
Salt Creek--natural	100	150	0	Unknown		
Deep Creek--natural	50	100	0	Unknown		
Total	4,900	5,000	900			
Nooksack-Samish						
Nooksack--natural and hatchery	61,200	2,300	58,900	1,500	4,124,573 fingerlings 299,768 yearlings	Includes Lummi and co-op releases. 1,250 expected escapement to Nooksack Hatchery.
Samish--predominantly hatchery	38,300	11,000	27,300	600	4,577,881 fingerlings 479,138 yearlings	
Total	99,500	13,300	86,200			
Skagit						
Skagit--natural	24,400	14,900	11,500	9,500		Harvest rates set on the basis of natural stock.
--hatchery	2,400	1,400	1,000		119,848 fingerlings 926,900 yearlings	Hatchery will take eggs from all available summers and falls.
Total	28,800	16,300	12,500			
Stillaguamish-Snohomish						
Stillaguamish--natural	4,300	2,000	2,300	1,500		
Snohomish--natural	11,400	5,300	6,100	5,600		
--hatchery	6,900	3,200	3,700		3,524,574 fingerlings 416,400 yearlings	Hatchery will take all available eggs. Harvest rate set on the basis of natural stock.
Tulalip--hatchery	2,700	0	2,700		502,206 yearlings	1,400 to be harvested in net-pen areas, the remainder in Tulalip Bay.
Total	25,300	10,500	14,800			

(Continued)

Appendix Table 1. (continued)

Stock	Predicted total return	Desired escapement	Harvest	Brood year natural escapement (1977)	Artificial production releases (1977 brood)	Comments
Lake Washington						
Natural	6,600	5,200	1,400	5,800		
Hatchery	5,900	4,600	1,300		2,804,010 fingerlings 157,800 yearlings	Includes University of Washington releases. Harvest rate set on basis of natural stock. Hatchery will take all available eggs.
Total	12,500	9,800	2,700			
Duwamish-Green						
Natural	8,200	5,800	2,400	3,800		
Hatchery	15,300	10,800	4,500		4,793,250 fingerlings	Harvest rate set on basis of natural stock. Hatchery will take all available eggs.
Total	23,500	16,600	6,900			
Puyallup						
Natural	3,100	1,400	1,700	700		
Hatchery	4,000	1,800	2,200		3,650,532 fingerlings	
Total	7,100	3,200	3,900			
Nisqually River						
Natural and hatchery	2,200	1,100	1,100	200	401,3[illegible] fingerlings	
Deschutes--Capitol Lake						
Natural and hatchery	13,100	6,500	6,600		4,939,320 fingerlings 1,031,755 yearlings	
Carr Inlet (Minter Creek)						
Hatchery	9,200	400	8,800		2,415,809 fingerlings 242,649 yearlings	
Misc. South Sound						
Chambers Creek--hatchery	400	200	200		162,300 fingerlings	
McLane Creek--hatchery	700	400	300		120,000 fingerlings 66,156 yearlings	
Total South Sound	68,700	36,200	30,500			
Hood Canal						
Hamma Hamma, Duckabush, Dosewallips rivers--natural	400	300	100	700		
Quilcene--hatchery	3,000	2,300	700		2,456,534 fingerlings	Planted at Walcott Slough. Success of program not yet established.
Skokomish--natural and hatchery	11,300	3,000	8,300	1,400	2,343,537 fingerlings	1,300 expected escapement at George Adams.
Finch Creek--hatchery	2,300	1,800	500		1,302,368 fingerlings 447,870 yearlings	
Total	17,000	7,400	9,600			

Graphical Material Relating to British Columbia Chinook Salmon Runs and Fisheries

and

Fraser River Status Report

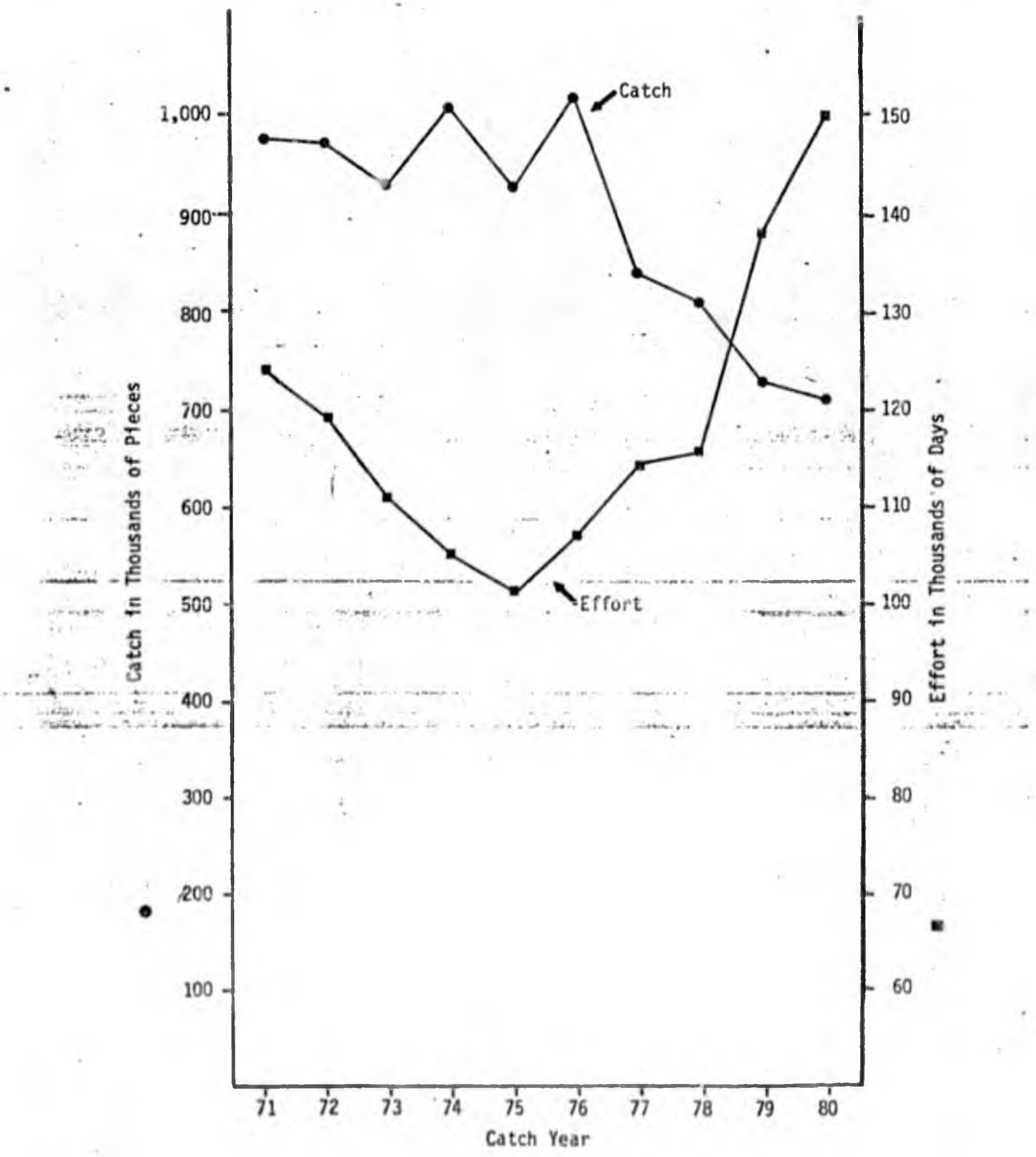


Figure 1. Catch of chinook salmon and fishing effort in ocean troll fishery. (Canadian data, Ken Pitre, Canada Department of Fisheries and Oceans, personal communication.)

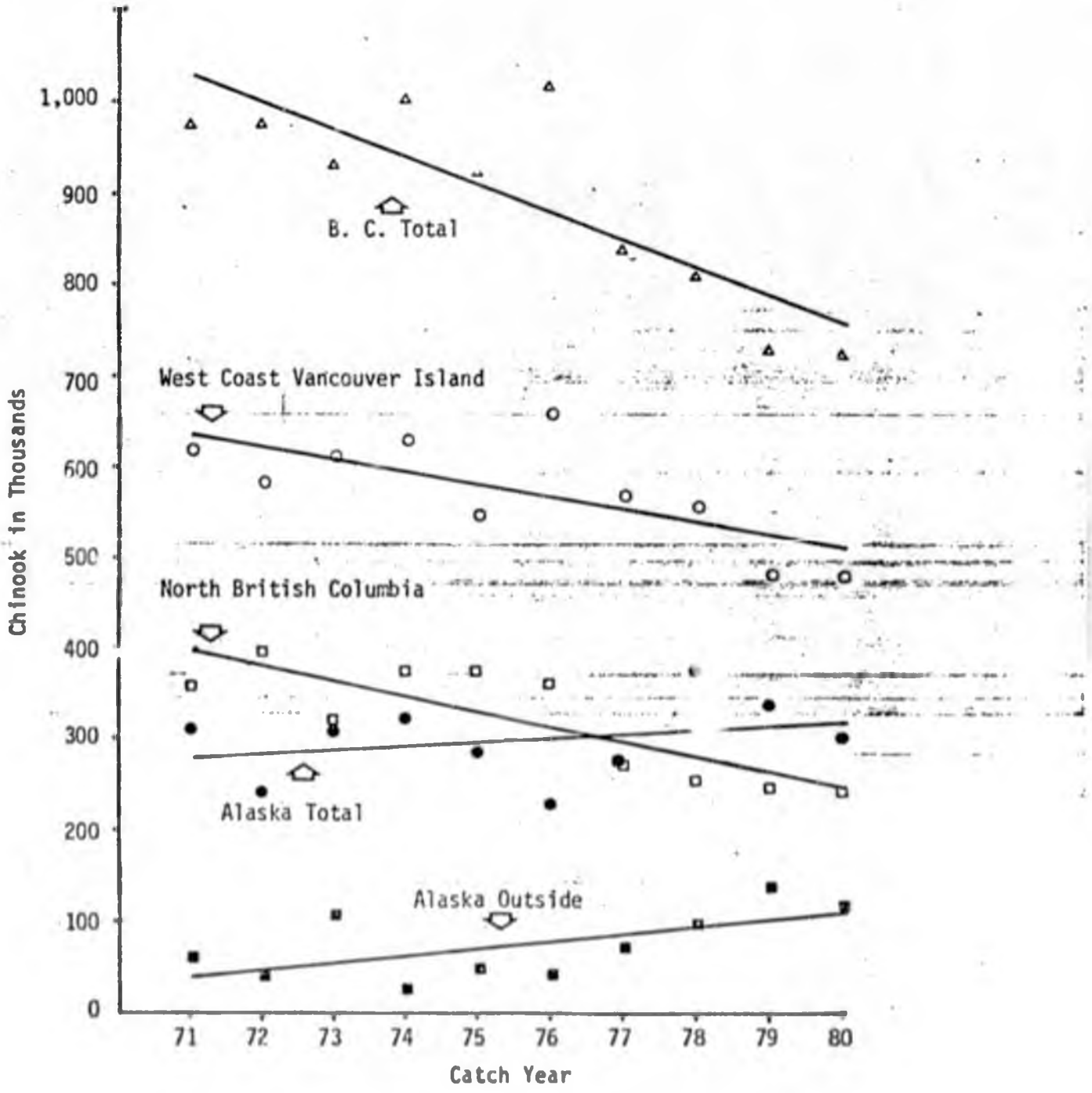


Figure 2. Summary of British Columbia and Alaska troll chinook catch, 1971-1980. (Canadian data, Ken Pitre, Canada Department of Fisheries and Oceans, personal communication.)

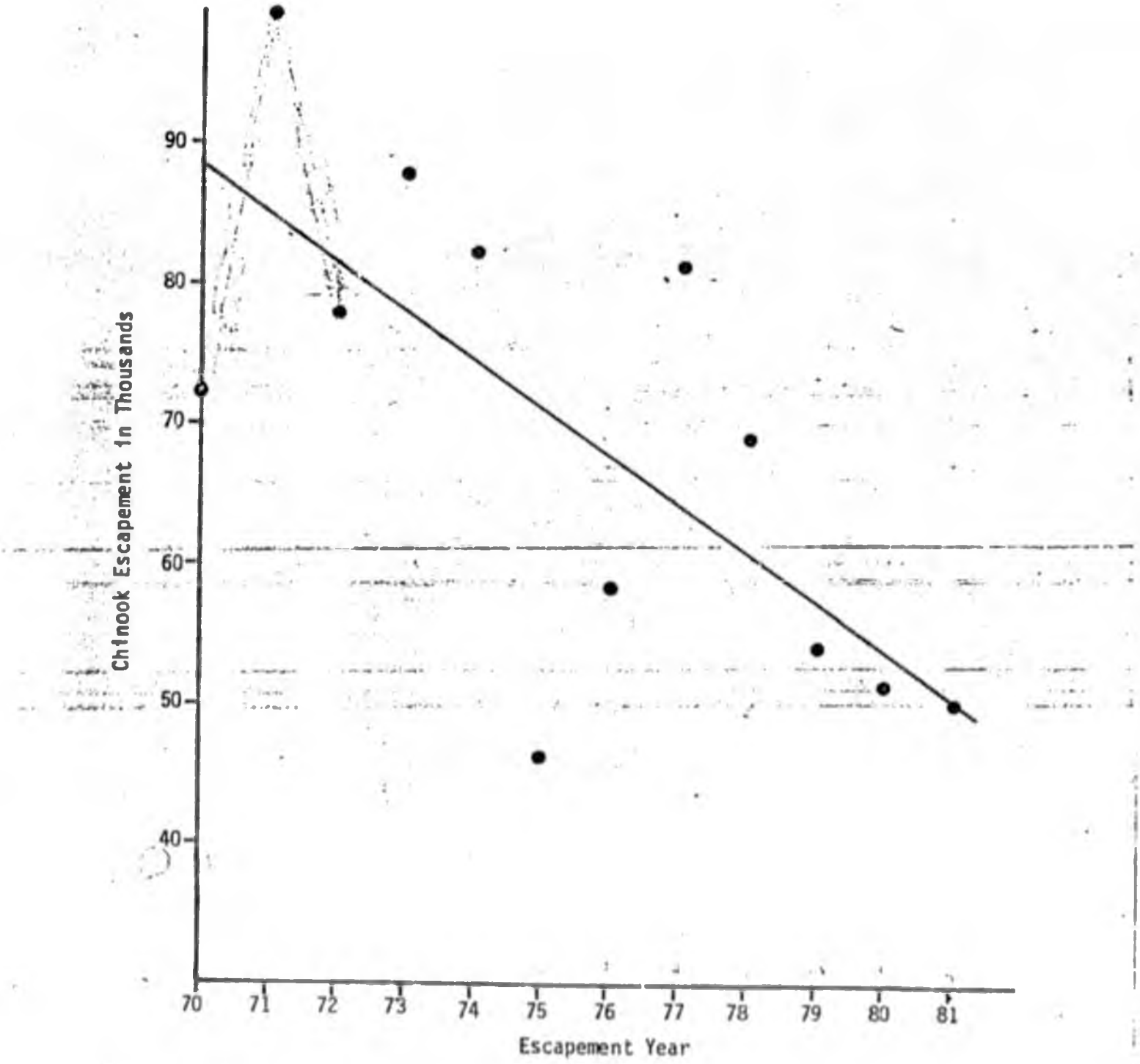


Figure 3. Canadian chinook escapements north of Cape Caution, 1970-1981 (Canadian data; Ken Pitre, Canada Department of Fisheries and Oceans, personal communication).

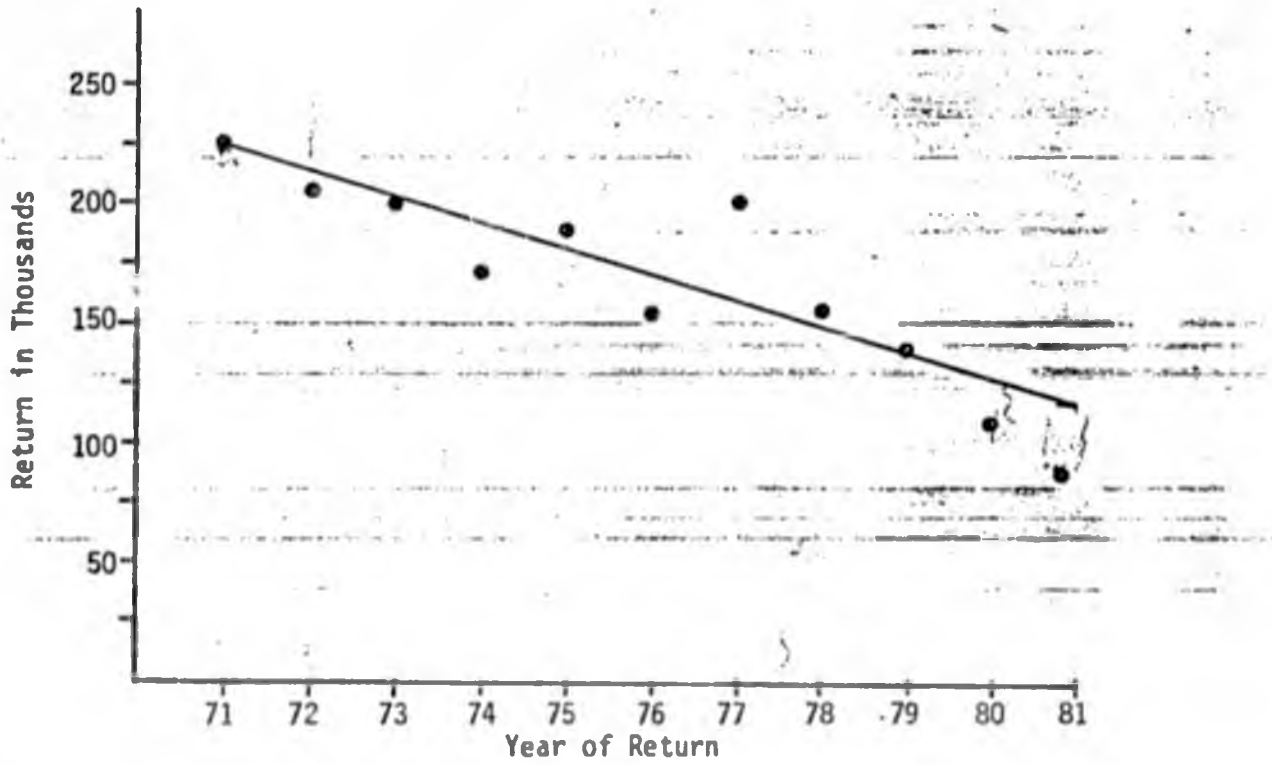


Figure 4. Fraser River chinook salmon returns from 1970 to 1981. Returns include escapement, Indian food fish, river sport catch, and terminal net catch. (Canadian data, K. Pitre, Canada Department of Fisheries and Oceans, personal communication.)

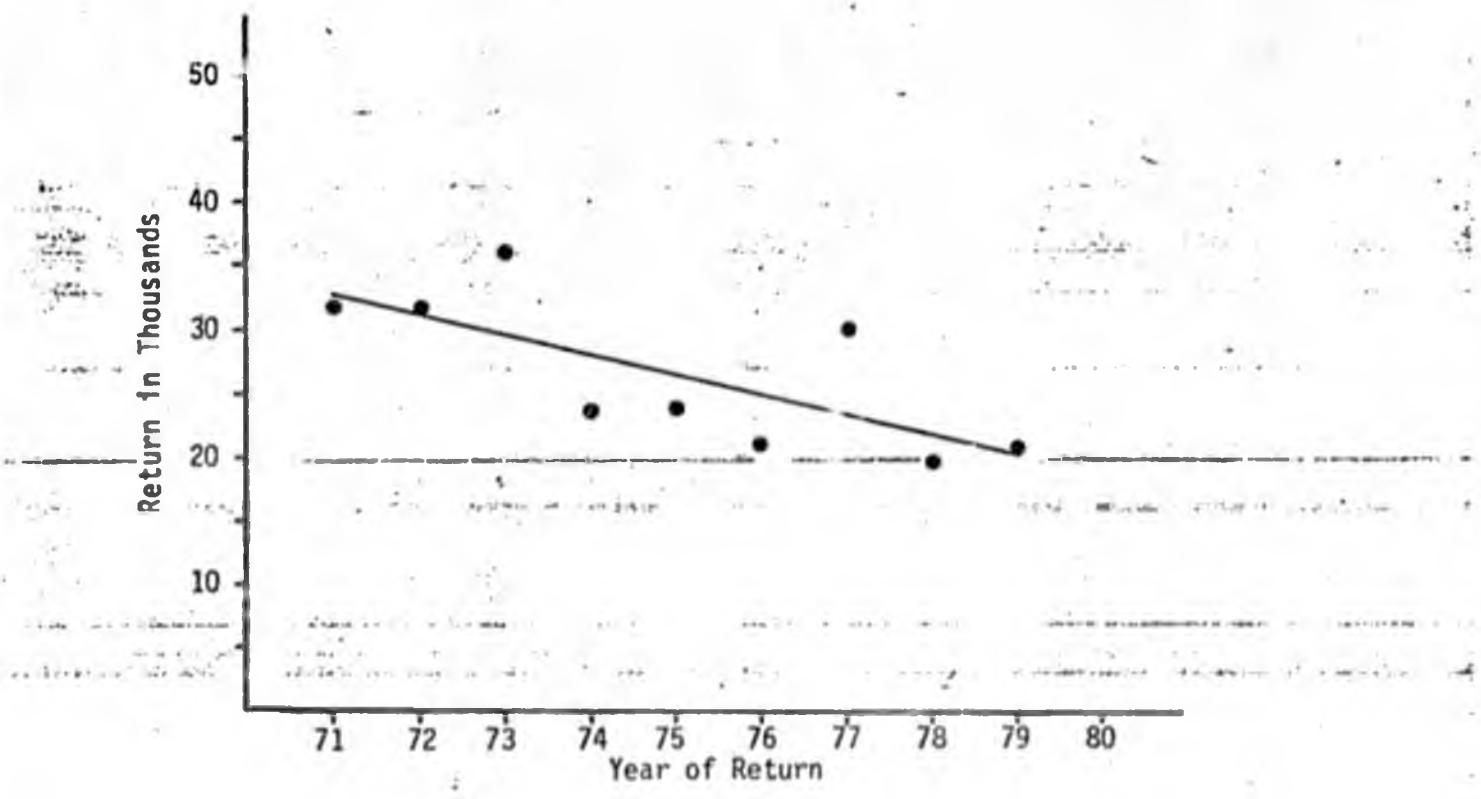


Figure 5. Chinook returns to Georgia Strait index streams, 1971 to 1979. (Canadian data, K. Pitre, Canada Department of Fisheries and Oceans, personal communication.)

Review of 1981 Fraser River Salmon Catches and Returns

1. Sockeye

The preseason forecast of 6 million sockeye was exceeded by the actual return of approximately 7.9 million. Most of the strength in this year's return was in the Horsefly run which is dominant on this cycle. The total return for this stock was about 4.2 million. The Early and Late Stuart runs (also dominant on this cycle) were the other main contributors with total returns estimated at 800,000 and 1.5 million, respectively.

The total catch in all areas was about 6.0 million fish of which 4.7 million (79%) were taken by Canadian fishermen and 1.3 million (21%) by United States fishermen. Of the total Canadian catch, about 1.2 million fish were taken within Convention Waters and about 3.5 million outside of Convention Waters, mainly in Johnstone Strait. The large catch in Johnstone Strait reflects the high diversion rate on the large Horsefly run in particular. The total diversion rate of 69% was more than four times greater than the longterm average of 15% on this cycle. This is the fourth consecutive year in which the proportion of the run returning through Johnstone Strait has been abnormally high.

The Area 29 gillnet of about 826,000 was somewhat below the average of 1.0 million for the last four years of this cycle.

The spawning ground escapement was 1.4 million with an excellent escapement of 677,000 into the Horsefly River.

2. Pink

The I.P.S.F.C. preseason forecast for Fraser River pinks indicated a run of 9 million whereas the actual return was 17.0 million, the largest on record. The catch in all areas totalled 12.6 million of which Canada took an estimated 8.8 million (70%) and the United States 3.8 million (30%). Of the total Canadian catch approximately 4.2 million were taken within Convention

waters and 4.6 million in outside waters primarily off the west coast of Vancouver Island and in Johnstone Strait. The Area 29 catch was about 287,000 compared to an average of 246,000 on the last four pink salmon cycles.

The spawning ground escapement of 4.4 million was the largest on record.

3. Chinook

Declining returns of chinook to the Fraser River and other Georgia Strait streams over the past decade with a particularly low return to the Fraser in 1980 resulted in a number of conservation measures being implemented by both Canada and the United States in 1981 in an effort to increase the chinook return to the streams of origin. The main conservation measures were as follows:

(a) Fraser River

(i) elimination of early gillnet fishery directed on chinooks

(ii) reduction of maximum gillnet mesh size to 5½ inches from previous maximum of 5 7/8 inches during sockeye fisheries

(iii) no Area 29D fisheries when expected ratio of sockeye to chinook was less than 10:1

(iv) no chinook sport fishing in river and off mouth except for jacks in river below Boston Bar

(b) Outside Canadian Fisheries

(i) two-area troll

(ii) reduced troll season

(iii) spot closures on problem juvenile areas

(iv) sport fishing conservation package

...3

(c) United States Waters

(i) no fishery targeting on chinooks prior to I.P.S.F.C. control (third consecutive year that this has been in place)

(ii) gillnet mesh size restricted to maximum of 5 7/8 inches during sockeye and pink salmon fisheries

(iii) non-Indian seines and reef nets were required to release chinook up to August 1 while Indian seines were required to release chinook greater than 28 inches in length to August 1.

While the benefits of some of the conservation measures were not expected to accrue for another one or more years some benefits should have been apparent as greater returns to the river and higher escapements in 1981. Any analysis, of course, suffers from lack of a control; what the return would have been had the conservation measures not been in place is impossible to determine.

Table 1 shows catches, escapements and total return of chinook to the Fraser River since 1971. The incidental commercial catch in Area 29 was only about 18,000, a record low as was the total return to the river of 80,000. The spawning escapement of 51,000 while well below the 10-year average of 66,000 was within the recorded range of recent years. However, it is only about one third the number considered to be optimum for the Fraser River.

The elimination of the directed chinook fisheries prior to I.P.S.F.C. control in both Canada and the United States did not achieve the desired result of substantially increasing spawning escapements to the upper Fraser (primarily to streams upstream of Prince George). In fact, escapements to this area were well below average. Had the fishing closures not been in effect the spawning escapements to this area would have been disasterous.

...4

Another conservation measure that was expected to show some benefits this year was the chinook release program in Unites States waters because these fisheries take large numbers of maturing chinooks of which a high proportion are considered to be of Fraser River origin. The incidental catches of chinook in Area 29 did not show any evidence of a major influx of fish and the spawning escapement of runs assumed to move through the lower Fraser River in July (when the release program was in effect), such as Chilko, were below average. The chinook test fishery also indicated a low return as the total catch was below that of 1980 (Fig.1). The apparent lack of effectiveness of the chinook release program may have been related to high mortality as chinook tend to be especially sensitive to handling.

While the spawning escapement to the Fraser River was low on the whole, there were areas such as some tributaries of the Thompson River that had a relatively good return. Others, including the late-timing Harrison River run were well below average.

4. Coho

The return of coho to the Fraser River in 1981 was exceptionally poor. The incidental Area 29 catch of only 4,000 is the lowest on record. While the spawning escapement information is presently incomplete preliminary information indicates that many streams in both the upper and lower Fraser will have below average escapements. Low wild coho escapements seem to be general throughout Southern British Columbia this year.

5. Chum

The pre-season forecast for Fraser River chums was for a return of 700,000 in 1981, equivalent to the number considered to be optimum for spawning. Test fishing in Johnstone Strait and in the Fraser River indicated that no fishable surplus was available throughout the season. Spawning escapement estimates are incomplete at this time. Although some of the small streams

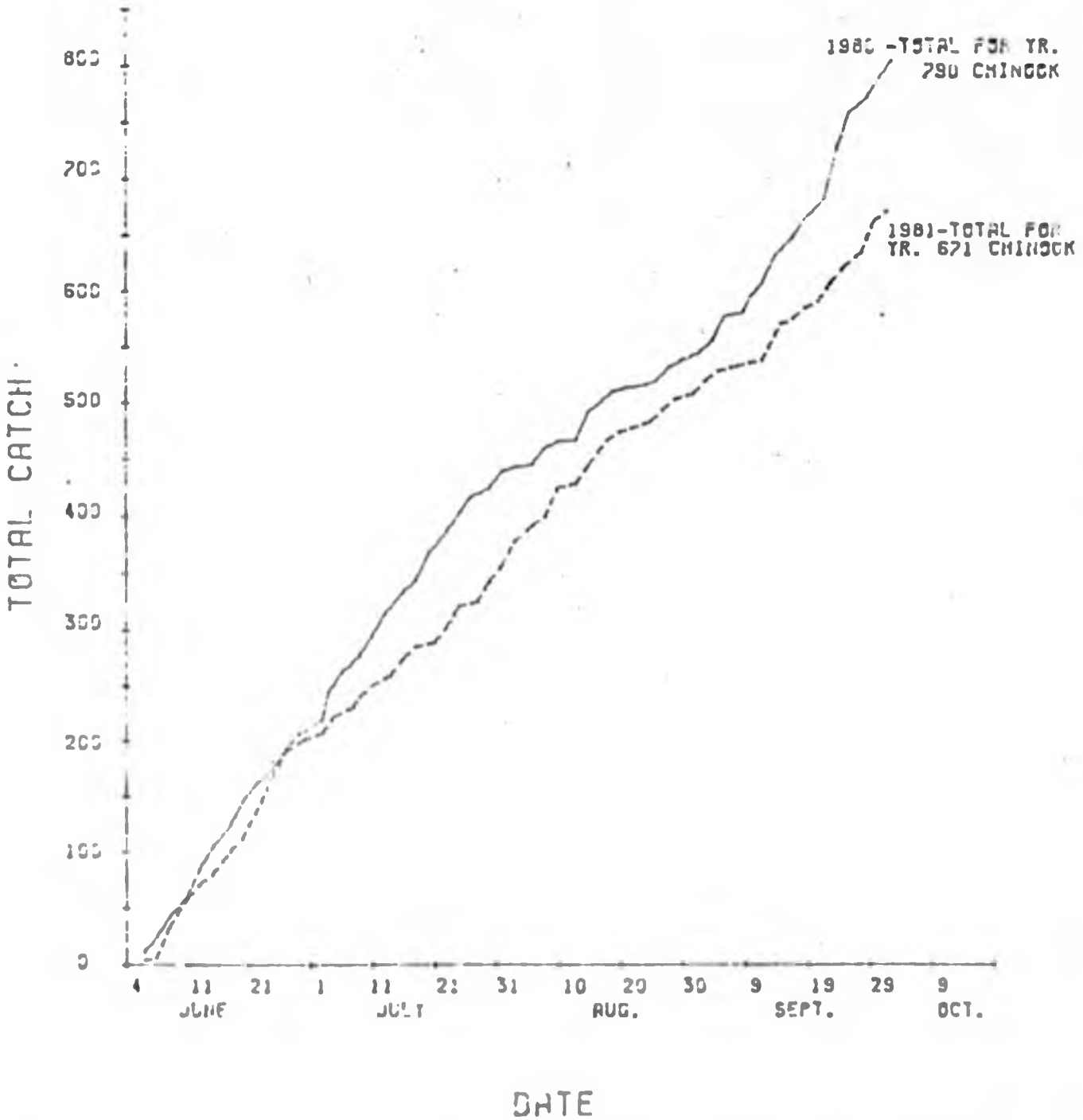
had relatively good escapements the later segments of the run are weak so the overall escapement is expected to be less than optimum.

TABLE 1. Catch, Escapement and Total Return of Fraser River Chinook

	Commercial Catch	Sport and Indian Food Catch	Escapement	Total Return
1971	132,000	33,000	60,000	225,000
1972	121,000	36,000	48,000	205,000
1973	95,000	23,000	81,000	199,000
1974	68,000	26,000	76,000	170,000
1975	74,000	35,000	80,000	189,000
1976	80,000	30,000	44,000	154,000
1977	91,000	31,000	80,000	202,000
1978	54,000	29,000	73,000	156,000
1979	52,000	26,000	63,000	141,000
1980	39,000	18,000	56,000	113,000
1981	18,000*	11,000*	51,000*	80,000

* preliminary

FIG.1. COMPARISON OF THE TOTAL CUMULATIVE CATCHES OF CHINOOK IN THE ALBION TESTFISHERY IN 1980 AND 1981.



1981 Management of the Southeast Alaska Salmon Troll Fishery In the Federal Fishery Conservation Zone

Federal management of the offshore southeast Alaska troll fishery began in 1977 subsequent to the passage of the Fishery Conservation and Management Act (FCMA) which created the fishery conservation zone (FCZ) from 3-200 miles offshore. The North Pacific Fishery Management Council (NPFMC) recommends management regimes for the FCZ to the Secretary of Commerce, who approves and implements them. Troll gear is the only authorized gear for commercial fishing in the FCZ.

Historically, southeast Alaska trollers fished primarily coastal and inshore waters but recent shifts in fishing effort have significantly increased the catch occurring in central and offshore waters. Annual chinook and coho salmon troll fishery catches from the FCZ are shown in Table 1. The 1981 chinook salmon catch from the FCZ was 57,700, and the 1981 coho salmon catch was 116,000.

Table 1. Number of southeast Alaska troll fishery landings and catch of chinook and coho salmon from the FCZ 1970-76 and 1977-81.

Year	No. of Landings	Chinook		Coho	
		Number	% of Total Catch	Number	% of Total Catch
1970-76	301	41,200	16	31,000	6
1977	337	50,000	18	9,100	2
1978	2,125	61,600	17	107,600	10
1979	5,544	116,300	35	294,600	32
1980	7,714	133,600	45	292,600	41
1981	3,045	57,700	23	116,000	14

The 1981 FCZ catch of both chinook and coho salmon were less than one-half of the 1980 FCZ catches and represented only 23 percent of the 1981 total chinook salmon catch and 14 percent of the total 1981 coho salmon catch. The 1980 FCZ catch of chinook and coho salmon, by comparison, represented a record high of 45 and 41 percent of the total 1980 catch of each species. The reduced 1981 FCZ catches most likely resulted from the FCZ being closed from August 10 through the remainder of the season. The FCZ was closed on August 10 by field (emergency) order, in cooperation with management in State waters, for the purpose of allowing more coho salmon to reach inside fishing areas. The FCZ was not reopened on August 20, when State waters reopened, because catch projections for the remainder of the season in State waters indicated that the upper end of the NPFMC optimum yield range of 272,000 chinook salmon would be met and significant mortality due to hook and release of chinook would occur during any directed coho fishery. Table 2 compares the 1980 and 1981 days fished.

Table 2. Season dates and numbers of days fished in the FCZ during 1980 and 1981.

1980		1981	
Dates	No. Days	Dates	No. Days
April 15-July 15	91	May 15-June 26	42
July 26-September 21	57	July 5-August 10	36
Total	148		78

The 78 days fished during 1981 represents a 47 percent reduction in fishing time from 1980. The delayed opening date in 1981 was a consequence of a cooperative effort with the State to protect mature Alaskan spring chinook salmon as they returned to southeastern Alaska spawning areas. The overall reduction in the length of the fishing season in the FCZ in 1981 resulted from implementation of a 15 percent reduction in the chinook salmon optimum yield from the 1980 level of 286,000-320,000 to 243,000-272,000 chinook salmon for 1981.

Draft of 12/21/81

DRAFT

CURRENT STATUS OF SOUTHEAST ALASKA CHINOOK SALMON STOCKS

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

December 1981

BRIEF

Chinook salmon runs occur in some 33 rivers and streams throughout Southeast Alaska. Three major systems, the Alsek, Taku, and Stikine Rivers are thought to produce approximately 70% of the total production while 8 medium and 22 minor systems produce an estimated 20% and 10% respectively. Hatchery production is currently small relative to natural production but is expected to increase substantially during the next decade.

Commercial chinook salmon catches in Southeast Alaska declined from an average of 610,000 during the 1930's to 320,000 during the 1970's. The 1981 catch was approximately 268,000. Significant contributions of non-Alaskan stocks to the total catch coupled with the lack of effective stock separation techniques prevent drawing direct inferences from total catches to changes in Southeast Alaska stock abundance. However, historical catch data from terminal area fisheries and available escapement data also indicate significant declines in Southeast Alaska stocks. It is estimated that Southeast Alaska stocks may currently be producing at only about half the potential level expected from minimum management escapement goals.

A management program is currently in progress to rebuild depressed Southeast Alaska chinook stocks. More restrictive fishery regulations begun in the mid-1970's and expanded in 1980 and 1981 appear to have arrested the decline in escapements in most systems and significantly increased escapements to two major systems, the Taku and Stikine Rivers in 1980 and 1981. Proposals are being made to further delay spring opening dates in certain southern Southeast Alaska areas in 1982 to increase escapements to 4 medium systems in the Behm Canal area. Tentative plans are also being made to supplement several natural stocks in this area with hatchery produced fish of the same brood stock in an effort to speed the rebuilding process.

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INTRODUCTION

Natural chinook salmon runs are known to occur in some 33 rivers and streams throughout Southeast Alaska (Figure 1). Three of these, the Alsek, Taku, and Stikine Rivers, are classified as 'major' producers with potential run sizes exceeding 10,000 fish. Eight of the systems are classified as 'medium' producers with potential runs ranging from 1,500 to 10,000 and 22 are classified as 'minor' producers with potential runs of less than 1,500 fish. Chinook salmon have also reportedly been observed on occasion in a number of other rivers and streams, however, these runs in total are thought to be small in comparison to the classified runs.

Of the 33 classified systems, 3 major, 5 medium, and 1 minor system are currently surveyed annually to estimate relative spawning abundance. These nine systems are currently used to provide an index or relative measure of annual chinook salmon spawning to all Southeast Alaska systems. In the 3 major systems which are large mainland rivers, surveys are conducted only on some of the more important spawning tributaries with physical characteristics which allow aerial spawning ground surveys. Counting weirs are currently used on the Kluckshu River, a major tributary of the Alsek, and on the Situk River. Escapement estimates based on aerial and/or ground surveys represent peak spawning counts unless expanded appropriately to estimate total escapement.

While some of the other non-index systems are surveyed occasionally, poor survey conditions due to glacial water and other factors prevent obtaining consistent annual escapement estimates from spawning ground surveys.

Chinook salmon are also produced in several Southeast Alaska hatcheries including ADF&G hatcheries at Crystal Lake and Deer Mountain and a NMFS research facility at Little Port Walter. Contributions to commercial and recreational fisheries are currently estimated to be in the range of 2,500 to 5,000 fish. Substantially expanded production is planned for a number of new hatcheries.

For a more detailed discussion of Southeast Alaska chinook salmon stocks the reader is referred to:

A Study of Chinook Salmon in Southeast Alaska.
Paul Kissner. Alaska Department of Fish and Game. Anadromous Fish Studies, Vol. 18. AFS 41-5. 1977

CURRENT STATUS OF NATURAL STOCKS

While it is generally agreed that Southeast Alaska natural chinook salmon stocks are depressed compared to both historical catch levels and estimated potential production, it is difficult to estimate quantitatively the degree to which they are depressed. This is due to the lack of consistent historical records of annual escapements and the inability to allocate catch from large mixed stock fisheries to individual contributing systems. There are several approaches that can be used, however, to provide some general impressions of the current status of these stocks.

Historical Commercial Chinook Salmon Catch Data

Commercial catches of chinook salmon by Southeast Alaska fisheries averaged 320,000 fish annually during the 1970's or about half of the 610,000 average annual catch taken during the peak decade of the 1930's (Figure 2). Significant contributions to this harvest by non-Alaskan stocks and the

absence of effective stock separation techniques required to determine stock components in these highly mixed stock fisheries prevent direct inferences being made from total catches as to the status of Southeast Alaska chinook salmon stocks. However, historical catches by Southeast Alaska fisheries operating in more terminal areas near local chinook producing systems such as the Alsek, Taku, and Stikine Rivers also reflect serious declining trends (Figures 3-4).

While historical catches shown for the terminal area gillnet fisheries have not been adjusted for fishing effort and thus are not a direct measure of relative stock abundance, the large early declines occurred during periods before significant reduction of fishing effort occurred. The very low level catches in more recent years, however, reflect both low stock abundance and significantly reduced fishing effort resulting from more restrictive fishery regulations designed to rebuild these runs.

Historical Chinook Salmon Escapement Data

Historical chinook salmon escapement data available for the 9 index systems combined with preliminary estimates of optimum escapement and/or minimum escapement goals also provide some general indication as to the degree to which these stocks are currently depressed. This information is shown graphically in Figures 5-13.

Minimum escapement goals for Southeast Alaska chinook salmon index systems currently being surveyed have been established based on the maximum number of spawners observed since surveys were initiated in the early 1950's (except for the Situk River where weir counts date back to 1928). Since the 1950's Southeast Alaska chinook stocks appear to have been substantially depressed below historical high levels and based on harvest patterns of

fisheries in terminal areas, even maximum escapements observed during this latter period do not appear to have reached or exceeded optimum escapement levels. (Analysis of data is being continued however, and revision of some escapement goals are anticipated in particular for the Stikine and Situk Rivers.)

Expanding average minimum escapement goals for surveyed systems to non-surveyed systems within each of the run size categories--major, medium, and minor--results in an estimated total minimum escapement goal for all Southeast Alaska systems of 66,000 to 80,000 fish. Average escapements observed during 1978-80 are estimated to have been 25,000 to 34,000 indicating a 42,000 to 46,000 spawner deficit.

Chinook salmon escapements to Southeast Alaska systems are therefore estimated to have averaged some 25,000 to 34,000 fish during the three year period 1978-80 or less than half of the total minimum escapement goal of 66,000 to 80,000 (Figure 14). As a result, production in terms of average annual harvest from Southeast Alaska stocks is also thought to be less than half of the harvest which might be expected if minimum escapement goals were being achieved (Tables 1-2). Although some improvement was observed in escapements to the Taku and Stikine Rivers in 1980 and 1981, escapements to other surveyed systems were generally unchanged (Table 3).

SUMMARY

Based on historical catch data in terminal area fisheries beginning in the early 1900's and on historical escapement data from the early 1950's for a number of index systems, Southeast Alaska chinook salmon stock abundance appears to be substantially below historical high levels and estimated

optimum levels. The apparent decline in stock abundance during the 1940's and 1950's was probably due to overfishing and possibly to some degree on less favorable environmental conditions.

The failure of Southeast Alaska chinook stocks to respond during the 1970's to more favorable environmental conditions as reflected by a general statewide increase in salmon production (Figure 15) was probably due primarily to continued overfishing and the resulting low escapement levels.

In response to more restrictive regulations for terminal gillnet fisheries (and recreational fisheries) since the mid-1970's and for the troll fishery in 1980-81, the decline in stock abundance appears to have been stopped. In addition, escapements to two of the major systems, the Taku and Stikine Rivers, increased significantly in 1980 and 1981.

Additional regulations are being proposed for 1982 to further delay the opening date of the summer season in District 1 in an attempt to increase escapements to chinook salmon systems in Behm Canal, namely the Unuk, Chickamin, Blossom, and Keta Rivers.

FIGURES AND TABLES

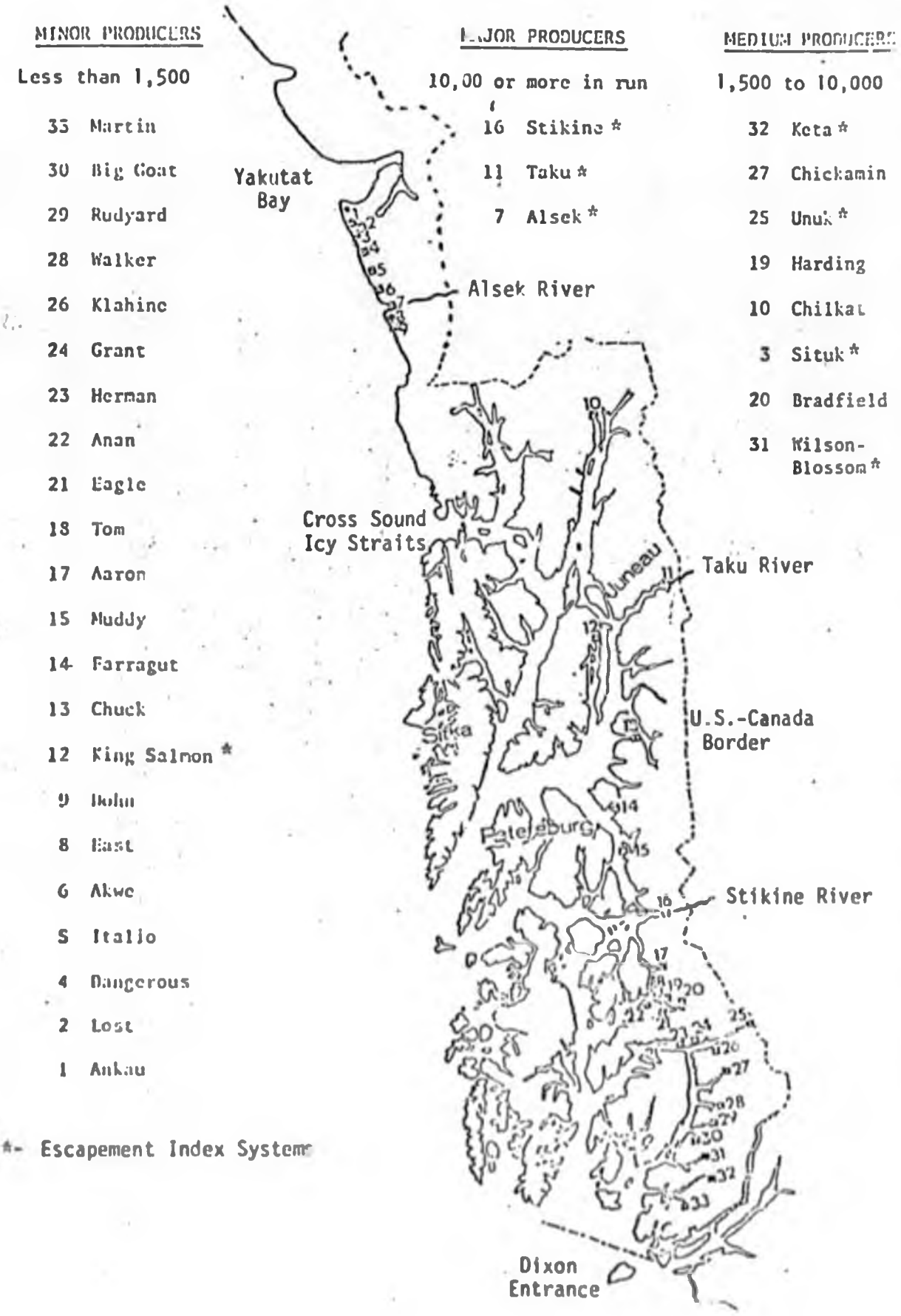


Figure 1. Approximate locations of chinook salmon systems in Southeast Alaska (ADF&G 12/81).

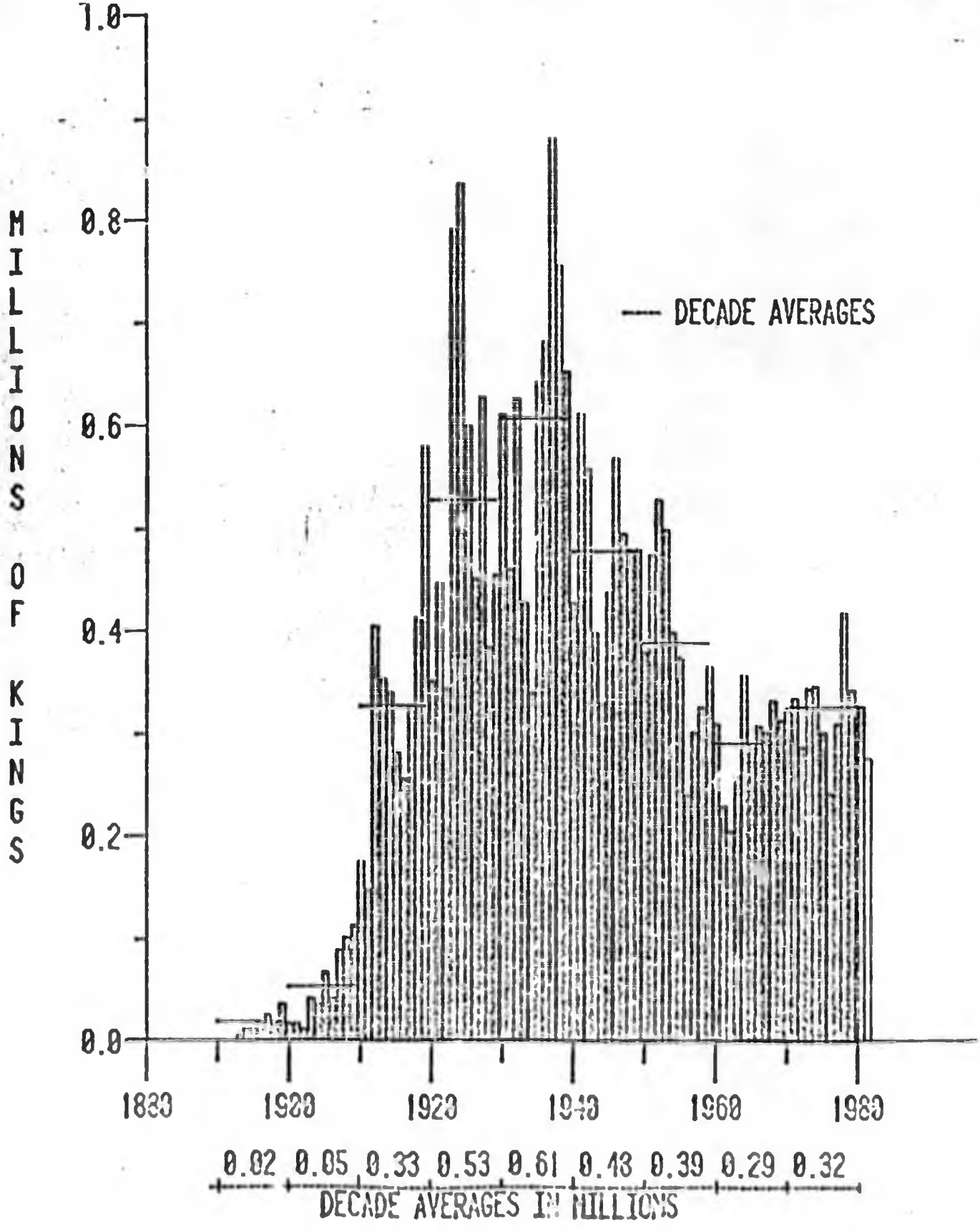


Figure 2. Southeast Alaska Region Annual Commercial Chinook Salmon Catches, 1893 to Present. (ADG&G 12/81)

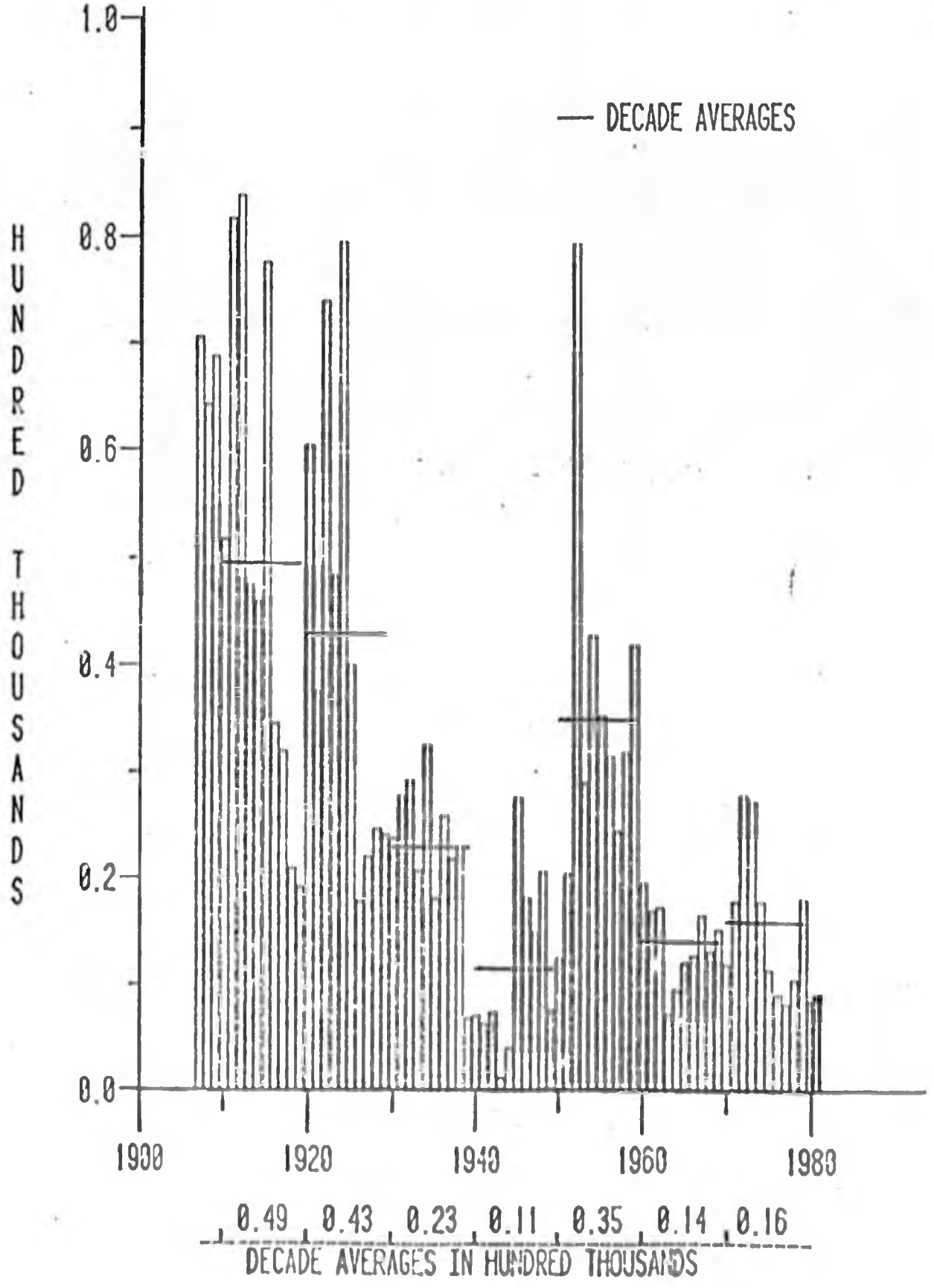


Figure 3. Southeast Alaska Historical Commercial Chinook Salmon Catches in Gillnet Fisheries, 1907 to Present. (ADF&G 12/81)

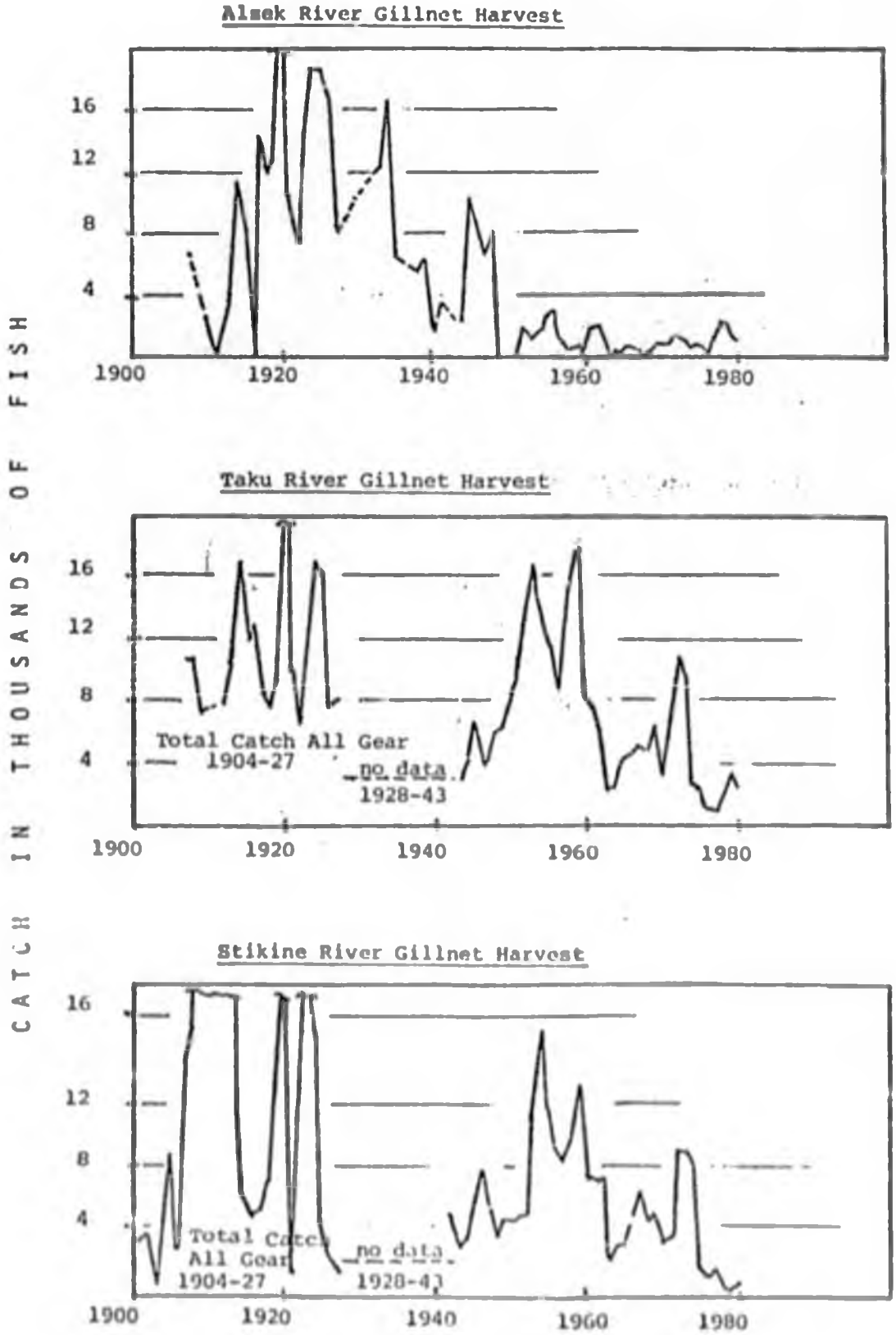


Figure 4. Historical Chinook Salmon Catches in Terminal Area Fisheries on the Alsek, Taku, and Stikine Rivers. (ADF&G 12/81)

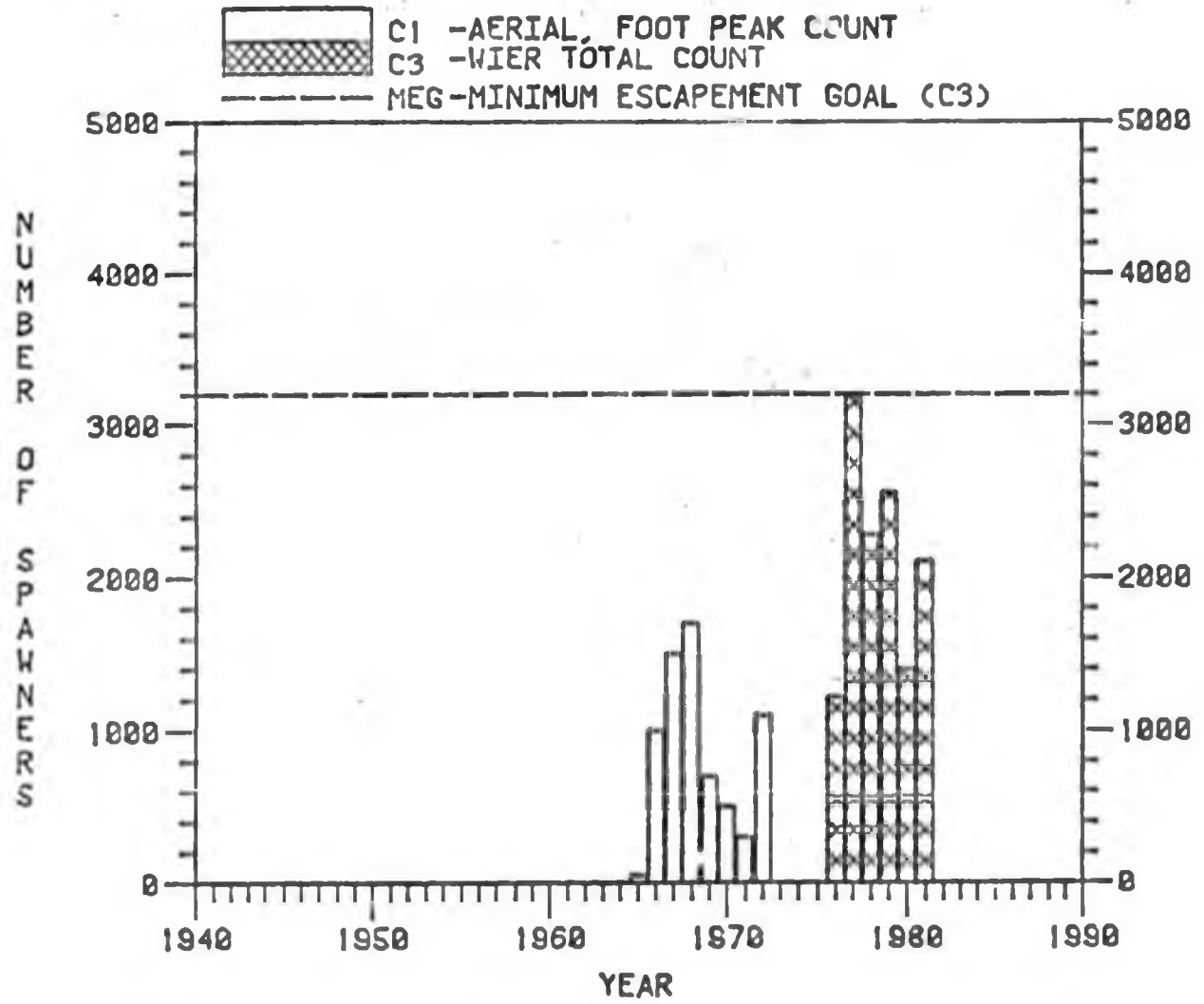


FIGURE 5. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE KLUCKSHU LAKE, ALSEK RIVER, SOUTHEAST ALASKA, 1965 TO 1981. (ADF&G 11/81)

(Note: Average contribution of Kluckshu Lake tributary to total Alsek River chinook salmon production estimated to be approximately 64%.)

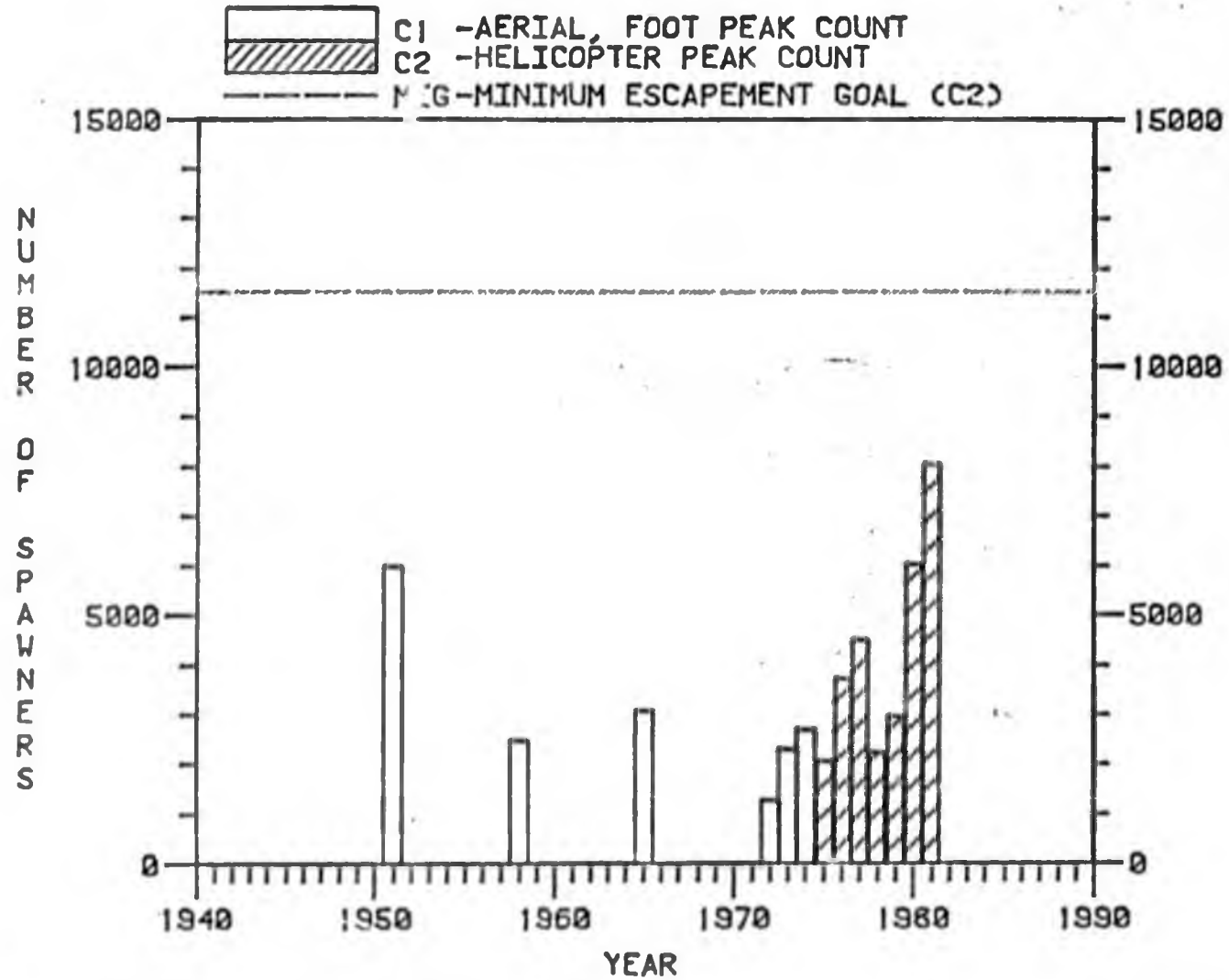


FIGURE 6. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE NAKINA AND NAHLIN TRIBUTARIES OF THE TAKU RIVER, SOUTHEAST ALASKA 1951 TO 1981. (ADF&G 11/81)

(Note: Average contribution of Nakina and Nahlin tributaries to total Taku River chinook salmon production estimated to be approximately 60%.)

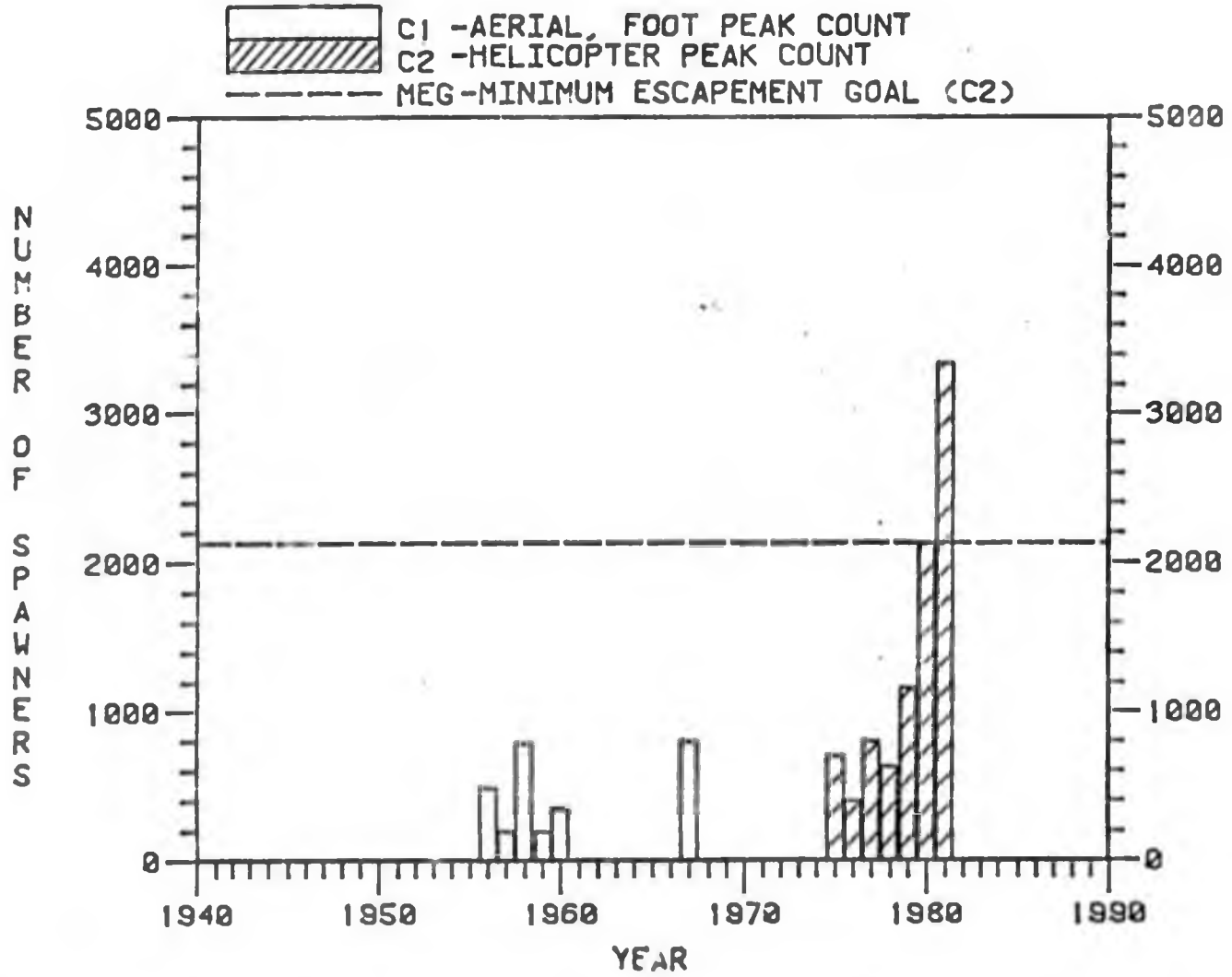


FIGURE 7. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE LITTLE TAHLTAN RIVER TRIBUTARY OF THE STIKINE RIVER, SOUTHEAST ALASKA 1956 TO 1981 (ADF&G 11/81)

(Note: Average contribution of Little Tahltan River tributary to total Stikine River chinook salmon production estimated to be approximately 25%.)

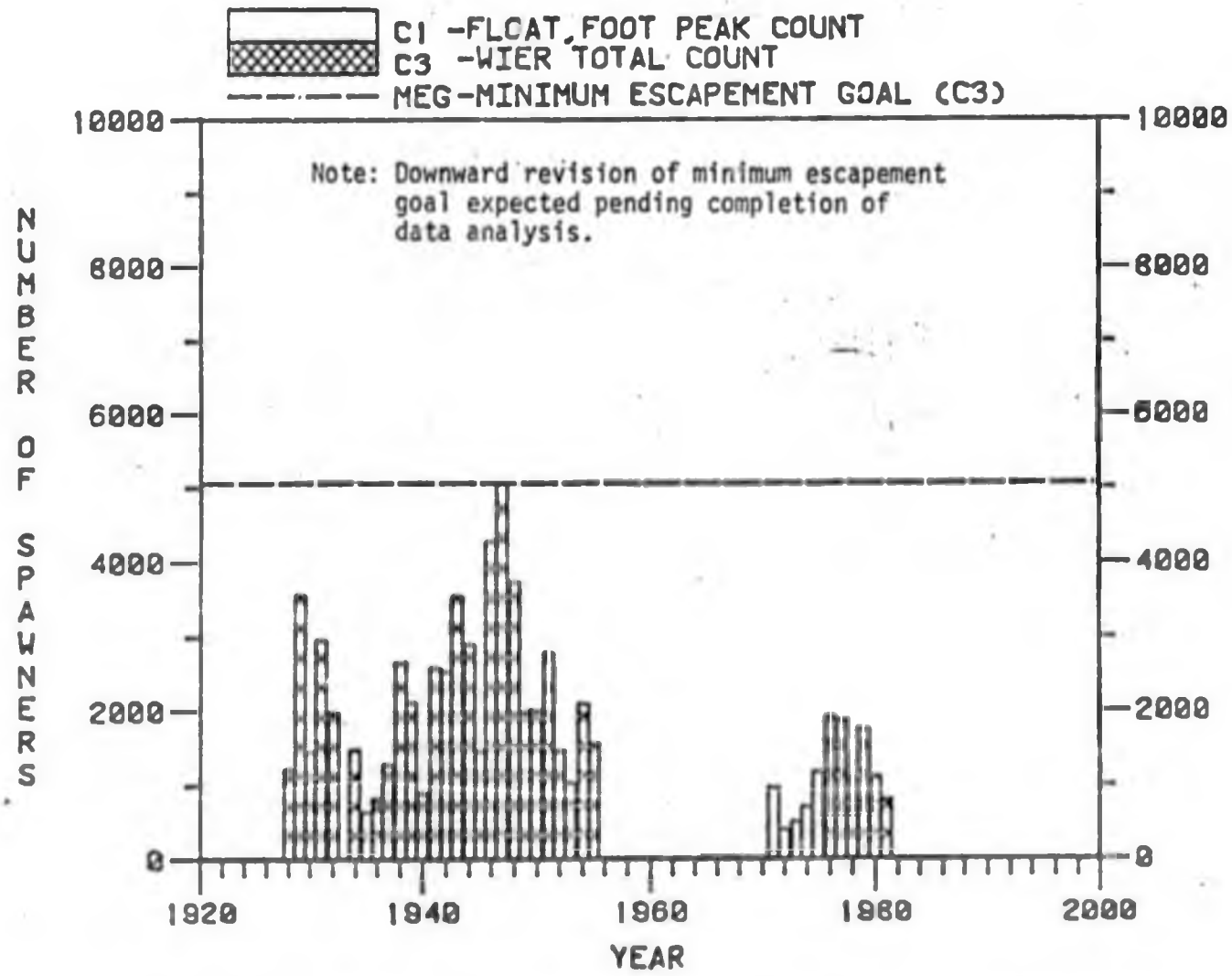


FIGURE 8. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE SITUK RIVER, SOUTHEAST ALASKA, 1928 TO 1981. (ADF&G 11/81)

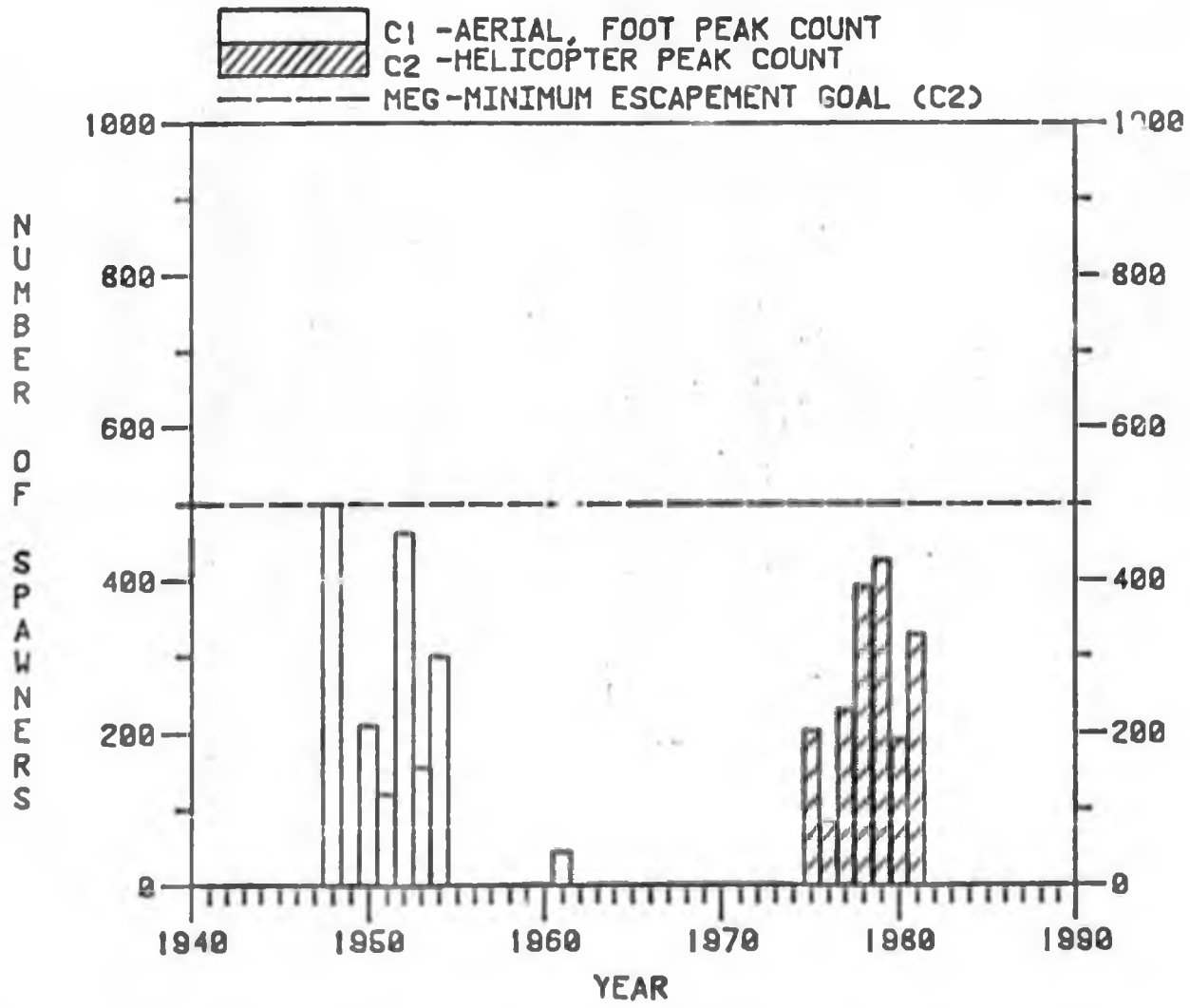


FIGURE 9. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE KETA RIVER, SOUTHEAST ALASKA, 1948 TO 1981. (ADF&G 11/81)

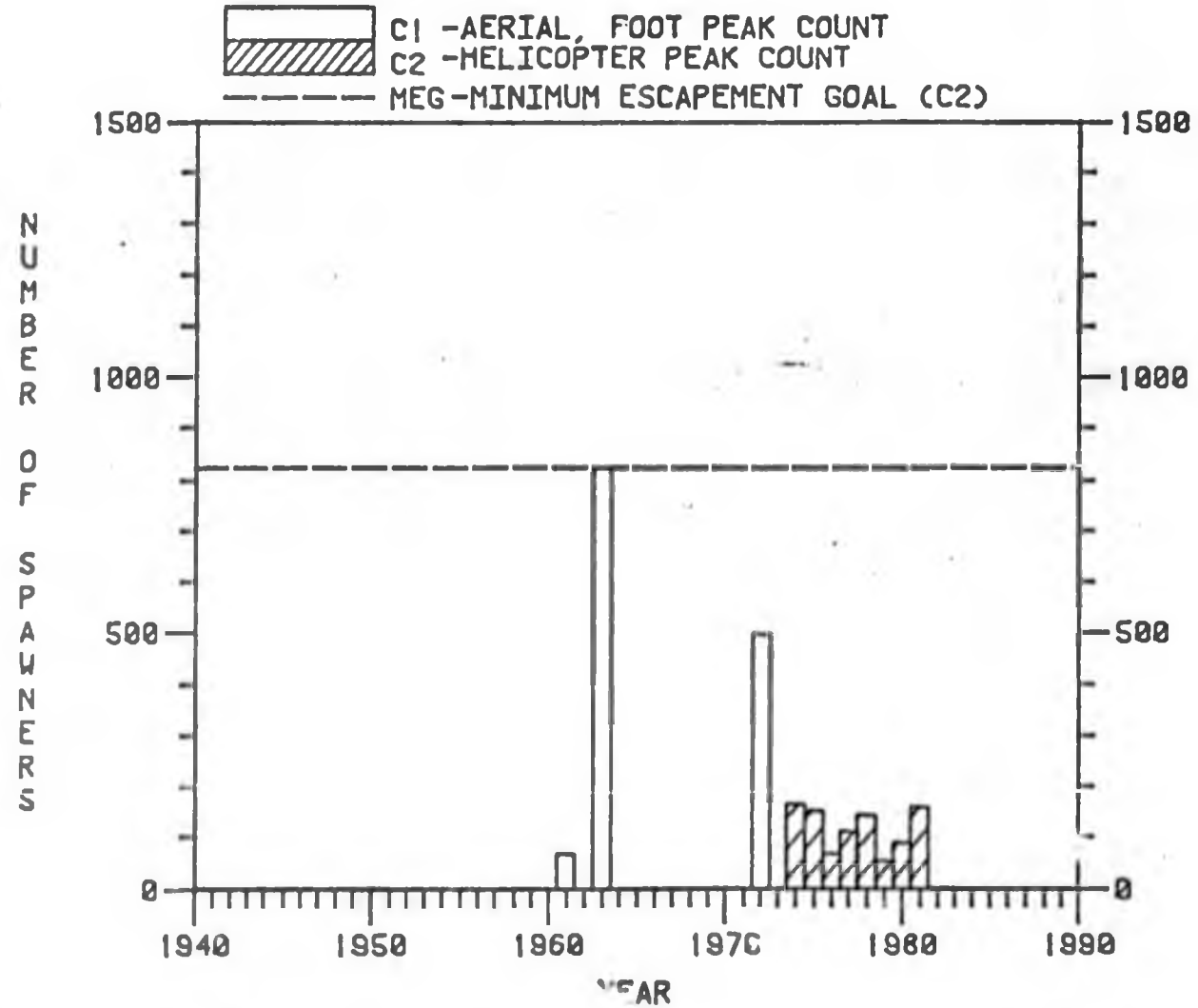


FIGURE 10. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE BLOSSOM RIVER, SOUTHEAST ALASKA, 1961 TO 1981. (ADF&G 11/81)

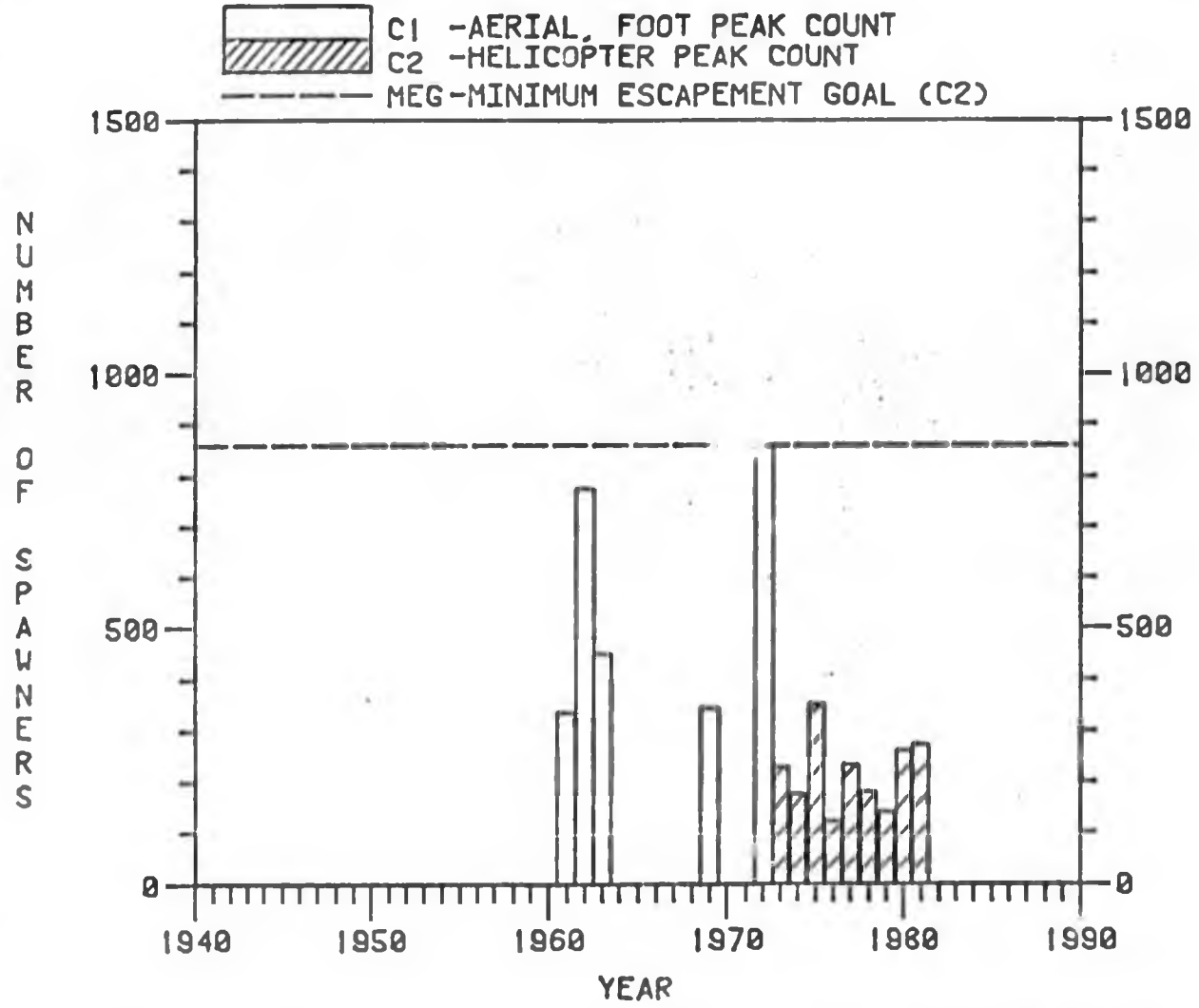


FIGURE 11. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE CHICKAMIN RIVER, SOUTHEAST ALASKA, 1961 TO 1981. (ADF&G 11/81)

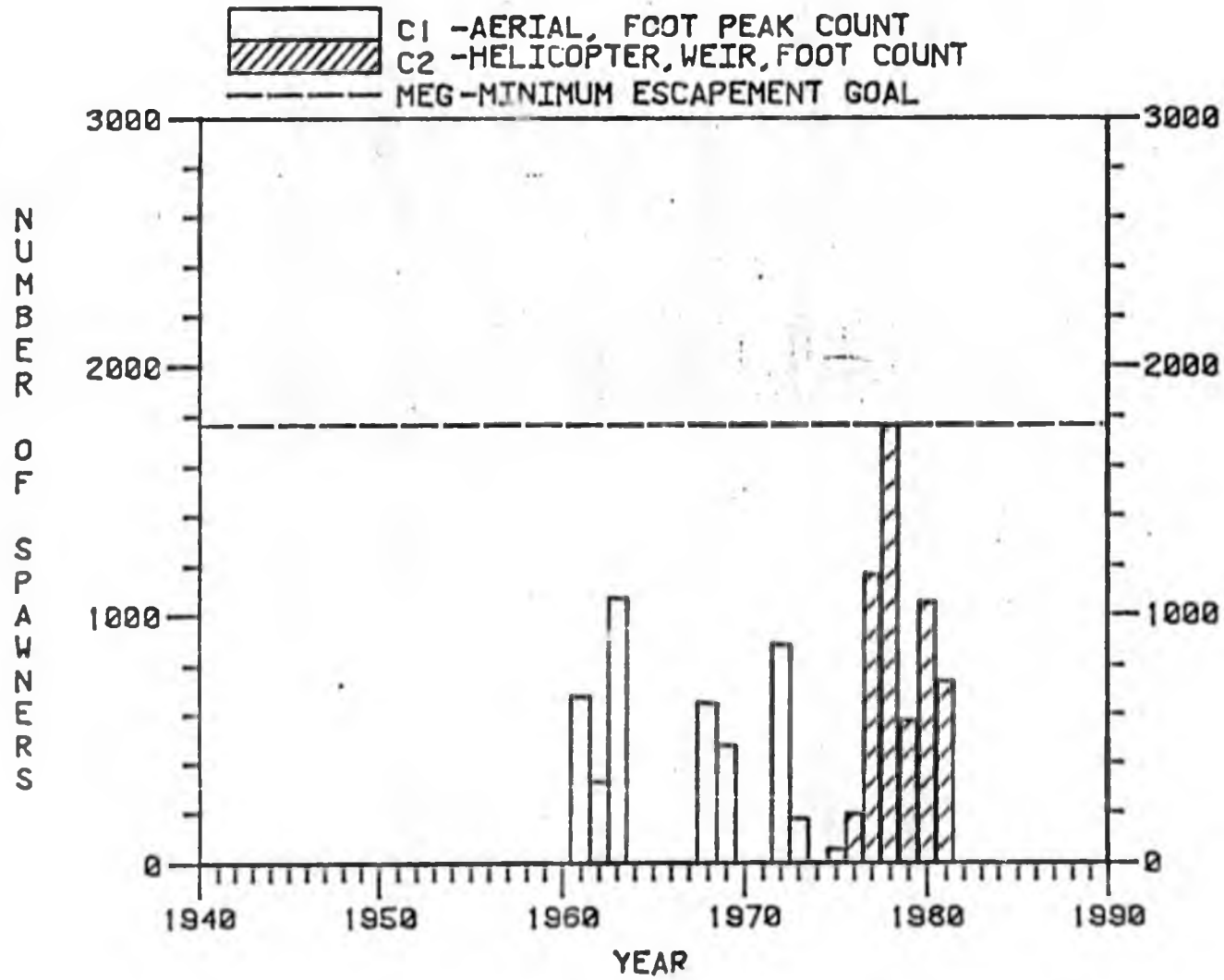


FIGURE 12. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE UNUK RIVER, SOUTHEAST ALASKA, 1961 TO 1981. (ADF&G 11/81)

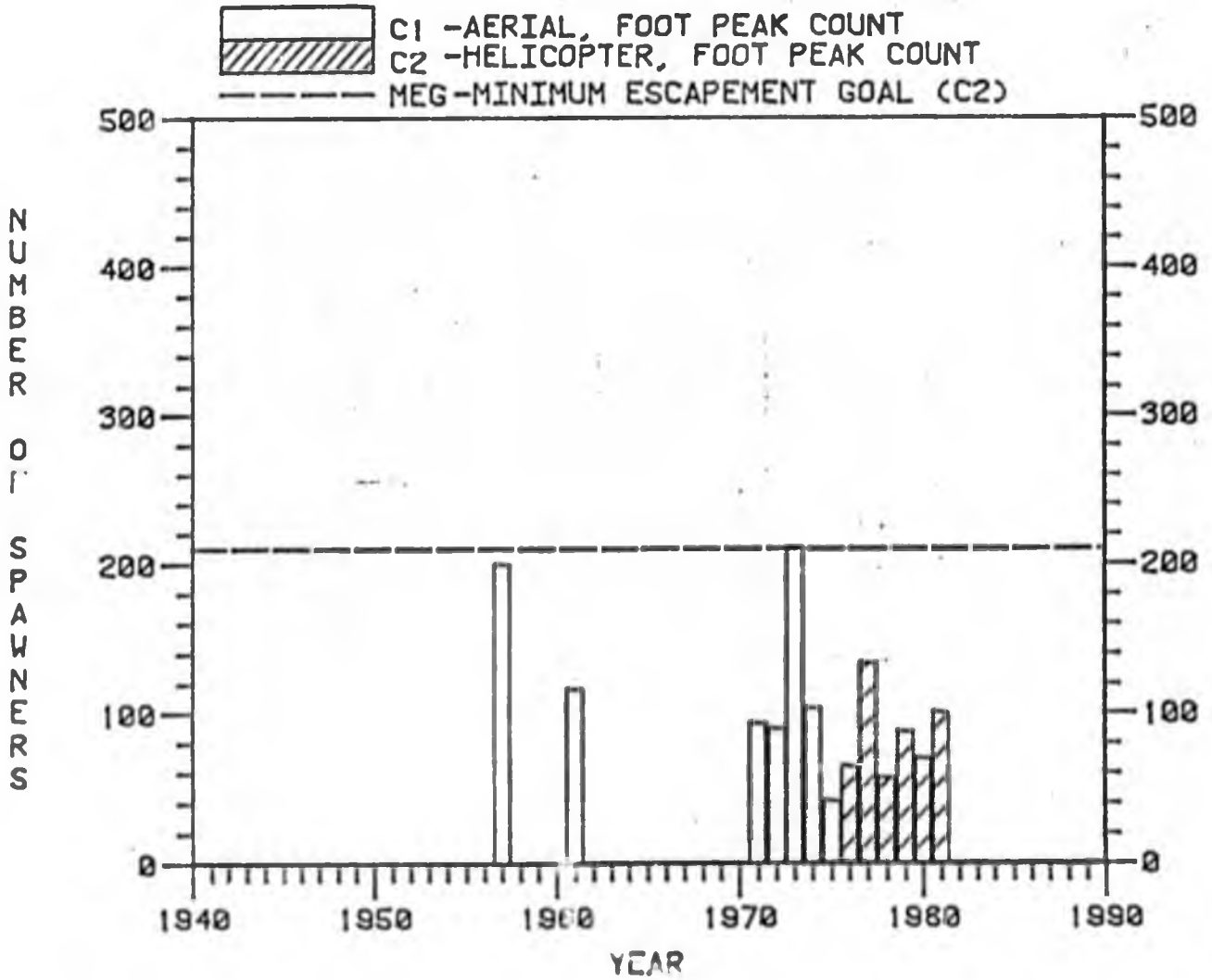
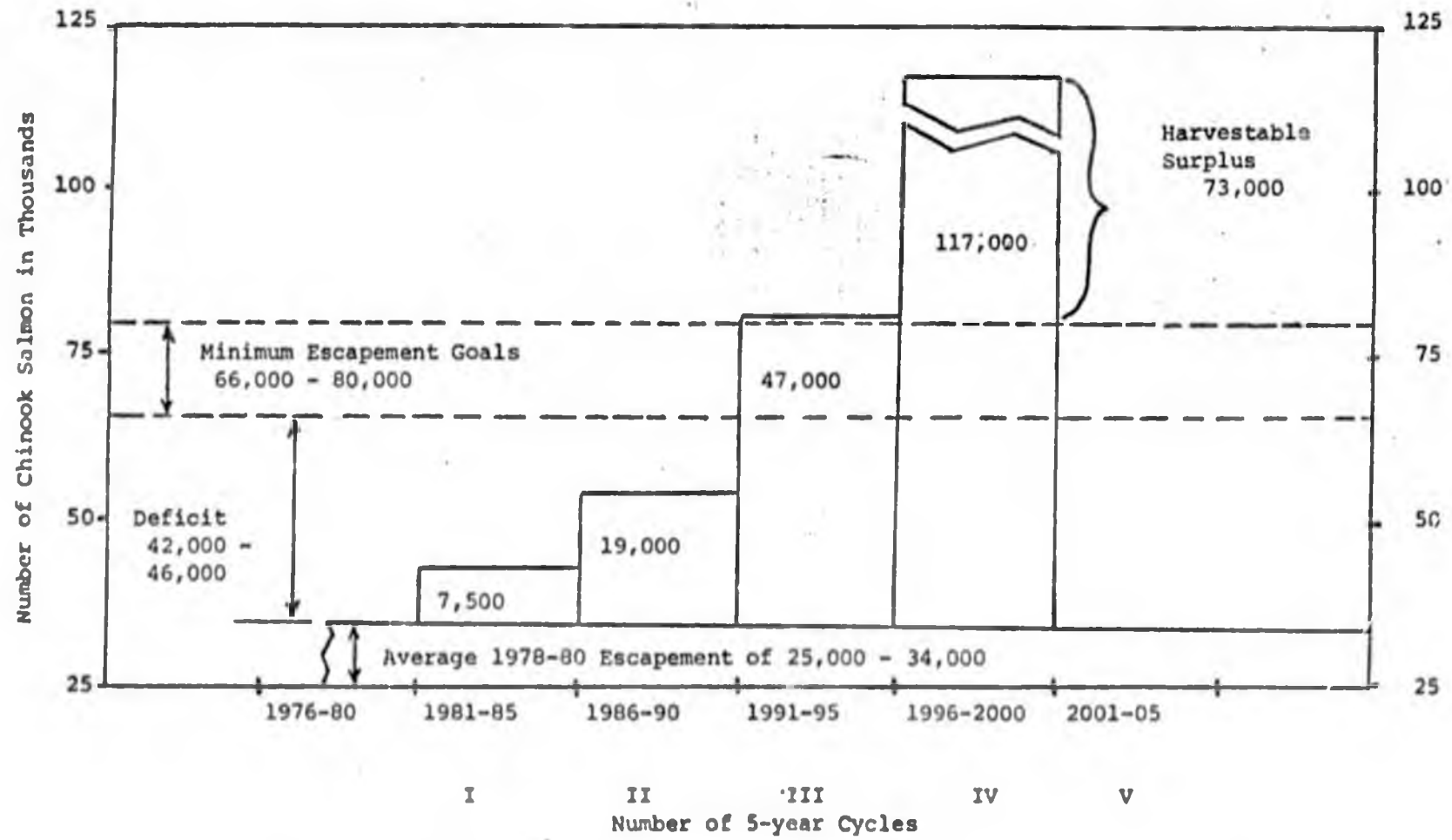


FIGURE 13. OBSERVED CHINOOK SALMON ESCAPEMENTS TO THE KING SALMON RIVER, ADMIRALTY ISLAND, SOUTHEAST ALASKA, 1957 TO 1981. (ADF&G 11/81)

Figure 14. Projected Average Increases in Chinook Salmon Escapements to Southeast Alaska Systems from Proposed 10% Reduction of the Southeast Alaska Commercial Chinook Salmon Harvest Ceiling from 320,000 to 288,000 in 1981.

(Note: Projections made 12/80.)



Note: The projected increases in escapements are based on an assumed 3:1 adult return per spawner ratio adjusted downward to 2.5:1 for harvest in fisheries not currently limited by the O.Y. Catch ceiling.

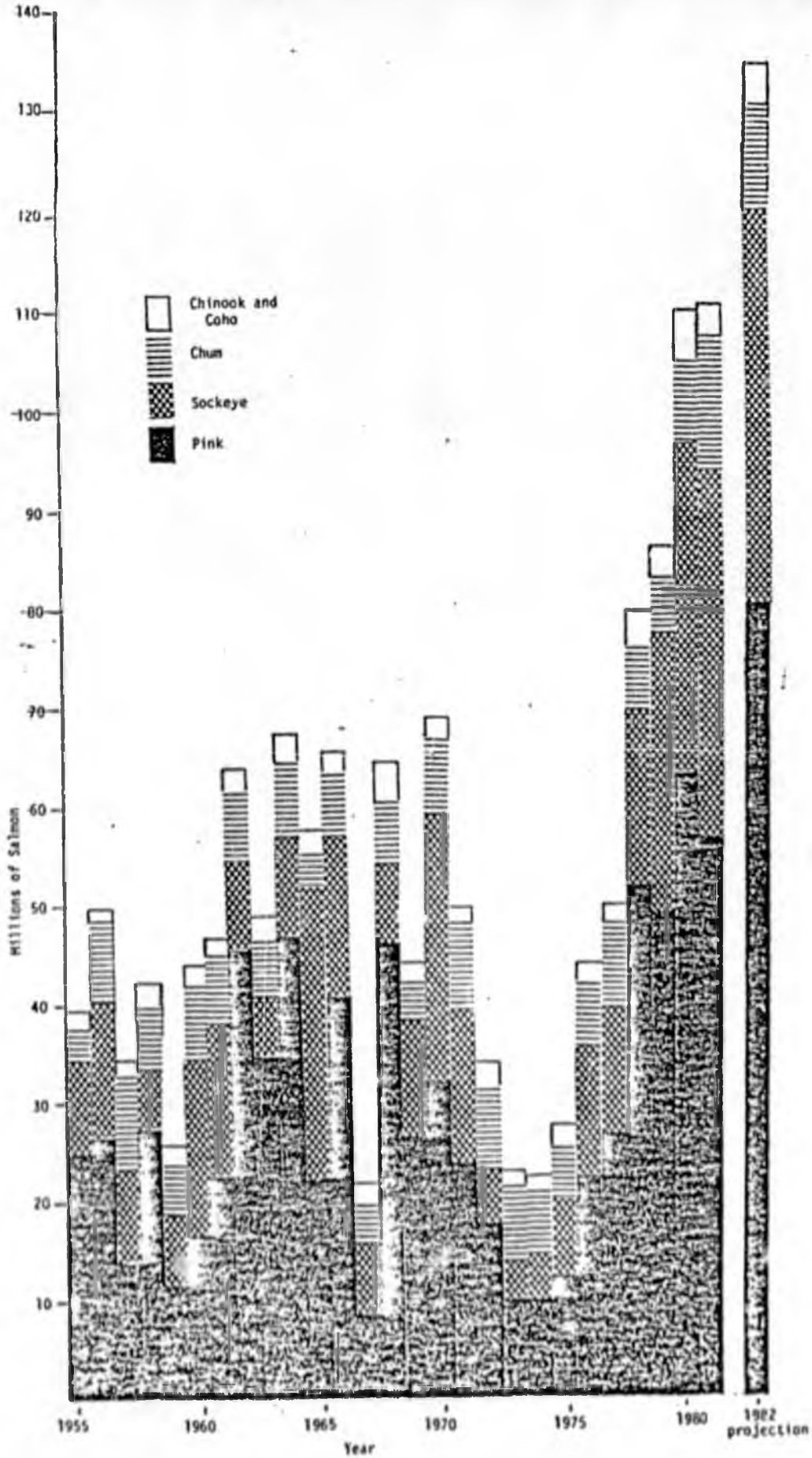


Figure 15. Alaskan commercial salmon harvests by species, 1955-1981, and the 1982 projected harvest.

Table 1. Estimates of potential average annual harvest from current minimum escapement goals for natural chinook salmon runs to Southeast Alaska systems (cont. p. 1/2) (ADF&G-80).

Assumptions								
Average Counting Rate for Aerial/Peak Surveys 1/	Average Return Per Spawner Ratio (Harvest Rate)	Major Systems (3 Total) Alsek	Taku	Stikine	Subtotal	Medium Systems (8 Total)	Minor Systems (22 Total)	All Systems Total
50%	1.5:1 (33%)	2,500	15,000	8,400	25,900	9,500	4,400	39,800
	2:1 (50%	5,000	30,000	16,800	51,800	19,100	8,800	79,700
	2.5:1 (60%)	7,500	45,000	25,200	77,700	28,500	13,200	119,500
	3:1 (67%)	10,000	60,000	33,600	123,600	38,200	17,600	179,400
	3.5:1 (71%)	12,500	75,000	42,000	129,500	47,800	22,000	199,300
75%	1.5:1 (33%)	2,500	15,000	5,600	23,100	7,200	3,000	33,300
	2:1 (50%)	5,000	30,000	11,200	46,200	14,400	5,900	66,500
	2.5:1 (60%)	7,500	45,000	16,800	69,300	21,600	8,900	99,800
	3:1 (67%)	10,000	60,000	22,400	92,400	28,800	11,800	133,000
	3.5:1 (71%)	12,500	75,000	28,000	115,500	36,000	14,800	166,300
				Average	75,500	25,100	11,000	111,700
				High	129,500	47,800	22,000	199,300
				Low	23,100	7,200	3,000	33,300
				Approximate Percent Contribution	70%	20%	10%	

1/ Unless specified otherwise in the explanatory notes below.

Note: Return per spawner ratios in the mid to upper range, viz. 2.5:1 to 3.5:1, are thought to provide the most realistic estimates of actual production.

Table 1. Estimates of potential average annual harvest from current minimum escapement goals for natural chinook salmon runs to Southeast Alaska systems (cont. p. 2/2) (ADF&G-80).

Notes on Computations and Assumptions

1) Major Systems

Alsek - An average Kluckshu contribution of 64% is assumed based on the average observed Kluckshu escapement compared to escapement to other tributaries. Thus the total minimum escapement goal for the Alsek system is 3,200 ÷ .64 = 5,000 fish.

Taku - An average Nakina contribution of 40% is assumed. An aerial/peak survey counting rate of 75% is assumed he Nakina tributary. Thus, the total minimum escapement goal for the Taku system is (9,000 ÷ .40) ÷ .75 = 30,000 fish.

Stikine - An average Little Tahltan contribution of 25% is assumed. Thus, the total minimum escapement goal for the Stikine system is 2,100 ÷ .25 = 8,400 plus an adjustment for the aerial/peak counting rate.

2) Medium Systems

The weir/total minimum escapement goal of 5,100 fish is used for the Situk River. Based on the other four medium systems surveyed, an average aerial/peak minimum escapement goal per system of 1,000 fish is assumed. At a 50% counting rate for aerial/peak surveys, this yields a total minimum escapement goal of 19,100 fish for all eight medium systems while a 75% counting rate yields 14,400.

3) Minor Systems

An average aerial/peak minimum escapement goal per minor system of 200 fish is used. At a 50% counting rate for aerial/peak surveys, this yields a total minimum escapement goal of 8,800 fish for all 22 minor systems while a 75% counting rate yields 5,900.

Table 2. Estimates of potential average annual harvest from average 1978-80 escapements to chinook salmon systems in Southeast Alaska (cont. p. 1/2) (ADF&G-80).

Assumptions

Average Counting Rate for Aerial/ Peak Surveys 1/	Average Return Per Spawner Ratio (Harvest Rate)	Major Systems (3 Total) Alsek	Taku	Stikine	Subtotal	Medium Systems (8 Total)	Minor Systems (22 Total)	All Systems Total
50%	1.5:1 (33%)	1,620	4,570	5,250	11,440	3,500	1,580	16,520
	2:1 (50%	3,250	9,140	10,500	22,890	7,010	3,170	33,070
	2.5:1 (60%)	4,880	13,710	15,750	34,340	10,520	4,760	49,620
	3:1 (67%)	6,500	18,280	21,000	45,780	14,020	6,340	66,140
	3.5:1 (71%)	8,120	22,850	26,250	57,220	17,520	7,920	82,660
75%	1.5:1 (33%)	1,620	4,570	3,500	9,690	2,560	1,060	13,310
	2:1 (50%)	3,250	9,140	7,000	19,390	5,110	2,110	26,610
	2.5:1 (60%)	4,860	13,710	10,500	29,090	7,660	3,160	39,910
	3:1 (67%)	6,500	18,280	14,000	38,780	10,220	4,220	53,220
	3.5:1 (71%)	8,120	22,850	17,500	48,470	12,780	5,280	66,530
			Average		31,710	9,090	3,960	44,760
			High		57,220	17,520	7,920	82,660
			Low		9,690	3,500	1,060	13,310
			Approximate Percent Contribution		70%	20%	10%	

1/ Unless specified otherwise in the explanatory notes below.

Note: Return per spawner ratios in the mid to upper range, viz. 2.5:1 to 3.5:1, are thought to provide the most realistic estimates of actual production.

Table 2.. Estimates of potential average annual harvest from average 1978-80 escapements to chinook salmon systems in Southeast Alaska (cont. p. 2/2) (ADF&G-80).

Notes on Computations and Assumptions

1) Major Systems

Alsek - An average Kluckshu contribution of 64% is assumed based on the average observed Kluckshu escapement compared to escapements to other tributaries. The average 1978-80 weir/total escapement to the Kluckshu was 2,082 fish. Thus the estimated total 1978-80 average escapement to the Alsek system is 2,082 ÷ .64 = 3,253.

Taku - An average Nakina contribution of 40% is assumed. An aerial/peak survey counting rate of 75% is assumed. The average 1978-80 aerial/peak escapement to the Nakina was 2,743 fish. Thus the estimated total 1978-80 average escapement to the Taku system is (2,743 ÷ .40) ÷ .75 = 9,143.

Stikine - An average Little Tahltan contribution of 25% is assumed. The average 1978-80 aerial/peak escapement to the Little Tahltan was 1,312 fish. Thus the estimated total 1978-80 aerial/peak escapement to the Stikine system is 1,312 ÷ .25 = 5,248 plus an adjustment for the assumed aerial/peak counting rate.

2) Medium Systems

The average 1978-80 weir/total escapement for the Situk River is 1,327. The average 1978-80 aerial/peak escapement per system for the four medium systems thus surveyed is 406. Expanding these rates to all eight systems yields average 1978-80 total escapement estimates of 7,011 assuming a 50% aerial/peak counting rate and 5,114 assuming a 75% counting rate.

3) Minor Systems

The average 1978-80 aerial/peak escapement for the King Salmon River is 72 fish. Expanding this to all 22 minor systems yields 3,168 if a 50% counting rate is assumed and 2,112 if a 75% counting rate is assumed.

Table 3 . Preliminary estimates of 1981 chinook salmon escapements to selected Southeast Alaska systems (ADF&G 11/81).

Note: Over 30 chinook salmon producing systems exist in Southeast Alaska. However, due to poor surveying conditions in many systems only those included below are currently surveyed in a consistent manner each year to provide a relative measure or index of total chinook salmon escapements to Southeast Alaska systems.

System - Tributary	Type of Survey[1]	Escapements			Minimum Escapement Goal[2]
		Ave. 1975-80	1980	1981	
		Major Systems (3 Total)			
Taku - Nakina	(1)	2,810	4,500	5,100	9,000
- Nahlin	(1)	780	1,530	2,940	2,500
Taku Subtotal		3,590	6,030	8,040	11,500
Stikine - Little Tahltan	(1)	620	2,140	3,330	(2,100)
Alsek - Kluckshu	(2)	2,130	1,400	2,110	3,200
		Medium Systems (8 Total)			
Situk	(2)	1,490	1,120	810	(5,100)
Behm Canal Systems					
Keta	(1)	250	190	330	500
Blossom	(1)	100	90	160	800
Chickamin	(1)	220	260	280	900
Unuk	(1)	800	1,050	730	1,800
Behm Canal Subtotals		1,370	1,590	1,500	4,000
		Minor Systems (22 Total)			
King Salmon	(1)	76	70	100	200

[1] Type of Survey Codes (1) - Helicopter peak spawning count (primary method).
(2) - Weir total count.

[2] These minimum escapement goals, established in 1980, represent maximum escapements observed since the 1950's (except for the Situk) when Southeast Alaska chinook stocks were seriously depressed. Revision of goals for some systems, in particular the Situk and Stikine, is expected pending further data analysis.

TRANSCRIPT SYNOPSIS

ADMINISTRATIVE REGULATION REVIEW COMMITTEE
FEBRUARY 10TH, 1982 TELECONFERENCE HEARING
RE: DEPT. OF FISH AND GAME REGULATIONS
1) METHODS USED BY THE DEPT. OF F&G TO DETERMINE POTENTIAL FISH CATCH STATISTICS
2) WHETHER REGULATIONS PROHIBITING SPORT FISHING OFF TROLL VESSELS SHOULD BE REPEALED.

TAPE #1, SIDE #A

Rep. Dick Randolph, Chairman -- made opening statements and introduced committee members, Sen. Colletta, Rep. Abood, and Rep. Moss, guest members of the Dept. of F&G Mil Zhan, Ken Parker, Nel Seibel, Paul Larson, Frank Van Hulle, Paul Kissner, Bob Simons, Conrad Seibel, Guest Chairman of Juneau Troll-PAC Larry Smith.

Rep. Dick Randolph then outlined the five areas of concern: 1) principle of Optimum Yield, 2) Limited Entry, 3) Time and Area Closures, 4) the use of Fish Tickets to establish harvest guidelines, 5) present prohibition of sport fishing from troll vessels.

Larry Smith, Chairman of Juneau Troll-PAC, Box 3020, Juneau AK 99803, - expressed concern regarding government management of the Troll fishing industry; effects of the 1976 Magnuson Act have been the mass implementation of regulations. Interplay Federal and State management has resulted in confusing and uncoordinated data and regulations. He set parameters of discussion. The salmon resource is not as depleted as we have been led to believe by management. Data is insufficient. Escapement figures are inaccurate. Foreign interception in FCZ is extensive - 200 to 500 thousand fish anually. Data input from other sources other than their own is ignored. ATA data is ignored. Troll fishing industry is the major part of Southeast AK's economy and in the past the industry has been an economically stable one. Troll catch represents over 40% of all catch of Southeast gear types. Optimum Yield has not been proven as an effective way of managing the fishery. Federal and State management only takes into account that data which complies with their already existing management plans. Biological data is being used for political ends. The public is exempt from decision making process. Public response is not taken into account. The management goal of conservation of fisheries resources should not be carried out to the extent that the Alaska fishing industry is destroyed. Mr. Smith calls for a private study to re-evaluate present methods used to evaluate data and to investigate more efficient possiblities. Inaccuracy of the use of fish tickets as means of determining abundance of the resource. All that fish tickets provide is a report of the number of fish caught. Written testimony will be provided.

Ken Parker, Deputy Director of Commercial Fisheries Division of the Dept. of F&G. - Written documents submitted. The Southeastern troll fishery has been subject to stringent regulations in the last two years. This has occured because of the depressed state of the Chinook and Coho salmon stocks and the necessity to balance the harvest between the in and off shore fisheries. He introduced other department staff.

Paul Larson, Southeast Region Finfish Coordinator for Division of Commercial Fisheries of Dept. of F&G. - Statement re: time and area closures placed on Southeast troll fishery. Troll fishery occurs in both State and Federal waters. Troll fishery is the only AK fishery allowed in FCZ off AK coast. It is important to manage the fishery so that the harvest is only the surplus after escapement needs have been met. The Board of Fisheries establishes the regulations which will guide the arrangement of fishing seasons. Conservation measures are necessary and time and area closures are the means the Board relies on

TAPE #1, SIDE #A continued

to achieve this. Further restrictions of harvesting seasons i. necessary because the resource has shown a need to be further protected; therefore, time and area closures have become more stringent. Compared with other fishing industries around the state there were very few emergency closing orders issued for the Southeast area troll fleet in 1981. He expressed all the complicated mechanisms of issuing time and area closures to indicate that they are not decided at the whim of the department.

Nel Seibel, Southeast Region Biometrician for Division of Commercial Fisheries of Dept. of F&G. - Comments on principle of Optimum Yield. He introduced statistics regarding first use of OY in 1980 season. All gillnet operations on Southeast Chinook salmon have been closed down since mid 1970s to lighten pressure on Southeast stocks. The necessity of Federal management of especially Chinook salmon within the FCZ was determined to be of great importance because the majority of those stocks being fished by the Southeast troll fleet were found not to be of AK origin. Rather, they were from Oregon, Washington and British Columbia rivers, streams, and hatcheries, where there is also a demand for these fish. The SE troll fishery is also one of the oldest sharing the harvest of these stocks, and the number of Chinook salmon is depressed. Hence, there have been cutbacks in the number of fish that can be harvested to allow these stocks to be replenished. There are not effective identification methods currently available for Chinook salmon stocks in areas of intermingling stocks; neither are they available for other species. Chinook salmon harvest in SE has increased from 301,000 in 1975 to 401,000 in 1978, even though there were more trawl vessels in intermingling stock areas in outer coastal regions. The problem then became how to take these concerns into account in a manner consistent with the Fisheries Conservation and Management Act, which says fisheries must be managed for Optimum Yield. This was not possible because of a lack of information, and the complexities of commercial, recreational, and subsistence fisheries throughout the state. Therefore, an overall catch limit was thought to be a reasonable way of addressing these problems; the limit was found by averaging stocks taken by trawlers from 1971-77 mainly, and was reviewed each season. In the 1980 season, 286-320 thousand was the limit developed by the state and federal boards of fisheries; the actual catch exceeded the upper range end by about 3,000. In 1981, the limit was lowered to 268 thousand, which was at the lower end of the Board's range, and upper end of the Council's range. From projections made in late August and early September, there was expected to be more Chinooks caught in the late part of the season. However, this didn't occur because of the shifting of stocks, and the FCZ closure in an attempt to keep the number within the lower Council limit, among other reasons. Preliminary hand counts based on some 30 thousand fish tickets were

Mil Zhan, Executive Director of Board of Fisheries and Game ---
The Board of Fish and Game establishes regulations and policies which are implemented by the Department of Fish and Game; the Board of F&G functions separately from the Department. The Board's regulations are for the conservation and management of resources, and determine the allocation of resources. Board decisions are based on biological data, expertise from the department staff, and public input. The board is the primary way for public involvement; there are 67 different boards across the state, where public testimony is heard concerning local needs

TAPE #1, SIDE #A continued

and issues. The Fish and Game Board considers 400-600 regulations annually; coordinated efforts are intended to be responsive of public needs, as well as, those of the resource. Sen. Colletta asked about how much weight the Board puts on public testimony. It was replied that the Board has professional biologists who could be depended upon most of the time. He then asked if it wasn't a sham, because the conclusions are one-sided, and the public has no recourse. Mr. Zhan replied that the Board is in a tough situation and must decide between biological and social needs.

TAPE #1, SIDE #B

Earl Krygier, Biologist for the Alaska Troller's Association --- He indicated that Alaskan fisheries should be managed by Alaskans, and that there are problems with the Department of Fish and Game's management. The Department can much better manage our resources in conjunction with the industry than with the federal government. A dual management system is not possible other than what could be called dual management by the state and the fishing industry. Escapement data is inaccurate. Optimal counts in reality were historic highs. Counts taken with fixed wing aircraft are highly inaccurate. It would take two years to gather, devise methodology, and develop index systems for Cohos when there is presently practically no data available. He states that much time would also be needed to complete the stock recruitment information for King Salmon. The troll fishery was closed down in 1981 for 10 days under a two tier prerequisite; one - the salmon were moving to inside waters, and two - the stocks were above the ten year average. The first prerequisite was irrelevant because of changed patterns in seining and gillnet fishing. A test fishery would much better answer this prerequisite. The second prerequisite is refuted by the fact that even after a 10 day closure, the 1981 catch was a record catch for the past 12 years. Exploitation rates are incorrect. Even with the total exploitation rate as high as 90%, we doubt this happens under the present management system; we do not know how much Coho stocks can take, i.e., they may be able to take as much as 95 or 96%. Work needs to be done on an a true exploitation rate for adequate management. Information on stock separation is also needed by scale pattern analysis and electrophoresis studies. As an industry biologist, he does not feel money would be well spent on investigative methods of evaluating the Department's present research methodology, but rather, money is needed to complete or initiate research either privately or governmentally which would give the Dept. the tools for correct management of the fishery. A list of needed management research has been provided by the Natural Resource Consultants in their work for the North Pacific Management Council. Industry and the Department should sit down together and prioritize the research that needs to be done. Written testimony has been provided.

Don Masterson, representing the Juneau Charter Boat Association. -- He spoke on the issue of sport fishing from troll vessels. Hand and power trollers are often involved in the charter business as well. They are almost forced to be because their fishing time has been so drastically cut and because tourism makes it a worth while enterprise. The charter boat owner is allowed to sport fish off his vessel. He sees no reason why the troller should not be allowed to do the same, like every other commercial fishing vessel.

Eric McDowell, a commercial salmon fisherman from Homan-McDowell Economic and Management Consulting Firm. -- He stated that he had been asked by the Alaska Troll Legal Fund to investigate the economic impact of two management measures. One is a series of 6 errors made in season management made in 1981 and the other is the economic impact of the quota system established by the Department. Cost of managment errors which could be rectified through better management techniques was 1.3 million dollars lost to Southeastern

TAPE #1, SIDE #B continued

fishermen. The quota system cost nearly another million dollar loss to AK fishermen. Errors were: 1- overestimation of potential catch by 73%, 2- Arithematic error of 12,000 Chinook salmon, 3- double counting of fish tickets, 4- overestimation of contents capacity of freezer boats, 5- use of fish tickets with relatively high catches as indication of average catches, 6- inaccurate estimates of boats fishing and daily catch per boat. He expressed need for improved management, but emphasized that although there are problems with state mangement, it far surpasses the federal management capabilities. Written testimony was provided.

Floyd Blossom from Soldotna -- There is no need for the Department to create a fourth fisheries group; the categorization of commercial, sport and subsistence is enough. Advisory boards are not being listened to by the Dept. There is a run of fish two weeks before the fishing season starts. The biologist in Soldotna thinks the Dept. of F&G should open up the season earlier because of this early run particulary since the fishermen fill their quota on the late run putting undue stress on that particular run and none on the earlier one. He is afraid the late run will be destroyed. Proposals put in by the advisory boards were ignored by the Board.

Theo Carson, member of the United Cook Inlet Association. -- Drift fishermen who practices law during the winter. In Cook Inlet there is no data base from which their biologists can work. There is no inventory of their streams, not even the Kenai River or important spawning beds. Sport fishing is permitted right on the spawning beds. Mayor of Kenai Peninsula complained to Governor, who, when he consulted with the commissioner was told there was no problem and nothing was done. Area biologists have tried to get management action through emergency orders before the Board; this is an indication of what type of data they are working from. He strongly favors the organization of regional boards who actually have more than an advisory function. Actual regional control is needed. A private agency should investigate the Dept. of F&G research methodology, but it is imperative that that agency be independant, and have full authority to investigate.

Walt Pasternak, troller from Sitka who also is an ATA board member --- He addressed Optimum Yield. The OY is not based on biological data, but rather inaccurate catch data. Through the mid 60s and early 70s there was a small Canadian troll fleet operating off the Fairweather Grounds which had a substantial catch and was not moved outside of 12 miles until the late 70s. Their catch is not incorporated into the Dept. determination of the OY. The Canadians also fish on much smaller fish.

Bruce Bachen, former fisheries biologist for ATA who is presently testifying because of personal interest. --- Money should not be allocated to a private agency to tell us what the Dept. already knows it does not know. What is needed is that money be used to further existing research and for implementing greatly needed new research. There is need for additional work on researching Coho stocks. Rational plan needs to be developed for better management that will benefit the fishermen, as well as, the resource.

Richard Lundahl, chairman of Pelican advisory committee --- the committee has participated in public hearings for a long time. Since 1974, Pelican has had an advisory committee which has been very active by attending almost every Board meeting. They have also attended every North Pacific Fisheries Council meeting since 1977. The Pelican advisory board has only met with frustration; They have never been listened to. A packet put together by the advisory board is available. There is a disproportionate number of non Alaskans on the Council. Foreign fleets which should be gradually eliminated from the 200 mile limit. He expressed the fear that the OY will be frozen, and that although stocks are improving, fishermen

TAPE #1, SIDE #B continued

will never be allowed to harvest the additional fish. The OY range is not large enough. A complete biomass study of King salmon should be made. A fishery should not be managed if there is no data. Trollers should tag the fish they are forced to throw back overboard because of size limits. If the troll fleet is destroyed these fishermen will be forced to impact other fisheries. The banks do not want back the boats which no other fishermen would buy. Hatcheries are a too long term solution; another solution is needed now! Trawling on the high seas is far more destructive than trolling. Trollers should be allowed to sport fish off their vessels. Written proposals from the Pelican board are available.

Al Burch, manager of the Alaskan Draggers Association and a member of the Kodiak Dept. of F&G Advisory Committee, and an appointee to the Shrimp Study Group. --- There is quite a problem in the Kodiak area with shrimp survey methods; surveys are only as good as the boat and equipment they are done with. They should be done in a commercial boat with a commercial captain on board because his livelihood depends on these counts. There are many problems which cause unnecessary compromising by management and the fisheries; there have been many lengthy meetings; now something should be done. More testimony will be given later.

TAPE #2, SIDE #A

Jim Hubbard, member of the Alaska Draggers Association and an appointee to the Shrimp Study Group in Kodiak --- He stated that quotas have a large impact on Kodiak's shrimp industry. As an example, 50,000 lbs. of product takes 3-4 hundred man hours to process. Hence, when catches are restricted, there is a great impact on the whole town's economy. Written testimony will be forwarded.

Rob Miller, Ketchikan --- He feels the law prohibiting sport fishing fishing from a troll vessel is unnecessary. His reasons for opposition included that charter boats which are licensed to hand and power troll have certain strict requirements to follow; trolling vessels should be required to comply with charter vessel regulations. Another problem facing charter vessels is that the Dept. of F&G has a registration form that doesn't check the licensing of the person through the Coast Guard and thus makes it so that a person chartering without being licensed by the Guard can not be prosecuted.

Frank Thompson, of the Thompson Fish Company in Hoonah----
He agrees with Rep. Randolph's proposal which calls for an investigation by a private agency into F&G methods. The OY should not be cut because such action would hurt the trollers considerably. The fishery should be maintained as much as possible, and not be constrained by unnecessary bureaucracy. The eight day on, six day off closure on fishing is a great economic hardship for the community. Bob Bitterman also tried to testify, but the teleconference transmission at that moment was cut off.

Gordon Peterson, a representative of the Icy Straits Trollers Association from Hoonah --- Because management didn't feel limited entry would take care of pressures from the rapidly growing hand trollers, the eight day on, six day off fishing closure was imposed. The eight and six plan is not the prime reducer of pressure in the eight and six area. The number of hand troll permits dropped from 3800 permits before the eight and six closure to 1150 permits in 1981. The reduced number of permits is spread over a larger area now because of the reopening of Cross Sound and the 3-mile limit to hand trollers. Then it was decided that the rest of SE needed a measure to ensure escapement, so the Chinook Closures for 30 days in the spring and the 10 day Coho Closure was imposed. Now SE could be assured of escapement, but Icy Straits still has the eight and six closures, plus the 30 and 10 day ones, although no one else does.

TAPE #2, SIDE #A

With limited entry the area doesn't need the 10 and 30 day closures in conjunction with the eight and six day ones, which is evident from area Coho catches. Regulations that management has made are often hard to repeal, and he suggests that this problem be severely looked at.

Michael Ferguson, a nine year troll fisherman, who until last year could support himself by fishing; however, because of management regulations which reduced fishing time, he has had to go to work this winter. --- This is happening to many fishermen in Pelican. Fisheries management is causing social and economic hardships that haven't been taken into consideration by the fisheries' managers. Many fish that are caught are marked by gillnet ant trawl scars. These two different types of fisheries are intercepting troll catches. The State of Alaska says there is no intermingling of SE trollers' catch stocks and the westward stocks, however, the trollers weren't allowed to fish west of Cape Suckling because these stocks supposedly didn't intermingle. He wrote and sent pictures to the National Marine Fisheries Service, and they explained them as drop outs from the Copper River Gillnet Fishery. Federal Biologists claim the above absurdity, while the state claims the fish don't go west of Cape Suckling. Who is right? The fishermen get caught in the crunch. The Japanese Gillnet Fishery admitted to catching over 700 thousand salmon in 1980. The OY doesn't deal with foreign interception, and so businessmen like him are bankrupt, while foreign fisheries continue to be active. In a July closure last year, the foreigners were catching the fish that the American fisherman were not allowed to catch. Management said they had gotten rid of all the bottomfisherman and in place put midwater fishermen, therefore, nevertheless, allowing foreigners. One solution could be a troll plan using newer data; the F&G even admitted that there were problems with the data. Satellites could also be used to solve this problem. Fishermen are being managed to allow escapement in southern rivers. Fish are being "pastured" in Alaskan waters, but Alaskan fisherman are not getting any return; fishermen should be entitled to a form of "rent" in terms of fish.

Diana Runde, fisherman and chairwoman of Sitka Troll-Pac. She mentioned that Ed Wojeck, executive director of ATA couldn't be there due to meetings in Phoenix on the Columbia River issue. There is insufficient information on Alaskan fish. People on the Yukon with fishwheels indicate that they find many King salmon with old sport fishing treble-hooks in them, and would like to know where they are coming from. Sitka fishermen have recovered tags from Washington State, partially because the tags weren't taken early enough in the season. Area tags have been pooled, so important information is lost. A test troll fishery was turned down because net fisherman were not getting many Cohos. The Sitka office admitted that they had no way of knowing if escapement had been reached because tests couldn't be carried out on glacial streams. The Sitka City and Borough assembly passed a resolution asking the Board for support of the troll fishery because the city is economically dependent on its fisheries.

Larry Drummer, an operator of a charter boat who has been engaged in hand trolling since 1975 and earns his living by fishing. --- He finds it impossible to comply with the regulation whereby only two gurdies and four fishing poles can be aboard. Due to the sporadic nature of his lifestyl and because he lives aboard, when called for a charter, they have no place to put their extra fishing poles and gurdies. This also means that if a charter wants to take out more than six fishermen, he is doing it illegally. He would also like to sportfish off any boat, and sees no reason why trollers should be discriminated against.

Ron Williams, chairman of the Fisheries Committee of the Alaska Native Brotherhood --- The ANB is opposed to limited entry for hand trollers.

TAPE #2. SIDE #A continued

There was a potential of 4400 permit holders, but there were only 1100 issued. The commissioned number of 2150 was supported because it was thought it would allow the elders and young people to participate in hand trolling. It would provide a means of employment when there isn't other employment available. This has been discussed with the Limited Entry Commission, which has assured them that they have tried to develop provisions for the young and elderly, but to no avail. ANB has been conservation minded. because their survival depends on fish. ANB feels there ought to be an agreement with the US, Canadians and Natives before harvest levels are established. Resoulutions that had been adopted by ANB and ANS conventions were then introduced. 8163 - asks for removal of fisheries on the Chilkat and Cowat Rivers, and Chilkat Lake, so salmon would be able to reach their spawning grounds, 8144 - asks the Board of Fisheries to remove the regulation that prohibits the use of commercial troll vessels for sport fishing, and 8119-asks that the Board of Fisheries abolish eight and six day closure regulations. Copies of these were left for members of the committee.

John Wilcox, president of the Juneau Hand Troll Association, which represents 400 hand trollers. --- There is a need for an outside agency to examine the Dept. of Fish and Game methods of operating. Fish tickets have been used to establish guidelines and quotas; the data acquired from them is being manipulated so that the resource is not being used to its best advantage. OY allows for bad years, but in good years, fishermen are only allowed as many as the Board says. Hence, the number of trollers has decreased from 4000 in 1978 to 1918 last year. OY is a product of a joint meeting of the Alaska Board of Fish and the North Pacific Fisheries Management Council; The North Pacific Council was forced to accept the OY, and then the OY was determined, excluding the two best years in the past decade. Hence the base started out low, and each year, there has been more reductions. The eight and six day closures has forced Huina residents to fish part time, so that they can barely make a living. They use small skiffs, and when attempting to get to the open fishing areas, there have been accidents. Other fisheries continue to operate during the trolling closurers. Fisherman cannot take their problems to court because of high costs; the lawyers used by the are also used by the Japenese; it seems a more objective attorney could be found to help the Board. The Juneau Hand Troll Assoc. has quit placing propsals before the Board since in the past 3 years, only 2 have been adopted; the Dept. of F&G had most of theirs approved. In a past Board meeting, a Washington biologist said they had lost over 34 thousand Chinook from one dam to another on the Columbia River. It was not stated where the fish had gone; instead. they asked the Alaskans to further cut their take of Kings. Fish have been caught with net and troll marks on them, although there are no American trawl or gillnet fisheries out in the FCZ. Hence, foreign fisheries are having a profound impact. Direction needs to be given to the Dept. of F&G, the Board of Fisheries, and the North Pacific Fisheries Management Council.

Ed Bergeron. He wanted to know how much money is being spent on the off-shore studies for King and Chinook salmon, and also the in-shore studies on salmon. This information should be available through the Dept. of F&G. There has only been one Dept. of F&G study on which they base all their off-shore information. It was done in the 50's. Also. he would

TAPE #2, SIDE #A continued

like to see a catalogue of all salmon streams in AK, and how much was spent by different areas for tagging. He is fairly sure the tagging program is almost non-existent. With a state-wide troll permit, he is not allowed to fish above Cape Suckling, although he was before 1970; if they were allowed to fish up there, it would eliminate the concentration of trollers on the outside. He would like to see the Sitka field office personnel replaced due to the erroneous information it produces.

Dean Paddock, a commercial fisherman who once worked for the Dept. of F&G, and has attended almost all meetings of the Board of Fisheries. --- We now have problems in SE, which were not there before. In Bristol Bay, where he fishes, there was once many more restrictions, now there are great returns of fishing stocks. This has occured because of consistent biological programs of the Dept. of F&G and the Board of Fisheries. The Board, at statehood, received the ability to function freely and not to be committed by concrete rules. The system has been successful and he feels it will continue to be successful as it is presently managed. We don't have data and management tools because in the past we didn't need them. The Fishery used to be wide-open. Department problems are fiscal and personal. Also, the Board cannot adopt every resolution made by the advisory boards. There is a bad situation down here, and there are tremendous unsolved problems concerning foreign fleets. We need more tools and money to help the fisheries. The basic agency responsibility is for the conservation of the resource, not for the economic base it provides.

John Ritter, who makes his living by trolling. When the troll season is closed, yet other fishery seasons are open to boats that catch more in one day than trollers catch in a week, there are obvious management problems. In regards to sportfishing from a commercial vessel, many would like to have crab or shrimp for personal use, but aren't allowed to take it.

Bob Horchover, skipper of a charter vessel, who primarily takes people fishing, but also uses it to go from Juneau to Sitka. ---- These trips are often used for pleasure, but because it is a commercial vessel, it can't be used for personal fishing. He proposes that charter vessels not be commercial vessels: the small amount of fish taken could be registered with the Dept. He would like to be taken out of the commercial fisheries category or have it made such that when a person is not using his boat for commercial purposes, it wouldn't be classified as a commercial vessel.

Sara Walsh. She is in favor of repealing the regulation prohibiting sport fishing form commercial troll vessels. One of the main summer SE attractions is sport fishing, and it would be nice to take friends out fishing. This regulation is far too restrictive and discriminatory.

Russ Schultz, a hand troller. ---- Regulations are regulating Alaska fisherman, though we don't know for sure whether the fisherman in this state are the major impact on Alaskan fisheries. The Boards can only regulate our catches; it ignors the foreign aspect. He suggests using some political clout to get all-around management of the stocks which people make a living on. If fisherman must stay at the docks and watch foreign trawlers, what is currently being done isn't effective management.

Jerry Musa, member of the Elfin Cove Advisory Committee, and also active in Troll-Pac. ---- Elfin Cove is totally supported by fishing. It is frustrating to be managed by people who only use best available

TAPE #2, SIDE #B continued

data, fish are miscounted, areas are not put down properly, and tag data is not correct. 50 thousand Taku Area fish were tagged, but not recovered by American fisheries unless they were spawning or juvenals. If the Dept. of F&G doesn't guess correctly, there is a big impact on the community. When the State has such vast resources, all possible efforts should be made to know what those resources are.

Larry Smith, Chairman of Troll-PAC, ---- The reason sport fishing from commercial vessels was prohibited was to deter people from going into the hand troll fishery. Since them, limited entry has been established; there were about 4 thousand hand trollers around in 1978-79, now there are only about 1,800. There no longer is a valid reason for keeping this regulation. Family and friends aren't allowed to go sport fishing of a fisherman's vessel. Also, about 75 days were taken away in fishing time, yet insurance must still be paid even while the boat lies idle. The eight and six day closure in Icy Straights has caused all the pressure to be concentrated into certain areas farther away from home. In fact, it has increased pressure on the resource by concentrating pressure on particular stocks in smaller areas. Trollers have not been able to make the Board understand the problems of the eight and six closure, and they don't get an equal opportunity to speak at Board meetings. The Federal Government is a lot to blame for this, because it manipulates the Board's ability to manage the fishery. The industry is not being heard. Fishermen are on shaky economic ground. The Federal Government is not considering Alaska's stocks and resources, but has ulterior motives as its priority. They have not proven that Alaskans are catching Columbia River Brites. Other problems of wastes and dams on the Columbia are impacting stocks not the Alaskan troller. There is no answer for why so many fish disappear between the Bonneville and McNary dams. They are probably being poached. Because of the Council, the Board is not allowed to address these problems. Even the fish numbers being accounted for on the Columbia River are not being calculated into Alaska's OY. Fishermen need to be dealt with fairly, and someone isn't addressing the real problem. Senator Colletta then asked if Mr. Smith or his organization appeared before the Board when these regulations were being proposed. Mr. Smith answered that he had appeared at local advisory board meetings, and that he had submitted written testimony to the Board regarding the proposed regulations. Sen. Colletta asked if there was much response to Board meeting notices, or if fishermen waited until regulations were implamented before complaining. Mr. Smith responded that in some cases regulations are accepted to see if they will work, and only then if they don't is there an outcry. A fisherman has other responsibilites than just monitoring the state and can't always keep up with what regulations are being promulgated.

Dorthy Osburn, a fisherman. ---- She indicated that she knew three biologists who had worked on Bristol Bay stream enhancement of Sockeye Salmon runs. She remarked that they were finding net marked fish. On her boat she has one sport pole which she has never been able to use. Whenever the family prepares to go commercial fishing, they must arange to have the pole kept with someone in Pelican. By having a sport fishing and hunting license from the state, she is entitled to use a crab pot and to fish for shrimp. Foreign trawlers have to pay the US government so that observers can be placed on their boats. The money goes to the National Marine Fisheries Service but never gets allocated to actually place those observers on foreign vessels. When people lose their gear due to reckless foreign fishermen, the Coast Guard doesn't respond to citizens complaints. Many fishermen are retired and have provided a good income for themselves, however, if things continue the way they are, they will be the only people who ever can afford to fish.

TAPE #2, SIDE #B continued

Rod Darnell, a troller. ---- His boat is his only home, and yet he is being told that unlike every other US citizen, he is not allowed to keep a sport fishing pole in his home. There is something wrong. Not allowing sport fishing from trolling vessels is a very poor policy and indicates poor management. Since limited entry came into effect in 1972, the troll industry has, every year, taken cut-backs. The OY figures came from years with low catches. Every year more and more regulations are implemented. The King salmon has a 5 to 7 year cycle, yet each year there are more restrictions, without any evidence that these regulations are even helping. Regarding the eight and six day closure, we don't know what effect it has on stocks. It hasn't been even seven years, but hand trollers are only allowed two lines. Somewhere the piling up of regulations must stop.

Dorthy Osburn then asked about the rules regulating the use of crab pots. She understood that if she had a sport fishing and hunting license, she could then use a crab pot. A member of the Dept. of F&G responded that he was not totally sure on this policy, but that he knew the personal use fishery is handled under subsistence regulations, and that there is no provision prohibiting someone from having a subsistence crab pot on a troll or other commercial vessel. Ms. Osburn said that she was under the impressio she could have a crab pot over the side of her boat. Conrad Seible, who is a member of the Dept. of Public Safety Division of Fish and Wildlife Protection, said that there is possibly some confusion between what is considered subsistence and what is considered sport fishing. Under subsistence regulations, one is allowed to possess a crab pot, and one does not need a sport fishing license. Ms. Osborn asked about out of state fishermen; are they also only prohibited from taking salmon?

Sen. Colletta then informed the group of the Regulation Review Committee's functions. It addresses regulations, and has the authority to submit legislation to make changes. It will not take any action to implement policy changes. Its members do what they can to act as mediators between the state's policy makers and the people as concerns whether or not regulations coincide with legislative intent.

TAPE #3, SIDE #A

Sen. Colletta continued that the ARRC can open lines of communication between the state and the people by at least making regulators aware that there are problems and by getting, like in this hearing, both sides to actually listen to each other and communicate their frustrations. When regulators see that the lines of communication are breaking down, instead of putting the public on the defensive, perhapse it should come to the Administrative Regulation Review Committee and see if they can help bridge the gap. Sen. Colletta thanked Dorthy Osborn for having brought up the issue of crab pots. because due to her statements, Dept. of F&G members were able to clarify a confusion which had frustrated many fishermen; namely, having a crab pot over the side of ones boat was considered subsistence fishing and not sport fishing which means there is no licensing requirement. The problem was simple one of miscommunication. Hopefully by next Wednesday, Dept. of F&G members will be able to answer other queries, and if not, Sen. Colletta is sure answers will be forthcoming. This hearing and the Dept.'s answers will be the first steps towards getting the problems actually solved. Transcripts in synopsis will be available for everyone attending next Wednesday's meeting so that everyone can quickly refresh their memory as to what the major problems were that this hearing addressed. Sen. Colletta then apologized for the absence of the other committee members who could not be present during the entire conference because of the call on the House which they can in no way avoid.

A continuation of this Feb. 10th, 1982 hearing on the Dept. of Fish and Game regulations will be held on Feb. 17, 1982 in the Capital Building Butrovich Room (#205) from 4:00 to 6:30 p.m. PST.

TRANSCRIPT SYNOPSIS

ADMINISTRATIVE REGULATION REVIEW COMMITTEE
FEBRUARY 17TH, 1982 TELECONFERENCE HEARING
RE: DEPT. OF FISH AND GAME REGULATIONS
1) METHODS USED BY THE DEPT. OF F&G TO DETERMINE POTENTIAL FISH CATCH STATISTICS
2) WHETHER REGULATIONS PROHIBITING SPORT FISHING OFF TROLL VESSELS SHOULD BE REPEALED.

TAPE #3, SIDE #B

Rep. Dick Randolph, Chairman -- He introduced the members of the committee: Sen. Colletta, Rep. Moss and Rep. Abood. The topics for discussion were: 1) optimum yield, 2) limited entry, 3) time and area closures, 4) use of fish tickets to establish harvest guidelines, 5) present prohibition of sport fishing from troll vessels.

Earl Krygier, biologist for the Alaska Trollers Association -- He outlined his testimony from last week, and added that the proposed cuts in the Dept. of F&G's budget will cause research to be cut back by about 20-25%. The National Marine Fisheries Service has proposed even more drastic cuts than the Legislature, they suggest an almost 70% cut back which would all but obliterate salmon research. He asked people to contact their state and federal legislators urging them not to go through with these cuts. As research which would be valuable to the Troll fishery, he suggested that ATA's proposal to provide an inseason contact with fishermen be adopted. The furthering of efforts such as the log program would help improve inseason management. Any test fishing would benefit all fisheries in the state; budget cuts would all but eliminate these already much neglected projects.

Eric McDowell, a commercial salmon fisherman form Homan-McDowell Economic and Management Consulting Firm -- He was asked by the Alaska Troll Legal Fund to prepare an estimate of the economic losses to SE AK fishermen from the institution of the King salmon quota, and due to managment errors in the 1981 season. A copy of the report was submitted during last week's hearing. SE AK fishermen lost $1.3 million in direct income due to errors in management. Errors were based on faulty catch tickets, inaccurate vessel data, double counting and inappropriate use of averages for the estimation of catch levels. AK fishermen lost almost another $1 million as a result of the quota that was established because of Federal pressures on the Dept. of F&G. This is another disgrace the Department must bear because of federal intervention. This report's major findings indicate that critical management decisions made in 1981 were based on erroneous and inadequate data. There is inadequate field personnel, so that no matter how great the effort, an acceptable level of management can not be achieved. Even the SE Chinook fishery which has a very predictable season pattern suffered due to the lack of proper management. If yearly adjustments are made, it is hard not to come up with a good catch estimate. Errors made at the Sitka office, caused regional management to underestimate the overall catch. Studies to acquire better data for managing the fisheries are needed. Most of the errors made could have easily been prevented. Had existing data been handled better, an accurate maximum quota would have been come by. He outlined six specific errors: 1) late in the season the Dept. of F&G overestimated the catch by 73% for a two week period. It was clear on Aug. 20th that catch levels were poor. In mid-June, catches were already falling significantly below the three year average. By using more typical weekly patterns, they could have come very close to the quota. Solutions include using representative averages to track weekly patterns, beginning earlier in the season to track these patterns, and using practical knowledge, including poor weather conditions to evaluate catch statistics. The Dept. should be in contact with the fishermen. In order to catch the amount predicted, fishermen would have had to achieve a 20 year record catch rate; 2) arithmetic errors resulted in the loss of 10,000 salmon; 3) double counting fish tickets; 4) overestimation of contents, capacities and numbers of freezer boats; 5) using fish ticket with exceptionally high catches as representative of all tickets; and 6) inaccurate estimates, based on fly-over observation of fishing boats' daily catches. These last errors were caused by faulty ticket, vessel, and

TAPE #3, SIDE #B continued

catch data provided by the Dept. of F&G's Sitka office. Computers could be programmed to catch the double counting of fish tickets. Fishermen could be asked how many they had on board. Catch estimates shouldn't be based on the number of boats, but rather, on the availability of fish. Sampling should be done with tickets, boats, and days of effort known. With limited entry, the Dept. knows how many boats there will be. Fly-overs do not work. The actual catch rate was less than one Chinook per day; double that rate was needed to achieve the Dept. set chatch quota. Historical data should be used as a guide. Professionals with statistical background should be employed, particularily in the Sitka office. Evidence should not simply be construed. The fisheries should have state and not federal management; the state has not had strong enough leadership to overcome federal pressures. Mr. McDowell supports Mr. Krygier's statement that regional management is operating under a handicap not having enough fisheries research information available.

Sen Colletta asked why the Dept. of F&G uses a three year average, as opposed to one of 6 or 10 years. Mr. McDowell responded that the three most recent years were thought to predict the next, but the last three years had an abnormally high catch rate. Sen. Colletta then asked if a three year base is historical. Mr. McDowell replied that this was the first time averages were ever used; obviously there isn't a good enough data base. Two years ago, using such averages seemed to work, but last year the use of averages caused problems. Sen. Colletta then said that Mr. McDowell had mentioned possible solutions for all the other problems he had outlined but none for the three year average. Mr. McDowell replied that it was fine to start with the three year average principle, but that as the season progressed, necessary adjustments should have been incorporated. If such adjustments had been made, the 73% loss to SE AK fishermen would never have occurred. There were obvious problems at the beginning of the season. Catch predictions should be adjusted as the season progresses. Rep. Moss asked who lost all the fish tags? Mr. McDowell answered that according to the biologists he had interviewed, the state, and the Sitka office especially, were responsible for the loss of about 10% of the tags. In regards to foreign fisheries, Rep. Moss asked if they return tags. Mr. McDowell responded that few tags were ever brought back by foreigners. Sen. Colletta them asked whether the Dept. of F&G has many seasonal workers; counting might be a seasonal responsibility while supervision is not. Rep. Moss asked what was being done to correct the situation in regards to the foreign fisheries. The only response was an out-break of laughter.

Rep. Randolph then introduced Jim Beaton, from the Board of Fisheries, and thanked him for coming. Then Dept. of F&G members were asked to respond.

Smith Moore, Dirctor of Commercial Fisheries for the Dept. of F&G -- In regards to foreign fisheries and interceptions, he stated, that on the high seas, there are both micro-water and external tag experiments. There has been fair foreign cooperation in returning tags with the external markings. On micro-water tags there is almost no return, partially due to the fact that American observers can not be on Japanese motherships when they are fishing outside the Fisheries Conservation Zone. The foreign Bering Sea Troll fishery intercepts up to about 110,000 Kings of Alaskan origin. Japanese mothership fisheries, gillnets, and high seas fisheries since 1952 under the International North Pacific Fisheries Commission were prohibited from fishing for salmon north of the "extension line". It was re-negotiated in 1978, and we asked that they leave the 200 mile zone altogether. There are a few others who fish west of 175° N, including the land based fisheries, which is a group of 300 independent gillnet boats that fish off the Japanese

TAPE #3, SIDE #B continued

mainland. They fish independently. Their troll fishery in the Gulf of AK probably intercepts a number of Kings. Most of the Bering Sea Trawl Fisheries and mothership opperations are intercepting western AK Kings. The Dept. is not sure what goes on in the land-based fisheries which are estimated to catch up to 160 thousand Kings. The Gulf of AK Troll King catch is estimated at between 20 and 40 thousand Kings annually. The Department is just beginning to collect biological data on this fishery.

Dave Cantillon, regional supervisor for the SE AK Dept. of F&G Div. of Commerical Fisheries -- During the past two seasons, the OY has been used to manaing e Chinook salmon, but in recent years, only about 20 thousand have been taken by the net fisheries as incidental catch; there is no targeted net fishery on Chinook stocks. In 1980, when the OY was initiated, the Dept. operated at the high end of the OY range, and estimated accurately. That year it was thought that they wouldn't come close to the initial OY, but a spurt of fish late in the season and the closing of the Chinook fishery on Sept. 20 caused the OY to be held. The Dept. had very little time that year to prepare for a counting problem. In 1981, the Board and Council couldn't agree on a joint OY range. Consequently the total take was 6% underestimated. The Council had a lower OY range. so they closed the FCZ range on Aug. 19. Most of the troll fishing of Chinook salmon is taken in June and July; and during the 1981 season, there was some of the highest weekly catches on record, so fishing was obviously quite good at that time.. Projections were that if the fisheries continued at their normal rate through the whole season, the OY would have been exceeded. Closures were needed. Rep. Moss then asked what some of the OY's individual components meant. Mr. Cantillon responded that the initial OY represented a catch average from 1971 to 1977. The Chinook came from a number of sources, possibly 20% of these fish come from Alaskan rivers, 30-40% are Canadian, and the rest come from the lower 48. A number of currently contributing stocks are in poor shape. In the fall of 1980, the Dept. presented to the Board of Fisheries a rehabilitation program for the next 20 years, which the Board accepted. There are, nevertheless, many other entities fishing on these stocks; continually causing great coordination problems. The Board's position is that AK has taken all the necessary steps to hold down its fishing, now responses are needed form other areas.

Nel Seibel, Southeast Region Biometrician for the Dept. of F&G Div. of Commercial Fisheries -- The Dept. will respond in writing to the Homan-McDowell report which Eric McDowell outlined. 1982 is only the second year the SE Alaska Fisheries were managed by catch limits or an OY on troll fisheries. The Dept. is going through a learning process. Estimatesat the beginning of th season seem high but by the end they are more accurate. The years of '78 through '80 were exceptional. He agrees with Mr. McDowell that these years were exceptional, but the Dept. is not sure of why they were such good years. The use of the 3 or 5 year average is debatable, but the Dept. didn't feel 1981 was exceptional; the Dept. didn't want to use the best of those years as a means of projecting future years so an average for 1978-1980 was used. At the time of the final closure, projections indicated that the catch would be 281 thousand; this explains the 4 thousand end of the season bulge. The Dept. uses averages because it doesn't have too much else it can rely on. The Dept. would like to replace averages with better actual inseason catch data. Ways of getting at this include programs where fishermen would be contacted upon arrival, or a program by which 20 fishermen would be selected to report to ATA once a week, so their information could be used to adjust average based data. In regards to arithmetic errors, in my brief discussion

TAPE #4, SIDE #A

with Earl Krygier, I discovered there was no real error. There were two estimates. The one of August 9 was based on the rough data we had in hand, and the other was for through Aug. 25. It looked as if we had added in the 10 thousand winter catch twice, when we actually hadn't. But, the double countin of fish tickets actually did take place; tickets were accidently entered twice into the computer. The Department has now set up a system which permanently prevents this from happening again. The Dept. handles about 30 thousand tickets. The Chinook tickets are hand tabulated to speed up the process. At the time it looked like there was an overage of ',500 fish. The estimation of boat contents, didn't enter strongly into the season end regulation. The Dept. would like to have a special tracking system, as well as, a better reporting system. Inaccurate estimates in fly-overs were caused by the exceptional number of boats fishing during just a few weeks. He commented that the Sitka office was going through a learning process; like the regional office, it carries a large part of the responsibility for the compiling of fish tickets. Furthermore, projections were not based soley on Sitka information; they were based on fish tickets from all over SE which had been jointly run through the computer system.

Jim Beaton, member of the Board of Fisheries -- The Board is well checked by the Governor and the Legislature. Chairman Randolph then explained that Mr. Beaton was making reference to last year's SB 5 which gave the Administrative Regulation Review Committee the statutory authority to suspend regulations promulgated in the ' rim of legislative sessions, but not while it is in session. During the on, only a bill can be used to repeal a regulation. He would like to the results of this hearing to be 1) a bringing together of the two sides to peacefully discuss their problems and 2) an exploration of other offical means of alleviating these prob'ems. Mr. Beaton continued that he believes very strongly in the Board process, and that he feels the Board has always tried to get all segments of the public involved. He doesn't see how the process can work any other way. He resents having the idea suggested that there be another party to mediate because that is the Board's essential function. If the Board needs to be improved, he feels it is up to the legislative and executive branches to appoint better Board members. The Board could do a better job, but money to remedy many of the expressed problems is just not available. Federal oversight also presents many problems, but the Board is doing its best to cope with them.

Ben Burn, chairman of the Craig Advisory Board -- He complained that people should be allowed to sport fish off of a commercial vessel; people can't afford to have two boats. He also wanted to know why a sport fishing and hunting license must be bought to fish halibut, red snapper, ect., for personal needs, yet no license is needed for clams, abalone, or roe. The regulations should be coordinated so that they become consistent. Also, when someone catches too many fish, they must be dumped overboard; this is unreasonable. He complained about not being able to have a free line over-board on a commercial vessel. Another unreasonable regulation is that one must fish two years on a power troller before one can get a power troll permit, yet seiners only need to meet a one year requirement. These regulations are discriminatory, as well as those regulating the transfer of permits.

Marilan George, a commercial salmon troller from Petersburg -- There is a need for more money in research areas. The reason tags are not recovered to the extent desired is that there isn't anyone living along Alaskan rivers the way there are people living along the rivers of the lower 48. More funding is needed for paid observers. There should be people who recover tags from cold storages at the beginning of the season as well. Money should be spent on stream enhancement projects, so fish can more easily get to their spawning grounds. To insure better operations, the Legislature needs to appropriate more funds to the Dept. of F&G.

TAPE #4, SIDE #A continued

Chris Page, a troller from Goose Bay -- He doesn't feel that having funds allocated to a private research agency to investigate the Dept. of F&G methods of collecting and evaluating information will benefit anyone other than those contracted to do the study. He feels that the Dept. of F&G methods are basically sound, but often in their surveys they lack the efficent intensity needed to prevent the generation of erroneous information. There are low levels of pre-commercial sampling in relation to the estimated value or abundance of a resource. Budgetary constraints force management by crisis. Fishermen suffer because there are cuts in the amount of tagging, survey flying, stream counts, and the enumeration of AK salmon stocks. Research is needed to determine why Cohos are returning from the ocean with net markes. [illegible] allowing trollers to sport fish from their vessels discriminates agains trollers. Crabbers and seiners can sport fish, so their shouldn't be a difference when it comes to trollers. The State Board of Fisheries can adopt regulations without public input. Board of Fisheries members are political appointees. The Board has adopted several regulations which have never appeared in the public package for review. This includes the '81 decision to limit hand trollers to one line, and to reduce the King salmon OY to 240 thousand fish. The Board says that by publishing a legal notice to amend and review regulations they have the authority to create any regulation they feel necessary. They are cutting citizen input drastically. The Legislature should review the Board process. Mr. Page will make his written testimony available to the committee.

Tony Gugenbesler, -- The Dept. of F&G and the Board of Fisheries often depends on erroneous information. They are too conservative. During the last Board of Fisheries meeting that pertained to trolling an extremely low estimate of King salmon escapement was accepted. Dept. staff gave figures for only one tributary on the Andrews river. The estimate of King salmon in this tributary underlogged the escapement for the whole river.

TAPE #4, SIDE #B

Lance Mingle, Chariman of Wrangell Troll Pac -- He questions the accountability of the Dept. of F&G; they failed to allow fishermen to reach the OY. Mistakes made were due to data entered into the computer. Considering how large an operation the Department is, it should be able to keep its data coordinated. The Dept. of F&G should be more responsible. Fishermen can't afford the losses that have been imposed upon them. Wrangell Troll Pac supports having a study done on Dept. of F&G operations.

Bob Ducker, fisherman from Soldotna -- He will submit his testimony in writing.

Hubert McGrowan, representative of the Sand Point Advisory Committee and the Alaska Commerical Marketing Association -- The Bristol Bay Red salmon run is far more than that of the Alaska Peninsula run. The Committee is dissatisfi with the 6.8% of the total harvestable red salmon that the Peninsula fishermen are allowed while the Bristol Bay fishermen are not. There are four times as many Bristol Bay fishermen dependent on Red salmon for their livelihood than on the Alaska Peninsula. The ratio is about 14 to 1. The proposed quota would cut fishermen's allowed catches by 25%. Many area fishermen are totally dependent on these runs. There is consistent underforcasting of the Bristol Bay area harvestable catch. 1976-81 forcasts were 73 thousand and actual runs were 85.16 thousand which is only 90% accurate. If one deletes the exceptional year of 1980, the figures only become 70% accurate. It is hard for the Dept. of F&G to make accurate estimates, but it is a bit peculiar that nevertheless they consistently underset the quotas. The actual harvest of the Bristol Bay run by Peninsula fishermen was only 5.1%. At Advisory Board meetings there are always complaints about how low forcasts are. We are being urged to take the 6.8% quota to court, but we are not sure anything would come of it.

TAPE #4, SIDE #B continued

Earle Johnson, from Sitka -- CS SCR 31 says it speaks for the SE AK troll fishery; it should include all fisheries because the problem is a statewide concern. Dept. of F&G data often is outdated and pertains to different locations from those presently fished. There are many fisheries organizations which should participate in the recommended study. During the National Marine Board of Fisheries' hearing, one member of the Board said he didn't really care if the Japanese were in or outside the limit, because they would catch Alaskan fish no matter what the state does. In regards to sport fishing from troll vessels, he doesn't want to see fishing issues become political. The problem should be resolved in other ways.

Steve Laposki, from Sitka -- He is against limited entry; there should be a strong system of free enterprise and a strong system of enforcement based on accurate data. There should be less politics involved in the management of the fisheries. Alaskan management of their fish is very tied up in foreign and out of state interests. 6 and 8 day closure laws do a great deal of harm to many areas. The public is not represented by the Board. The Alaskan fishermen's interests are set aside for those of other groups. There is a need for better enhancement and more fish hatchery programs. Sport fishing should be allowed from troll vessels.

William Thomas Sr., a Ketchikan resident and vice chairman for the Alaska Native Brotherhood Grand Camp -- He supports the repeal of regulations prohibiting sport fishing from commercially licensed vessels. A sport pole should be a part of the equipment of every boat in case of regular gear failure. He supports the comments made earlier by the off-net sites of Craig and Wrangell. Limited entry is restricting the rightful opportunity of Alaskan residents. With lower 48 stocks becoming endangered, Alaska should take measures to protect its resources from being destroyed in the same way.

Terry Cardey, from Haines -- He will be in Juneau tomorrow and will submit his testimony at that time.

Capt. Frank W. Sharp, Anchorage member of the Dept. of Public Safety Div. of Fish and Wildlife Protection -- There are many misconceptions about sport fishing from commercially licensed trollers. While people on trollers are prohibited from using rod and reel, they are not prohibited from using crab pots, or from going clamming, etc. These other activities can be done because they aren't considered sport fishing, but rather, subsistence, and no licensing is required for subsistence fishing. A commercial salmon troller uses lines to catch salmon. Since crabbers, gillnetters and seiners don't use rods commercially, it can easily be distinguished what type of fishing they are doing. On board a commercial troller, the conditions under which a salmon was caught can not be so easily distinguished, thus a sport or subsistence caught salmon could easily enter the market illegally as a commercially caught fish. This would allow trollers to fish in areas closed to commercial fishing, but open to sport fishing. When limited entry on hand trolling first became an issue, there were over 5 thousand licensed hand trollers, but the Limited Entry Commission decided it should cut that number to 2150, still last year there were only 1100 hand troll fishermen. Perhaps this restriction on commercial salmon trollers using sport fish gear, reduced the number of people willing to troll leaving more Kings for other commercial users. The policy of the Div. of Wildlife Protection was that they would support sport fishing off commercially registered trollers only if they could not sport fish while physically engaged in commercial trolling. Therefore, commercial and sport caught fish could not be on board together. Any fish caught off a commercially registered troller in a closed area would have to have a fin removed, to identify it as sport caught. These regulations were in effect in 1979, but enforcement was so difficult that the Department decided to prohibit further sport fishing from troll vessels.

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TAPE #4, SIDE #B continued

Leo A. Land, from Haines -- He has done research since 1966 and has repeatedly given the information he has found to legislators. He is very concerned about the Limited Entry Commission Reports. There are 26 permittees who if they do not pay by the end of this year will lose their permits to the State. If one has a grocery store the State has no right to force one to license it, and if the State forces licensing it most definitely does not have the right to demand the payment of back fees. This aspect of these regulations should be repealed. 21 of these permits are for salmon, one is a drift gillnet, one a hand troller, and one a seiner. The permittees are from village communities where they are not in the position to help themselves. He came down on his own money, and has done all the research on his own. The State needs to do something about the injustice involved in the confiscation of these permits.

Gordon Pederson, representative of Hoonah and Icy Straits Troller's Assoc. -- He addressed the eight and six closure laws. Before last year no closures from April 15 to Sep. 20. When the April 6 closure occurred, almost half of the trollers fishing time was lost. In 1980, hand trollers lost permission to use two lines, which cut their harvest abilities in half, and after 1981, inseason closures, there was practically no fishing time left at all. Permit holders reduced from 2622 to 1135. Fishing days were reduced from 158 to 62 in the Icy Straits Area. The Straits and Lynn Canal areas are the only ones which still are inflicted with the 8 and 6 closure regulations. They are proposing the removal of the 8 and 6 only in the Icy Straits area; it should be removed from everywhere.

Lottie Edelman, representative of the Kenai, Cook Inlet Area, and Kenai Peninsula Fishermen's Association -- She is against the Legislature regulating the Dept. of F&G. Once in a while, the Legislature should make sure things are being governed on biological grounds and not political ones. In 1977, a salmon management plan was adopted in Cook Inlet. It designated the Cohos, Pinks, and Chums as the target fish of the commericial fishery, and the Kings and Chinooks were those desired by sport fishermen and thus reserved for them. In the plan, the Department established fixed dates for opening and closing the season which have had a disasterous result for several streams. Commercial fishermen had harvested Kings since the 1800's; a number of years ago fishermen asked for a closure, so they were closed down for 16 years. Then fishermen requested a test fishery when they saw the number of fish was rebuilding, but this request was denied. July 1 is the opening date, and an August 15 closure is now in effect. The Kenai River every even year has a heavy run of Pink salmon. In 1980, the local staff asked for a closure because they still were running fairly heavy on Aug. 15. However, this was denied them by the Board. Last year the same thing occured again. In 1980, there was quite a return of Red salmon. By June, 200,018 was the cumulative count, but the season could not be opened because of the management plan. The sport fishery was opened, other areas were open, yet the commercial fishermen were not allowed to fish. By July 31st only 56,625 Reds were left. Who knows what the effects of this mismanagement will be four years from now. A Coho run comes in Sept. first. Labor Day is the last fishermen's effort, so there is hardly any fishing of this run. The fish average 12 to 14 lbs. We don't mind letting the sports fishery fish them, but on the Monday after Labor Day there should be an opening for commercial fishing as well. There has been very little research done on this run. We feel our staff is very good, but we need biological management before the resource is destroyed.

Bolney Smith, representing Wrangell Troll Pac -- The OY is meaningless because it doesn't take into consideration the difference between seasons. Fish tickets show there was a large run in 1981, of which 400 thousand Kings could have been harvested. In the past three or four years, the run has gotten better, so the early April and May closures were unnecessary.

Closures of the inside waters, along with limited entry has put serious restraints on the hand troll fleet. The data used to establish harvest guidelines only tell what has been caught, and not anything about the catch in five to ten days. By the time records get to Juneau and back, the fish have left.

TAPE #5, SIDE #A

Weather considerations, spot fish counts, tagging and more accurate data collection are the first steps which need to be taken. He supports a private investigation into the Dept. of F&G. Why does the Dept. deny tag data when all this information is dearly needed? He suggested that there be Coho tagging done during the troll fishery closures.

Bill Stokes, past chairman of Sitka Hand Trollers and SE Hand Troll Associations -- Fishermen may be looking for exact answers in an inexact science. If one small mistake is made, it can have drastic effects. We don't need money to tell us what is wrong, fishermen know what's wrong with the Dept. of F&G. The Dept. is expensive to run, but fishermen can not afford not to have their fishery managed. Fish require expert management. He put in a proposal to the Board of Fisheries concerning the ban on sport fishing from commercially licensed troll vessels. He suggests this information be looked up. The issue deals with a protection problem not a Board of Fisheries problem. He proposed that sport fishing be allowed in areas which now are exclusively set aside for commercial use, and he would not allow any commercial fishing vessels to sport fish in the sport fishing zones. People can not afford two separate boats, one for sport fishing and the other for when they need to go commercial fishing!

Eric Jordon, full time power troller, was a secretary to a Fish and Game Advisory Committee in 1977, member of the North Pacific Management Council Advisory Pannel for the last two years and he has represented many fisheries groups including trawl fishermen and hand trollers before the Board of Fisheries -- He agrees to the existence of the serious mistakes outlined by Eric McDowell. He personally contacted managers last summer before these regulations actually went into effect. At the time he indicated his concern regarding the inaccuracy of the data being used. He has talked to the managers since and is confident that due to hindsight such mistakes will not happen again. The Department would not have passed the regulations it did, and managers will do better in regulating the fishery in 1982. He opposes a study and recommends the money be used to support further research and management needs of the Department. The more information the Department has available the more precise management will become. He is opposed to the Legislature overruling the Board's decision to prohibit sport fishing off troll vessels regardless of how much he himself would like to be able to do so. The appropriate role of the Legislature is to provide the funds needed for research and better management. It should carefully review the Governor's appointments to the Board of Fisheries and to the Department heads. Overruling the Board weakens the present system. The Legislature's position should be to strengthen it or develop a new system. ATA's suggestions are inappropriate for the achievement of the common goal of better management. He has three suggestions: 1) He recommends extensive hearings on whether or not the State should request the NPFMC to get out of the salmon management business. He personally thinks salmon management should be handled by the state. 2) He recommends the Legislature work in conjunction with fishermen to protect the all important fish habitats such as the ones on the Stikine River. 3) He suggests a cooperative program with trollers to tag Chinook under 28" and during Chinook closures when they are fishing Cohos and Humpies to release the Chinook alive. Fishermen are willing to participate in such a program. Funds are needed for tags, tagging tools and data extraction and evaluation, as well as for an extensive log book program. He encourages the Legislature to work with the Alaskan Trollers Association and the Dept. of F&G and the Board to develop such a program.

TAPE #5, SIDE #A continued

John Durkin, -- Southeast seems to have very little knowledge of the INPFC (The International North Pacific Fisheries Council) and its functions. In Petersburg there is a commissioner of the INPFC. There is no high seas data available on the migration of fishries stocks for Bristol Bay, Prince William Sound, or Cook Inlet. The new INPFC treaty was one which the INPFC did not want. It was arranged because of pressure from the State Dept. The INPFC wanted the line left at 175° West, but it was moved to 175° East. As soon as that happened there appeared a 534 boat fleet just outside the 200 mile limit using 3 1/2" gear. That fishery is so destructive that it is not even permitted within 12 to 14 hundred miles of Japan, yet it can exist on the Alaskan side of 170° East. Everyone all across the State is complaining about the Columbia River problems, putting Alaksans and Washingtonians at each others throats while the vital facts are being ignored. The fish are being harvested out of existence before they even get down into state or federal waters. A communication break down has caused fishermen to blame their biologists and managers when the real problem is foreign interception. The problem to be solved is how to get those fish back, only then is it worth while to argue over which states should get what share of American stocks. Certainly accurate information is necessary, but how that information is dealt with is essential. Are various members on the Board representing fishermen, themselves or even Japanese interests? More care needs to be taken in the appointment of Board members. The Board is becoming complicated. The Legislature copped out by not defining a subsistence user. It was the duty of the Legislature to do that, and now as things stand, each case must be adjudicated by the Board. The Board should be freed from such duties so it can get back to what it was intended to do -- manging the fisheries. If the foreign processors can force a fishermen's strike, we will have the foreign fleets right back within our waters. There has been practically no representation for fishermen since the passage of the Fisheries Conservation Management Act in 1976. Alaskan canned salmon has been outlawed by several European nations. You can imagine what effect that will have. Biological management and political mangement are two different things. Hatchery development is necessary. In regards to the repeated mention of the Sen. from Japan, he questioned which senator people were referring to. He feels there are several persons in influencial positions who are serving the ends of foreign interests and not those of Alaskans. There should not be so many net marked fish. Something is wrong!

Bill Stocks, -- the sport fishing issue has a certain rational, however, there is a problem in having a blanket regulation the way it is now established It should be suggested that the March Board hearings take up this issue. The problem is not just one for sport fishing for salmon but for bottom fish as well.

Richard Lundahl, Chairman of the Pelican Advisory Committee -- Time is of the essence. There is not much time left. Many documents are produced but hardly any of them are reviewed. Testimony which the Pelican Board prepared for the Board was made available. Mr. Lundahl urged that members of the Administrative Regulation Review Committee please to review it. Hatcheries are needed. Regulation proposals should have objectives identified. Specific statements regarding time frame for testimony and comment should be made clear. A list of the predicted benefits to the user groups involved should be distributed with the proposals. Issue papers for each Board meeting should be prepared listing concerns, proposed action, and predicted benefits. This would help assure that each topic discussed is clear and will keep testimony and comments to the point. He feels it would be nice for trollers to be able to sport fish from their vessels, but this is only a minor issue. The fleet is suffering and may be totally destroyed. Action must be taken to insure that the industy's needs are taken into consideration.

TAPE #5, SIDE #A continued

The OY has reduced the catches to already practically unbearable lows, and it seems as though those cuts are going to continue. The troll fleet was a viable industry and when permits were being sold the State gave the impression that it was going to get better. Now the industry is dying and fishermen find themselves terribly over capitalized. The permits say state wide, then why can't fishermen now fish westward and northward. The FCMA implies that Alaskan fishermen would be protected form foreign overharvesting. Why is this not so? The State instigated low interest loans and tax incentives, and construction funds incentives in order to encourage investment in the fishing industry, and now it seems to be working to insure the industry's destruction. Power trollers only catch 2.2 salmon per day on the average. They catch selectively few and good quality fish. They are the best indication of where the fish actually are and could be a valuable tool in determining what areas should be restricted from trawl fishing.

Bruce Wallace, executive director of Southeast seiners -- Testimony today has been basically that of hook and line people, and therefore, only part of the problem has been presented. Their arguments are valid, but it should not be forgotten that there are domestic net fisheries as well. He also has numerous problems with the Department and feels the most effective way to deal with those problems would be to confront the Department directly. He feels money could be much better spent inside the Department rather than on an outside research project. There are many important research projects within the Department which need funding badly. The system as it stands, is workable and only needs to be cleaned up and reenforced.

Rep Randolph, -- commented that in view of all the proposed budgetary restraints the House has been suggesting for all departments he feels it is important not to neglect enforcement. No matter what department is being cut, enforcement whether for life, liberty or fish should not be restricted. It is going to take an active effort on the part of everyone involved to make sure that management is not treated in a way that will end up being detrimental to the resource.

Ed Bergeron, -- He commented on research that has been done on salmon stocks. The NPFMC and the Board of Fisheries have been basing some of their policies on sparce data. The statistical history the committee has before it contains warnings of what would happen on the Columbia River if adequate measures were not taken. This repor was written in 1952. As far as he knows there has been no research done on the off shore salmon fishery between 1952 and 1972. Then again there was a study done in 1981. This shows how limited research has been. These three investigations are what the Department is basing all its management on. Obviously more studies are needed. Funding for such studies is desperately needed.

TAPE #5, SIDE #B

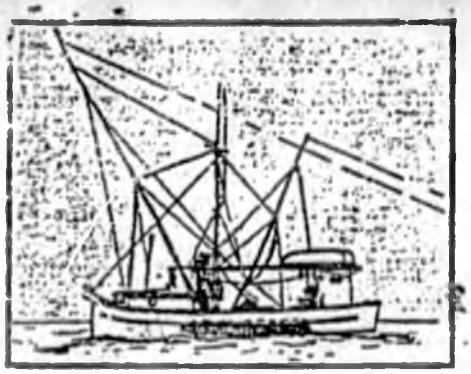
Mil Zahn, Executive Director of the Board of Fisheries -- The Board came to its present position regarding sport fishing from troll vessels because of the difficulty in monitoring sport fishing from these vessels. They were getting numerous reports that sport caught fish were being sold on the commercial market. It had become almost impossible to separate troll and sport fishing harvest statistics. By prohibiting sport fishing from troll vessels the Board felt it could limit the overall commercial troll effort.

TAPE #5, SIDE #B continued

?, another member of the Dept. of F&G -- Research on the Stikine River has begun and is going to be well under way this year. OY was decided upon in a joint session of the NPFMC and the Board. Also joint stocks are in desperate trouble in many areas and all those concerned must work together to insure the resource's conservation for all. There are many stocks which are caught by outside fishermen whoes management is not controlled by the State which nevertheless impact the Alaskan fishing industry. Concerted action is needed.

Rep Randolph thanked everyone for participating and then called the hearing to a close.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT



Alaska
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Association

REPRESENTING ALASKA POWER TROLLERS

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TESTIMONY TO THE LEGISLATURE'S ADMINISTRATIVE REGULATION REVIEW COMMITTEE BY EARL E. KRYGIER, LOG BOOK BIOLOGIST

I would like to start by saying that one of the major reasons that Alaska became a state was to extricate itself from federal management of its fisheries. With the inception of the 200-mile limit, the federal government is again surreptitiously taking control of the Alaska fisheries. I believe Alaska fisheries must be managed by Alaskans.

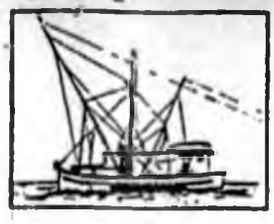
As to the point at hand, regarding the Alaska Department of Fish and Game, there are some specific problems with the department's management scheme which I will discuss, but it must be emphasized that ADF&G is much more capable of managing our resource, possibly in conjunction with industry , than are the federal managers. A dual management system is impossible!

Specifically, escapement extimates as they relate to the optimum yield, are a major problem. Inadequate escapement counts affected the 1980 management of Southeast salmon. The Board of Fisheries was given escapement counts which were called optimal, when in fact they were historic highs. Some of these abnormally high counts were taken with fixed wing aircraft, rather than the more accurate foot, weir, or hilicopter counts. The Department's king salmon biologist considers fixed wing aircraft counts inaccurate. The use of glacial and non-glacial water condition years in the counts affects escapement trends. We need true optimal escapements from stock and recruitment curves, or at least historic "means" until optimal escapements are determined. Two years of extensive work could develop methodology and devise index streams for cohos for which almost no data is available and complete the stock/recruitment information for king salmon.

Next

In 1981 the troll fishery was closed for 10 days under a two-tiered prerequisite: first, stocks being above the 10-year average and second, fish were moving to the inside.

The 1981 catch was the second or third highest in the past 12 years and this occurred when we had a 10-day closure at the height of the season. Determination of whether the fish were moving to the inside was made by comparing the 10-year averages or gillnet, seine and sport fishing. This 10-year average is statistically



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irrelevant because of changes in fishing areas in the gillnet and seine fishery. A test fishery would better answer this second prerequisite.

Next

Exploitation rates on coho, which effect time and area closures by trollers, have been given as 90% on some stocks. We feel these estimates are incorrect. First, inadequate escapement and tagged/untagged ratios from spawning grounds make this estimate unreliable. Second, NMFS using adequate research methods and giving trollers special openings, show trollers only able to harvest 20-50%, while seiners could take only 60% at terminal areas under special openings. Even with total fishery exploitation rates as high as 90% -- which we doubt happens under present management -- there is no information as to what levels of exploitation coho stocks can take. 1977 and 1978 were touted by the department as being exceptionally bad excapement years, yet these produced the 1981 near-record year. Work needs to progress on true exploitation rates for adequate management.

Lastly

Information on stock separation is also needed by scale pattern analysis and electrophoresis studies.

From my perspective as an industry biologist, I do not feel that money would be well-spent to investigate methods of collecting and evaluating statistics of the department's. Rather, money (a large amount) is needed to complete or initiate research, either privately or governmentally, which would give management the tools to correctly manage the fishery. A list of needed management research has been provided by the Natural Resources Consultants in their work for North Pacific Fisheries Management Council. If industry and the department sat down and prioritized the needed research -- and the monies were made available -- I feel most of the management inadequacies could be alleviated.

Homan-
McDowell

Economic and Management Consultants

Frank Homan • Eric McDowell • Peter McDowell

ECONOMIC LOSSES TO SOUTHEAST ALASKA FISHERMEN DUE TO CHINOOK SALMON MANAGEMENT ERRORS AND THE QUOTA IMPOSED DURING THE 1981 SEASON

For:

Alaska Troll Legal Fund

Alaska Trollers Association

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ECONOMIC LOSSES TO SOUTHEAST ALASKA FISHERMEN DUE TO CHINOOK SALMON MANAGEMENT ERRORS AND THE QUOTA IMPOSED DURING THE 1981 SEASON

INTRODUCTION

In 1981, Southeast Alaska fishermen lost at least $1,261,000 in income due to errors in the management of their fishery. The losses were caused by three closures for king salmon and by the incidental loss of other species during the June closure. Errors causing unnecessary closures included using faulty catch, ticket, and vessel data, double counting, and using late season averages for exceptional years to project 1981, an average year for chinooks.

In addition, the region's fishermen lost another $907,000 due to the imposition of a king salmon quota. This politically determined catch ceiling was imposed primarily at the urging of federal officials and is considered an unusual management measure for a salmon fishery. All other Alaska salmon fisheries are managed on a biological basis for escapement.

Losses due to management errors:

1) June 26-July 4 closure imposed due to failure to consider current catch data:

Chinooks (8,541 at $44.55)*	$380,500
Cohos (45,157 at $9.59)*	433,100
Other salmon (estimated)	75,000

*Average 1981 weights and prices used.

2) August 10-19 closure imposed on all species when single species fishery for chinooks during at least part of this closure would have allowed a catch of:

Chinooks (3,103 at $44.55) $ 138,200

3) September 4-12 closure on chinook resulting from a 23% overestimate of catch for the Aug. 20-Sept. 3 period:

Chinooks (5,256 at $44.55) $ 234,200

Total losses due to management errors: $1,261,000

Losses due to Quota (Optimum Yield):

	No. Chinooks	Economic Losses
1) April 15-May 14 Closure	6,400 @ $44.55	$285,100
2) August 10-19 Closure	13,963 @ $44.55	622,100
	20,363	$907,200

The following report documents six management errors of 1981 and offers solutions for improving catch estimating methods. In addition, the report estimates what catches would have been without closures (an average king salmon year and a banner coho year) and quantifies the king salmon lost to fishermen during each of the season's four closures.

The major finding of this report was that critical management decisions in 1981 were made on inadequate field research and data. Good management simply cannot occur in the absence of good information, even in the Southeast chinook fishery which has steady and predictable seasonal patterns when compared to many other fisheries.

The major recommendations of this report are a change in field research and data management at Sitka and, an improved data collection and reporting system for in-season management. It is further recommended that Southeast fishermen, fishermen's organizations and others dependent on the fishery encourage their legislators to support the budget and research necessary to improve management of the region's salmon fisheries.

ASSESSMENT OF MANAGEMENT ERRORS

1. Error: Overestimating late season catch by 73% for a two-week period by using averages for three exceptional years, 1978-80, when, in fact, a 6- or 10-year average would have been more appropriate. Catches for weeks 35 and 36 were estimated to be 26,000 when the actual total was 15,043, an error of 73%. Late season 1981 was obviously not as strong as the 1978-80 late seasons. This was very clear as soon as fishing opened on August 20. And as early as week 24 (June 7-13), two full months before the August 15 closure, weekly catches were falling significantly below the three-year average. The 1981 seasonal pattern more closely resembled the 6-year average for 1975-1980. An estimate slightly below the 6-year average, a level obvious since June, would have been very accurate for the remainder of the season.

Solution:

- Use a more representative average to track weekly patterns and begin comparisons early in the season.

- Consider practical factors such as weather (50 knot winds and 20 foot seas prevented fishing outside for three days after the opening), effort (concentrated on plentiful cohos in inside waters, not on chinook), and the FCZ closure, which along guaranteed catches below historic late season levels.
- Be in contact with fishermen. The entire troll fleet and the ATA staff knew full well that 1981 was a good, but not exceptional, year.

2. Error: Arithmetic error of 12,000 chinook. The August 25 ADF&G estimate of catch levels to date apparently added the winter catch twice and overestimated the summer catch by 2,000 with an unprocessed ticket factor. Total error was 12,000 more chinook than had actually been caught. Part of this unexplained amount may be due to a "freezer boat" factor, detailed in Error 4.

NOTE: Errors 3 through 6 were caused by faulty ticket, vessel, and catch data provided by the ADF&G Sitka area office to the regional office in

Juneau. Taken together, these errors in management information appeared to have led to unnecessary closures.

3. Error: Double counting fish tickets, overstating catch by about 3,500 chinook, according to ADF&G.

Solution:

- Program computer to catch double counts. This is being done by ADF&G for next season.

4. Error: Overestimating the contents, capacities and numbers of freezer boats with chinook on board after the August closure. The Sitka office list of freezer vessels includes many which are not freezer boats or were not freezing in 1981. Furthermore, the list includes overestimates of the capacity and contents of some freezer boats, according to ATA. As a result, an erroneous factor for freezer boats was apparently included in catch estimates. Documents on freezer boats are on file at the ATA office.

Solution:

- Verify freezer boat capacity with fishermen through ATA. Ask fishermen or inspect boats to determine fish on board.

5. Error: Using fish tickets with exceptionally high catches as being representative of all tickets, when in fact they were doubtfully representative or statistically selected. This caused the false impression that fishing was exceptional after the August closure when, in fact, chinook fishing was poor. This put the regional officer in the position of making decisions with erroneous data.

Solution:

- Do not base catch estimates on the number of boats but rather on the availability of fish.
- Contact fishermen to find out how fishing is. This was done successfully by the regional office in 1980, through ATA.
- When sampling tickets it should be done in a statistically acceptable manner with tickets, boats, and days of effort known, or reliably estimated. Otherwise the sample is statistically invalid. Use historical data on boats fishing and catch per boat as a guide.

6. Error: Making inaccurate estimates, based on a flyover, of boats fishing and daily catch per boat after the August closure. According to ATA staff, the Sitka troll management office estimated the

number of boats fishing to be greater than average in late August 1981, when, in fact, actual ADF&G data show total boats in week 35 numbered less than the 4-year average. This overestimate of boats, when coupled with the inflated fish ticket sample in Error 5, again led to the misconception that chinook catches were large.

In truth, trollers averaged less than one (.95) chinook per day in weeks 35 and 36 in 1981, about half of that needed to reach the ADF&G estimate for those weeks. After accounting for errors, trollers would have had to exceed the record catch rate for weeks 35 and 36 to reach the 1981 quota.

Solution:

- Use historical data as a guide when estimating numbers of boats fishing and catch per day. Historical data were apparently ignored or at least not used during this critical period of decision making.
- ADF&G should employ, as head of the Sitka management office, a professional having a background in statistics and an ability to work cooperatively with other professionals and fishermen.

In addition to the expensive errors detailed previously, the Sitka office has, on many important occasions, produced poor and inaccurate statistical work. According to several fisheries scientists and biologists, significant numbers of recovered tags have been lost; tag sampling is not done in early season when Alaska stocks are abundant, thereby skewing results; area tags have been pooled, losing valuable information and distorting marked/unmarked ratios, and a faulty statistical evaluation distorted the coho exploitation rate. These documented examples, as well as others not specified here, have and will continue to disrupt the regional office's diligent and intelligent efforts at competent management. Good management can only be accomplished with good information. Critical errors and inadequate research and field data will continue to harm both fishermen and regional managers until a change is made to insure good management information.

EXPLANATION OF TOTAL CHINOOK HARVEST ESTIMATE

The first step in calculating the economic loss to Southeast Alaska fishermen is to estimate the volume of catch had the season remained open and had a king salmon quota (optimum yield) not been imposed. In other words, what kind of a season was 1981 from a biological standpoint?

To make this estimate for king salmon, average weekly catches during the 6-year period of 1975-1980 without closures or imposed quotas (with adjustments for closures for September 6-20, 1979 and July 15-24, 1980), were compared with weekly catches 1981. (See Table 1.) This provides a method for estimating what would have been caught had fishermen been allowed to fish. It also adjusts for any "build-up" and "catch-up" effects which may have occurred just before and after closures. Using this method for estimating the season's catch, Southeast Alaska fishermen would have caught 305,400 chinook in 1981 had a quota not been enforced.

Other methods to estimate probable catch could be used. Applying 1981 daily averages to closed periods is one method and another is using year averages. Both methods would yield a higher probable catch. However, the smoothing method was selected because it is based on acutal current catches and it accounts for changes in effort levels before and after closures.

This smoothing out method of projecting probable king and coho catches considers the average relative changes from week to week and applies these relationships to weeks which were affected by closures and build-up or catch-up effects. These week-to-week relationships are remarkably stable in the long run, especially for king salmon catches, and could be readily used as a predictor for in-season management, a recommendation made earlier in this report. The 1981 season is then smoothed out to a close approximation of what would likely have occurred week by week without closures, quotas, and the "build-up" or "catch-up" effects.

The 1981 weekly pattern and probable seasonal total more closely resembled the six-year pattern (and the long run historical pattern in which king salmon catches tail off significantly after mid-season), and was similar to the three-year 1978-80 average used by management only during early season. Catches in 1981 began falling significantly below the 1978-80 level in the second week of June (12% in week 24 and 18% in week 25), and continued their relative decline throughout the season. In fact, the disparity between management estimates based on the abnormally strong late seasons of 1978-80 and actual catch in 1981 from August 20 to September 3, showed that management estimates were 73% above actual catch even including any catch-up effect following the closure.

INDIVIDUAL CLOSURES

The impact of the four 1981 closures on salmon catch and consequently fishermen's income are estimated as follows:

Quota Closure #1, April 15-May 14

This closure occurred for two reasons; as a response to increasing federal pressure and as a conservation measure, to increase the escapement of Alaska stocks.

Good late winter catches, greatly improved spring spawning escapement, excellent inside sport fishing and high early season catches indicated strong spring runs. Excellent escapements in several systems testified to the conservation success of this closure and strong early runs. High early season catches were a result of both the build-up effect from fishing being closed and strong spring runs. Since spawners are on the move during this period, it is unlikely that the good opening catches were entirely due to build-up. The fact that build-up was virtually non-existent after the July and August closures (as it was after the July, 1980, closure) indicates run strength played a significant part in early season catches for weeks 21-23. After that period, catches returned to more normal levels and then declined in relation to the exceptional 1978-80 averages after early June. The cost of the early season closure can be computed

by using the weekly catch level relationships by week for the six-year average and applying these to weeks 17-19, 20, 21, and 22. This produces estimates for the closed weeks and also smooths out the build-up effect after opening.

Weeks 17-19, 20, 21, and 22	Chinooks
Projected catch without closure	58,242
Actual catch with closure	-51,842
Chinook salmon lost. (April 15 - May 14)	6,400

Management Error Closure #1, June 26-July 4

The weeks which appear to have been affected were the week prior to the closure (26), the closure (27), and the two following weeks (28 and 29) in which a build-up was apparently not present to any great degree. This could indicate that the fish present during this period were on the move rather than schooling or building up due to lack of fishing pressure. Historically, king catch levels begin declining in early July and this appeared to be the case in 1981. After this closure catches were slightly below the 6-year average.

This closure was strictly for the purpose of keeping catch levels below the quota (optimum yield). There was no biological basis for this closure and, ironically, it was the use of non-current data reflecting high early season abundance which caused the closure. However, as early as the second week of June, it was apparent that 1981 would not be up to the level of the 1978-80 period.

Weeks 26-29	Chinooks
Projected catch without closure	66,513
Actual catch with closure	-57,972
Chinook salmon lost. (June 26 - July 15)	8,541

In addition to king salmon losses, cohos and pinks were beginning to show before this closure. Coho losses are based on three-year weekly averages for the cl ure week and adjusted for 1981 catch levels before and after the closure. (See Table 2.) Pink, sockeye, and chum losses are estimated to total $75,000.

A three-year average was used to reconstruct the week-by-week coho catch because the average catch for 1978-80 was approximately the same as the 1981 season. If it is assumed that the seasonal patterns were roughly the same, then 1981 can be reconstructed with a fair level of confidence.

Weeks 26-29	Coh s
Projected catch without closure	19 130
Actual catch with closure	-14 183
Coho salmon lost. (June 26 - July 4)	45,147

Management Error Closure #2, August 10-19

This closure was imposed for the primary purpose of reallocating much of the peak of the coho run from outside to inside waters and thus changing the mix of gear types which would harvest these fish.

That 1981 was a banner coho year was evident by late July (week 31) when over 150,000 cohos were landed in just 7 days

by trollers alone. And the fishing continued to improve right up to the closure. In spite of these exceptional catch levels, management carried through with the closure. The fact that the net fisheries were allowed to continue fishing in the interception areas and that inside trolling was closed beyond the normal six-day period for only four of the ten days, clearly indicated that no serious management effort was made to limit inside fishing effort. By contrast, all outside troll effort was prohibited during the ten most economically critical days of the season. Coho catches peak at that time and chinook salmon are still fairly abundant in outside waters though down from early season levels.

Another underlying issue for this closure was the fact that most fisheries managers still under the mistaken impression that king catches were similar to the 1978-80 period, felt that it was necessary in order to stay within the chinook quota. Further, federal managers, who are under heavy political pressure, were pressing the state for early closure and, in fact, kept the FCZ closed for the rest of the season.

Actual chinook salmon harvests were no more than 242,000 at the time, a fact that should have been known to managers and used to keep open or re-open outside waters for a single species fishery targeted on chinook salmon.

Chinook salmon were lost to fishermen during this closure. On the average, chinook catch levels were dropping significantly over the week 32-36 period, and by the end of July catches were already 25% below the three-year average for week 31. By assuming the six-year average weekly pattern of decline but starting at a level slightly below the six-year average, a probable catch of 53,616 is projected, compared to an actual catch of 35,706 or a loss of 17,910 chinook salmon. This correlates fairly closely with the six-year average catch of about 18,000 during the ten-day closure period with no consideration given to build-up. Some build-up appeared to have occurred just before the closure but could have been attributed to freezer boats selling off-season catches just after the 10th. Also, after the closuref, bad weather outside and poor fishing prevented fishermen from enjoying any build-up at that end, with the exception of a few boats inthe southern part of the region catching the tail-end of the fast-moving fall chinook run for a few days. Seiners experienced good king catches in southern areas before and during the August closure.

Thus, total chinook salmon lost to Alaska fishermen as a result of not having a single-species chinook fishery during the August 10-19 coho reallocation closure can be estimated as follows:

Weeks 32-36	Chinooks
Projected catch without closure	53,616
Actual catch with closure	-35,706
Chinook salmon lost (August 10-19)	17,910

Management Error Closure #3, Sept. 4-12, for Chinook Salmon

By overestimating the troll chinook salmon catch for the year to date and the period August 20 to September 3, the ADF&G closed the chinook season early on September 21 16,900 chinooks short of the quota (optimum yield).

In fact, using the six-year averages and estimates in Table 1, assuming normal levels of effort, the harvest would not have been expected to exceed about 5,000 additional chinooks, from September 4-12.

Weeks 35-38	Chinooks
Probable catch without closure	20,505
Actual catch with closure	-15,249
Chinook salmon lost (September 4-12)	5,256

This closure, ostensibly to prevent over-reaching the quota (optimum yield), in fact compounded the errors of management in the earlier closures and served to insure that actual harvests would be even further below the quo (optimum yield) than would have otherwise been the case.

Homan-McDowell

Juneau, Alaska

February 10, 1982

1a

January 30, 1981

Submitted to Reg. Review in 1981. Situation still stands and is getting worse.

L Smith
Feb, 1982

The policies and procedures of the Alaska Department of Fish and Game since 1975, and the Board of Fisheries hearings since 1978-79 have gone beyond the point of rational acceptance. The urgency of the situation has caused me to spend uncountable hours investigating the status of the resource, the economy, and management policies pertaining to the troll fishery. I have tried to make sence of all the information I come in contact with, going back to the conception of Limited Entry, and the regulatory practices since 1970.

I wish to make a brief point of areas in question:

A. The resource, King and Coho salmon, is not in such a depressed state as we would be led to believe by management. The real problems of mortality have not been addressed for political reasons as well as lack of data.

   1. We don't have a sufficient observor program to document river escapement, except the Taku River. Escapement figures have been assumed or selected to fit nature of management plan.

   2. Foreign interception of King salmon in the FCZ may run from 200,000 to 500,000 fish annually.

   3. NPFMC-PDT and ADF&G staff ignore any biological data input other than their own.

B. The economy of the troll fishery has been basically stable through the last decade. The hand troll catch and units of gear have increased since limited entry (1975). If the full optimum yield of this resource is realized, and the political implications shown, the hand troller would not be a problem.

   1. The troll fleet (hand and power) is a major part of the Southeast Alaska economy, an urban and major rural contributor.

      "The annual average catch value of troll salmon is $20 million and is 40% of catch of all Southeast gear types". (Hohman-McDowell report-1980) It also employs a higher percentage of Alaskan residents than any other gear type.

2(a)

5 AAC 39. 270 Troll Specs. and Operations

Comment: As stated before, the total of the area/time closurers and gear restrictions presents an over kill in the percentage allocations. I would like to make the point, that the number of dependent fishermen in the hand troll fishery, for example, could be estimated at 700. The number of out of state hand trollers is 379. These people have nothing else to do but fish up here. They could conceivably be catching 50% of the hand troll allocation. In other words, our residents and fellow Alaskans are being forced into poverty because of an outside interest. This problem has never been addressed. The ADF&G seems more interested in Empire Building than protecting the residents of this state.

5 AAC 48, 090 Adopted 1-15-79 No Sport Fishing

Comment: There was no public hearing on this action to start with. This is discrimination against the troller, and in fact undue not to be able to use private property for recreation. Some of us, in this world, have to fish for a living and or live closer to Mother Nature than the local supermarket. Even so, a bad season means no money to purchase food. A bias and unseeing ADF&G puts people, who need food, in a worrisome and precarious position. If the ADF&G wants to make sure, "the closed to commercial areas" are policed, they can have all fish caught in such an area clipped of their fins. One small vessel and two people, 8 hours a day, could insure the sport division satisfactory results. As for outside closed areas, this regulation is grossly biased against the troller, discriminatory, unjust, violates personal rights, and definitely an undue hardship on the owners and his relatives and friends. The latter, who are not allowed on the vessel for recreation cannot enjoy a day or the waters of SE Alaska for any reason other than commercial fishing. This regulation is a perfect example of the ADF&G insinuation that trollers are pirates to begin with and should be delt with in said manner.

5 AAC 33.310 Weekly Fishing Periods

Comment: Does this amended regulation mean state wide? I believe these restrictions are compounding the economical impact on the dependent fisherman and the small community. In conjunction with 5 AAC 39.270, "troll specs and operations", there is a definite overkill on the catch percentage allowed. I would like to raise the question of foreign vessel catch of our salmon stocks. I do not believe the troll fishery is directy responsible for the condition of the salmon.

5 AAC 33. 365 Salmon Troll Management Plan

Comment: Again the Board of Fisheries and the ADF&G point directly at the troll fishery as the main problem in salmon management. This is true only in point, that we fish on the open sea and feeding grounds and present a bureaucratic paper filing problem on which drawer to put the trollers in! If the troll fleet is not

3(a)

NO KNOWLEDGE OF PRIOR REGULATORY EFFORTS

Management decisions and policy is made annually without any guidance from prior regulatory input. ADF&G considers the data as preliminary for two to three years.

CLOSURE

The June closure was announced with a total tabulated catch of 103,000 Kings from October 1, 1980, to June 13, 1981. This closure was initiated under the assumption the catch as of June 24, 1981, would be 150,000 fish. This cannot be documented until the tickets are tabulated. All other fisheries will continue in State waters, Canadian waters and in the eastern section of the FCZ by foreign interests. Again, there seems to be no conservation intended, just reallocation. The Halibut opening the second week of June took considerable troll effort off the grounds. The people involved in the Halibut opening will not be fishing again for a period of time, due to the logistics involved in changing gear and travel. The quota is established from October 1 of each year until season closure in the fall. The season end is set at Sept. 20 this year. This leaves approximately 11 weeks left to fish, if no further closures are imposed. The ADF&G has proposed a ten-day closure June 25 to July 5, a tentative ten-day closure July 28 to August 6, and early season end in late August or early September. This is a further reduction of approximately 40 days from the season. Coupled with the Board of Fisheries reduction of 41 days from the season and the 12% quota cut, the situation seems to have become impossible. The Commercial Fisheries Division has been uncooperative in attitude and unresponsive to any input other than their own data. The Board of Fisheries seems to be trying to manage for conservation of the resource and the ADF&G managing for reallocation. The troll fishery will not survive this type of management. 10 Foreign trawlers were on our fishing grounds in June when we were forced to port. JH 1982

RECOVERY

The Taku River escapements are 200 to 300% higher in the last two years. This is the only river with a comprehensive (as can be) escapement program. This shows our stocks are recovering since implementation of Limited Entry in 1975 and Fisheries Conservation and Management Act of 1976. 1975 and 1976 are the parent years for these stronger returns. The ADF&G has changed their goals from "recovery" to "speed of recovery" of the resource, and subsequently, it appears, to reallocation of the resource.

600% higher escapement in 1981. JH 1982

..3(b)

FISH TICKETS

Alaska Department of Fish and Game uses fish tickets to compile information to manage the troll fishery. Up until a few years ago numbers of fish were not included on a high percentage of tickets. (Daily averages were used by many fishermen.) The areas of catch reported on tickets are substantially not correct because of competitive nature of fishery. Tickets do not show the strength of runs, only the amount of fish caught. Tickets were double counted in 1981 causing undue closures. 11 Feb. 1982.

ESCAPEMENT

Escapement figures are not conclusive, as ADF&G does not have adequate surveillance of Southeast rivers, and condition of rivers makes it virtually impossible to count fish. Other factors, such as predators (seals, sea lions, sharks), foreign trawl effort, and Japanese High Seas Gillnet fishery have not been addressed or included in management criteria. A King salmon tagged in Gambier Bay during a pink salmon seine test fishery, was recovered in the Bering Sea by a U.S. trawler. (ADF&G). High Seas gillnet fishery targets all species of salmon around 4 to 6 pound average. The troll fishery is recovering many net sc ed small chinook, coho, and chum salmon consistently.

SUSTAINED YIELD

Managing a fishery on a sustained yield basis seems arbitrary if escapements are not known, strength of runs cannot be measured and foreign interceptions are at best only estimated. Optimum Yield (OY) was developed from fish tickets collected in the years 1970 to 1977. This was before the growth of the hand troll fleet and during the implementation of Limited Entry. Limited Entry was at that time stated to be the stabilizing force to insure the participants security in their investment and livelihood. This also includes the 1975 season which was cut short because the silvers stayed off shore until late and the fish tickets did not show enough catch inshore. The fishermen told ADF&G this but were ignored. The season was reopened three weeks later.

OPTIMUM YIELD

Optimum Yield is defined as the allowable catch which will provide the greatest overall benefit to the nation taking

4(a)

Fish Enhancement! Fred Division, ADF&G

Comment: Where is fish enhancement? Six years have passed since the ADF&G has been talking about strengthening the native stock or hatcheries. All they have done is take money (tax dollars) and purchase police boats, charter airplanes, guns, badges, and uniforms (to stock streams with?). We took the limited entry system in as a step needed to save our native runs, and to insure safety to make a living. The ADF&G has not upheld their end of the bargain. All we have received from ADF&G is more time and area closurers that I want to single out as "temportary measures until?". These measures, instead of being dropped when the excuse was achieved, have been left as another monument from ADF&G that they have no intention of just regulation. Also, any information you may volunteer or being up to the Commercial Fishing Division will be found in the proposed regulations, altered in a way to make it more difficult for trolling. I have been told by people that work as stream observers, etc., that they are the first people let go by ADF&G if they run low on budget. Dave Cantillions own words about management and the resource is that "the data they have is weak, they have tested or observed fifteen to twenty rivers or streams out of two thousand in SE Alaska, and the Coho stocks in SE are not in danger but are borderline". Yet this is the excuse given for continual cuts and pressurers put on bush communities through the troll industry; or visa versa. I have thoughts about why these trends are moving against the troller but these are basically without proof.

3(c)

into account maximum sustained yield (MSY) as modified by food needs, recreational needs and social, economic, or ecological factors. MSY is unknown due to lack of data. OY has become a "quota" without any data base, or any public response or input; and "sustained yield basis" has become "established guideline harvest level" by the same phenomenom.

A Senate Resource Committee hearing in April 1981, with NOAA General Council and representatives of National Marine Fisheries Service salmon plan development team, raised concern about the validity of managements data base. Senator Fahrenkamp, Senator Gilman and Senator Mulcahy were in attendance; with aides from Senator Eliason's office, House Resources, and Representative Duncan's office. Senator Gilman asked the NMFS biologist if they could substantiate the data used in troll management; the answer was no.

TIME AND AREA CLOSURES

Time and area closures have been devised as a management tool. This tool only serves to intensify effort and increase pressure on certain stocks of salmon migrating through the area. Again, decision were made from fish tickets information which cannot show resource strength in areas not fished and only show number of fish caught in open areas.

ALASKAN INTERCEPTION OF SOUTHBOUND SALMON

Washington Department of Fisheries has not provided sufficient evidence of Alaskan interception of Chinook bound for Washington. Numerous studies have shown environmental degradation and massive destruction of small salmon by Columbia River dams. Chinook salmon forgone by S.E. Alaskan closures will only be reallocated to Canadian trollers. If any fish do get to Washington waters, they will be harvested by Washington fisheries and treaty Indians net fisheries. There is not a conservation motive here. It should be noted that 30% of the Southeastern Alaskan troll landings are accounted for by American fishermen other than Alaskan residents. (ADF&G)

QUOTA over 100,000 chinook were incidentally caught by foreign trawlers off Vancouver IS. in 1980. & 1982

The quota imposed on the troll fishery and the 12% reduction adopted by the Board of Fisheries this year is a reallocation of fish to the Canadian troll fishery. The Canadian troll season began April 15th this year. The reduction to eight lines and area designation forced the fleet to target on King salmon. By regulation, the fleet was forced to choose the money fish for a higher return. Very little is known about the migration habits of Chinook, therefore, it is conceivable the Canadian catch includes Scutheast Alaskan salmon.

5(b)

stocks. My figures for 1979 incidental catch of chinooks in the Bering Sea and Gulf is conservative at 120,000 fish. This count is taken on a 1 in 5 observer-foreign vessel data base, which in reality is totally inadequate. A reduction in effort by government buying of all permits now for sale would insure that number as being retired from ever fishing. I refer to government buying of permits only in reference to Council members' implication that too many permits were issued by the government.

C. Time and Area Closures

Through experience as a year around troller for nine years in Northern Southeast Alaska, I strongly object to poor management policies. Time and area closures to the troll fleet foster social, economic, and resource destruction. Time and area closures, coupled with limited entry, is irresponsible and negative in nature, to the resource and socio-economic situation in Southeast Alaska. The implementation of inside area and time closures in the past five years and limited entry are the two main reasons we have an increased fishing effort in the FCZ and Surfline. The grouping of the troll fleet and time restriction intensifies fleet activity on certain runs of fish. NMFS biologist and PDT member, Bill Robinson stated to me that the best way to manage a fishery is to spread effort over wide areas thus minimizing pressure on certain stocks and migratory routes. This is a logical and rational approach to resource management. Why then is the PDT determined to make proposals advocating bad management? The troll fishery was, before limited entry, life-style oriented. With people acquiring permits who are not fishermen but businessmen, and the smaller troller being replaced by the larger offshore troller because of inside area closures, the FCZ has received the increased effort. It should be noted that 30% of troll landings in 1979 in Alaska were made by non-residents (ADF&G). These were, for the most, offshore and surfline landings. If the situation can be reversed and the people of Southeast Alaska be allowed to fish their historic areas, the pressure on the outside mixed stocks and certain inside stocks will be relieved. The effort will again spread over all the waters and be of much lesser impact on the chinook runs.

The "Brite" Columbia River natural stock of chinook has a higher percent of Alaskan interception (?40%) than any other Washington chinook. Yet these fish must run a gauntlet of dams to reach the ocean and return. There is no effort to help these immature fish by these dams. I see the hazards on the Columbia River as the utmost problem with chinook returns, not Alaska. A trucking of fingerlings past the Bonneville Dam would help everyone's return on the Columbia. I grew up on the Columbia in the Tri-Cities, Washington. I know a little of the area.

20,000 To 40,000 'Brite' Chinook are illegally caught each year between McNary Dam and the Bonneville Dam before they reach the spawning grounds.

Larry Smith
Feb. 15, 1982

5(a)

Submitted to NPFMC Nov. 13, 1980
(North Pacific Fisheries Management Council)

Public Testimony to Council.

Gentlemen of the Council:

I would like to comment on the specific proposals set by the Plan Development Team and then an overall summary of the Plan Development Team's 1981 Troll Plan.

A. Optimum Yield

The occurance of a 1980 optimum yield on chinook salmon is, to use a staff description, "a phenomenon", that is based on inadequate data and has not followed the mandate of the FCMA of 1976. That mandate is, "The Optimum Yield is defined as the allowable catch in a fishery which will provide the greatest overall benefit to the nation, taking into account the maximum sustained yield (msy) as modified by food needs and recreational needs, and by social, economic, or ecological factors." (emphasis added)

The basic management goals mandated by FCMA are developing fishery resources and protecting the environment, while taking into account the economic, social and political factors which affect and are affected by the state of the resource The implementation of the goals is to be undertaken by the regional councils through the development of optimum yields for the fisheries, and by the control of foreign and domestic fishing. (emphasis added) The FCMA of 1976 states, "only the part of the optimum yield not caught by Americans will be harvested by foreigners."

The instance of net marked fish by foreign nets landed on my vessel was reported in my 1977 testimony to the Council. Since that time I have frequently landed marked fish, with up to 25% of my total catch for a day freshly scarred by nets. We do not have a sufficient observer program on foreign hulls and I cannot emphasize strongly enough that the U.S. put an observer on each and every foreign hull within the FCZ in 1981.

The optimum yield does not identify or address social and economic impact, especially on Southeast Alaskan residents or economy. I hope the Council will reconsider this ill-conceived OY and present a more balanced option to our problem, both socio-economic and resource in nature. I vehemently oppose reduction in an OY that has not been developed to meet criteria set in FCMA of 1976.

B. Limited Entry

A moratorium on gear in the FCZ, at this time, would be a positive step toward stabilizing the effort and mixed stock fishing. I strongly recommend a moratorium on foreign fishing in the Bering Sea and Gulf be implemented immediately to stop any forther growth of incidental catch of West Coast chinook

5(d)

A vast, sound body of information on fish, people and property must be collected before the Council can project the domestic catch each year or over several years In addition, information must be collected on foreign activities, which we just do not have.

As to the opening statement, "The FCMA of 1976 requires that the stocks of salmon be managed uniformly throughout their range", this statement is nowhere in the FCMA of 1976. In essence, the 1981 Troll Plan or any troll plan, should take into consideration the resource and social and economic impact equally. This would call for unique treatment by management of the fish, people, property and area in question here.

The bottom line on this 1981 Troll Plan is that it is totally unacceptable to me for two reasons. One, there is not sufficient data to base the plan on and the FCMA of 1976 has not been adhered to in a manner representing all factors involved in the question. The second reason is the hardship, financial and physical and emotional drain, put on myself and my wife and children because of poor management and lack of consideration for the impact on the fishermen themselves.

With due respect,

Larry S. Smith

Larry S. Smith
F/V Mary jean
P.O. Box 3020
Juneau, AK 99803
907-789-9923

These Comments were directed to options given fishermen by North Pacific Fisheries Management Council Plan Development Team. They continue to ignored testimony and data submitted by the fishermen and industry. We need help!

Feb. 15, 1982

Larry Smith

5(c)

Escapement – over 15,000 in 1984

We have an escapement in the Taku River of 7,500 counted chinook in 1980 which is 200-300% increase over earlier 1970 escapements. I see this as improvement. I am sure we all want ideal resource conditions, and we are working slowly toward this goal. All except the Canadian nets strung across the Taku River for the past six or seven months. We also have a reduction of hand troll effort in the past two years.

If the Council is considering time and area closures, I strongly urge the Council to provide for in-season closures of the FCZ to foreign trawlers during salmon migratory periods. The management people's profound belief in area and time closures has caused economic panic among fishermen and more intense fishing to make ends meet.

Basically, I do not see enough solid data and confirmed research to substantiate any Plan Development Team proposals. I definitely recommend we strengthen our data to base any decision pertaining to the social and economic survival of Southeast Alaskan fishermen and communities, as well as our natural resource.

D. Gear Restrictions

I have never used more than four lines in my effort. I cannot speak for or against the use of six lines in outside areas. The only thought about restrictions to four lines is the cost of gurdies and equipment to vessel owners that would be made obsolete by such a restriction. The fishermen with extra gurdies use them for hauling stabilizers and I see no harm in that. The treble hook is used extensively and with proper care in releasing undersized salmon there should be no harm done. In my own experience, the smaller chinook survives very well unhooking and leaves the area with much vigor. I would like to emphasize the troll fleet is the only gear type with size restrictions on chinooks on the West Coast. I would suggest size limits of chinook for all gear types, anywhere.

E. Reporting Requirements

All my landings are recorded on ADF&G fish slips. I do not own a freezer boat or ever intend on owning one.

SUMMARY

In summarizing what I have read in the 1981 Troll Plan, I honestly believe there is not enough hard fact in data and resource analysis to substantiate such devastating cuts in the overall troll industry. The industry provides a top quality product always in demand and a long line of social and economic involvement. Given the state of the economy, nation and statewide, the implications of the 1981 Troll Plan would be grossly adverse in respect to the resource and social and economic survival of the Southeast Alaska fishermen, the fishing communities and the industry.

GRAND CAMP Alaska Native Brotherhood Organized 1912

INCORPORATED

PRESENTATION - RON WILLIAMS, ALASKA NATIVE BROTHERHOOD

AT LEGISLATURES ADMINISTRATIVE REGULATION REVIEW COMMITTEE - 02/10/82

Mr. Chairman and members of the Committee, my name is Ron Williams. I am Chairman of the Fisheries Committee of the Alaska Native Brotherhood. The ANB Fisheries Committee is composed of representatives from each ANB Camp in Southeast Alaska. We appreciate this opportunity to make comments on various issues in the Alaska Fisheries. We have addressed the following issues previously either to the Limited Entry Commission or to the State Board of Fisheries.

The ANB had been opposed to limited entry for Hand Trollers, but since its inception, we have made our views known to the Limited Entry Commission. It was our understanding that there was a potential of 4,400 permit holders. The State Board of Fisheries recommended to the Limited Entry Commission that there be only 1,100 permits issued, where as the Commission's number was 2,150. We supported the 2,150 figure, thinking this would allow our young people and elders to participate in Hand Trolling.

We felt it necessary for the young people to be able to Hand Troll as it is a training ground for future fishermen. Also, because of employment practically non-existent in many of the villages, this would provide a means of income. Almost all Alaska Natives who retire, do so in Alaska, for this is their home and they have no where else to go. The elders need to be active to stay healthy and, also, Hand Trolling would supplement their meager pensions.

We now find that it is very difficult to zero in on the young and elderly in trying to provide them with a permit. We have discussed this with the Limited Entry Commission and they have assured us, that they made every effort to develop special provisions for the young and elderly, but to no avail. I bring this out, hoping the legislatures could look into the possibility of asking special provisions for the young and elderly.

Historically, the Alaska Native has been conservation minded, for they know their future survival depends on this. As for instance, the ANB has been against the fish traps since the early 1930's, for they know, this type of fishing would be harmful to the fisheries. I have been in constant contact with the fisheries department on their conservation efforts. What has made conservation more complex is the Canadian and lower 48 States fisheries programs. In order to protect the salmon, there needs to be a complete, detailed agreement between the United States, Canada and the Treaty Indians.

I am presenting here resolutions that were adopted by the last Alaska Native Brotherhood and Alaska Native Sisterhood Convention held in Ketchikan last November.

Resolution number 81-63, Titled: Removal of Fish Weir. The resolution asks for the removal of fish weirs of Chilkat River, Klawock River and the Chilkat Lake, primarily to remove obstruction so that salmon would be able to reach their spawning grounds. Perhaps those listening to this teleconference from Haines and Klukwan could shed more light on this.

Resolution number 81-44, Titled: Use of Commercial Troll Vessel. This resolution asks the Board of Fisheries to remove the regulation that pro-

hibits the use of commercial troll vessels for sport fishing. 3

Resolution number 81-19, Titled: Relating to the Open and Closure of the Commercial Troll Fishery. The Board of Fisheries imposed on eight day opening and six day closure regulation in the troll fishery. This resolution recommends the Board of Fisheries abolish this regulation.

Thank you.

Grand Camp

Alaska Native Brotherhood

69th ANNUAL ANB/ANS GRAND CAMP CONVENTION
Ketchikan, Alaska
November 9-14, 1981

RESOLUTION NUMBER: 81-63

TITLE: Removal of Fish Weir

WHEREAS, the fish counting weir has obstructed the free passage of salmon to the upper Chilkoot River, Klawock River and the Chilkat ~~River~~ Lake; and

WHEREAS, the salmon by its own nature will not exhaust itself nor attempt to negotiate obstructions, waterfalls, or narrow, swift flowing rivers; and

WHEREAS, extremely suitable salmon spawning beds are located above the Fish and Wildlife weir; and

WHEREAS, the complete removal of the said fish weir would enhance the salmon runs.

NOW, THEREFORE BE IT RESOLVED, that this 69th Grand Camp ANB and ANS Convention assembled in Ketchikan this 14 day of November, 1981, request the complete removal of the said weir.

FUTHER RESOLVED, that copies of this resolution be sent to the Office of the Governor of Alaska, Commissioner of the Alaska Fish and Game, and State Fish and Game Board members.

Robert R. Martin, Sr.
Robert R. Martin, ANB Grand President

ATTEST:

I certify that this resolution was passed at the ANB/ANS Grand Camp Convention, assembled at Ketchikan, Alaska, the week of November 9-14, 1981.

Albert M. Kookesh
Albert M. Kookesh, ANB Grand Secretary

Past ANB Grand Presidents
Frank G. Johnson
Roy Peratrovich
Alfred Widmark

Cyrus Peck
Frank Peratrovich
Joseph Williams
Patrick J. Paul

Thomas Jackson
John Hope
Frank Sae
Walter Sobolieff

Richard Stitt
Steven V. Hotch
Nelson D. Frank
Frank G. Williams
Herbert Hope

Cyrus Peck Sr., Grand Secretary Emeritus
Mildred Sparks, ANS Grand President Emeritus

Grand Camp

Alaska Native Brotherhood

69th ANNUAL ANB/ANS GRAND CAMP CONVENTION
Ketchikan, Alaska
November 9-14, 1981

RESOLUTION NUMBER: 81-44

TITLE: Use of Commercial Troll Vessel

WHEREAS, the regulation prohibiting the use of a commerical troll vessel by sports, and/or subsistence fishermen creates undue hardship on most rural residents; and

WHEREAS, the commercially licensed vessel is a large investment that cannot be used by the owner even when all commercial fishing is closed; and

WHEREAS, many families cannot afford a second vessel to harvest fish for their personal use and to feed their families.

NOW, THEREFORE BE IT RESOLVED, that the ANB/ANS Grand Camp ask the Board of Fish and Came to abolish this regulations.

Robert R. Martin, ANB Grand President

ATTEST:

I certify that this resolution was passed at the ANB/ANS Grand Camp Convention, assembled at Ketchikan, Alaska, the week of November 9-14, 1981.

Albert M. Kookesh, ANB Grand Secretary

Past ANB Grand Presidents
Frank G. Johnson
Roy Peratrovich
Alfred Widmark

Cyrus Peck
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Cyrus Peck Sr., Grand Secretary Emeritus
Mildred Sparks, ANS Grand President Emeritus

Grand Camp

Alaska Native Brotherhood

69th ANNUAL ANB-ANS GRAND CAMP CONVENTION
Ketchikan, Alaska
November 9-14, 1981

RESOLUTION NUMBER: 81-19

TITLE: Relating to the Open and Closure of the Commercial Troll Fishery

WHEREAS, the Alaska Board of Fisheries imposed an eight day opening and six day closure regulation in the commercial troll fishery; and

WHEREAS, the 8 and 6 policy was a management effort to limit the harvest due to the large number of handtrollers, with increased harvest of salmon; and

WHEREAS, in the 1982 season, the State o f Alaska will institute the Commercial Fisheries Entry Program for the handtroll fishery which will effectively reduce the number of vessels and gear; and

WHEREAS, the Alaska Department of Fish and Game has emergency authority to open or close areas, and/or to restrict seasons as a management tool; and

WHEREAS, the limited entry for the handtroll fishery will go into effect; and

NOW, THEREFORE BE IT RESOLVED, that the Grand Camp of the Alaska Native Brotherhood recommends that the Alaska Board of Fisheries discontinue this regulation.

FURTHER RESOLVED, that the Grand Camp of the Alaska Native Brotherhood and Sisterhood, in convention, assembled at Ketchikan, Alaska, on 14th day of November 1981, forward this resolution to the Commissioner of the Alaska State Department of Fisheries and the Executive Director of the Alaska State Board of Fisheries.

Robert A. Martin, ANB Grand President

ATTEST:

I certify that this resolution was passed at the ANB/ANS Grand Camp Convention, assembled at Ketchikan, Alaska, the week of November 9-14, 1981.

Albert M. Kookesh, ANB Grand Secretary

Past ANB Grand Presidents
Frank G. Johnson
Roy Peratrovich
Alfred Widmark
Cyrus Peck
Frank Peratrovich
Joseph Williams
Patrick J. Paul
Thomas Jack
John Hope
Frank Sae
Walter Soboleff
Richard Stit
Steven V. Mcich
Nelson D. Frank
Frank G. Williams
Herbert Hope

Cyrus Peck Sr., Grand Secretary Emeritus

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2. All Alaskan N.P.F.M.C.
3. Reinstatement of Incidental Troll Halibut Catch
4. Marine Mammal Predators
5. Shark Predators
6. Washington and Treaty Indian Demands
7. Foreign Marketing Gap
8. Salmon Optimum Yield
9. Adoption of and Review of Regulations and Policies
10. Chinook and Coho Hatcheries

REQUESTS FOR RESOLUTIONS, POLICIES, AND MANAGEMENTS DIRECTIVES TO

THE ALASKA ~~DEPARTMENT OF FISH AND GAME~~ Board of Fisheries

FROM

PELICAN ADF&G ADVISORY COMMITTEE

RICHARD W. LUNDAHL, CHAIRMAN

Sept. 1981

RESOLUTION REQUEST

RELATING TO ALL ALASKAN N.P.F.M.C.

WHEREAS, the F.C.M.A. seats many non-Alaskans on the N.P.F.M.C.; and

WHEREAS, the dollar value of Chinooks and Cohos that migrate from the waters of the N.P.F.M.C. to the waters of the P.F.M.C. is insignificant when compared to the dollar value of the King Crab, Tanner Crab, Black Cod, Halibut, ocean perch, pollock, hake, sockeyes, chums, pinks, cohos, chinooks, and etc. that do not migrate from the waters of the N.P.F.M.C. to the waters of the P.F.M.C.; and

WHEREAS there are already adequate provisions for coordination and cooperation between the N.P.F.M.C. and the P.F.M.C.;

NOW, THEREFORE, BE IT RESOLVED, that the Alaska Board of Fisheries hereby requests that the Congress of the United States amend the F.C.M.A. to state that all voting members of the N.P.F.M.C. be Alaskan residents; and

BE IT FURTHER RESOLVED, that the vast majority of scientific and statistical committee and the advisory panel members also be Alaskan residents.

Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
Pelican Alaska 99832

RESOLUTION REQUEST

RELATING TO THE CURTAILMENT OF FOREIGN NETS

RESOLUTION: Curtail foreign gillnet and trawl fisheries in the Gulf of Alaska.

JUSTIFICATION: A tremendous number of net marked and injured Chinook and Coho salmon caught by trollers make evident that these species are targets for the foreign net fisheries.

Statistics show a significant number of halibut are taken by foreign trawl gear.

Documented testimony reveals there are miles of nets being used by foreign fleets.

Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
Pelican, Alaska 99832

POLICY AND RESOLUTION REQUEST

RELATING TO SALMON OPTIMUM YIELD

WHEREAS, the OY was established during a period of severely depleted stocks; and

WHEREAS, the current Alaska Board of Fisheries and ADF&G management policies are greatly increasing salmon escapements; and

WHEREAS, aquaculture research and enhancement have just developed potentials for greatly increasing Alaska salmon stocks; and

WHEREAS, Alaska is upgrading its timber harvesting standards for environmental protection, including spawning habitats;

NOW, THEREFORE, BE IT RESOLVED, that the OY be reestablished at projected potential harvest levels and that anything less than this potential harvest level be called a <u>temporarily reduced</u> harvest level (or temprary OY).

Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
pelican, Alaska 99832

RESOLUTION REQUEST

RELATING TO FOREIGN MARKETING GAP

WHEREAS, the F.C.M.A. allows foreign fishing fleets to augment the American harvest until 100% of the allowable biological catch is harvested; and

WHEREAS, the major markets of these foreign fleets is in their mother countries; and

WHEREAS, the American fisherman is at a great financial overhead disadvantage in competing on the world market in the harvesting of our own American fish; and

WHEREAS, this marketing disadvantage creates a financial incentive for foreign fleets to displace American fleets; and

WHEREAS, our American fleets actually are being displaced by foreign fleets; and

WHEREAS, prices vary with supply and demand; and

WHEREAS, the price for our fish is kept low because 100% of the allowable catch is always harvested; and

WHEREAS, the price for our American fish would rise if the allowable foreign catch was reduced; and

WHEREAS, the incentive for American fishermen to invest in new fisheries and thereby displace foreign competition would increase if the price for American fish increased;

NOW, THEREFORE, BE IT RESOLVED, that the Alaska Board of Fisheries does hereby request the Congress of the United States to amend the F.C.M.A. to include:

1. that if the American fleets can harvest 100% of the allowable biological catch then the Americans and the Americans only be allowed and encouraged to do so; and

2. that if the American fleets cannot harvest 100% of the allowable biological catch that a 20% "foreign marketing gap" be established (as an economic incentive to American fishermen) so that the combination of American and foreign harvest can only total 80% of the allowable biological catch.

Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
Pelican, Alaska 99832

PERSONAL REQUESTS

FOR

RESOLUTIONS, POLICIES, AND MANAGEMENT DIRECTIVES

TO

FROM

RICHARD W LUDANL

PELICAN, ALASKA

SEPT 1981

ALASKA BOARD OF FISHERIES
Policy Request

REGARDING ADOPTION OF AND REVIEW OF REGULATIONS AND POLICIES

In the proposition or adoption of regulations and policy we request that the Board and Department state:

1. the objectives to be achieved,
2. the time frame needed to achieve them, and
3. the projected benefits to that fishery be listed.

JUSTIFICATION: The past system of adoption has led us into the difficulties that most of our fisheries are experiencing today in that there is no system of review of regulations that were adopted in the past. The goals and benefits of these regulations were often unclear.

Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
Pelican, Alaska 99832

POLICY REQUEST

RELATING TO TAGGING AND RELEASING OF IMMATURE SALMON
BY TROLLERS

WHEREAS, aquaculture biologists need continuous research in migration patterns, feeding habits, and growth rates of both natural and hatchery stocks; and

WHEREAS, various trollers and groups of trollers have always been interested in tagging salmon that must be released anyway; and

WHEREAS, the cost of such study would be minimal if the "tagging" were done by commercial fishermen;

NOW, THEREFORE, BE IT RESOLVED, that the Alaska Board of Fisheries does hereby direct ADF&G and requests the N.M.F.S. biologists to set up a tagging and releasing program of immature salmon with all interested trollers.

Richard W. Lundahl
Box 793
Pelican, Alaska 99832
PERSONAL REQUEST

REQUEST FOR MANAGEMENT DIRECTIVE

RELATING TO BIOMASS STUDY OF CHINOOK SALMON

WHEREAS, the size limit for troll caught Chinook salmon has been a constant issue; and

WHEREAS, "shaker mortality" and treble hooks have consequently also been constant issues; and

WHEREAS, the predator caused mortality of salmon in the high seas has always beena subject of conjecture; and

WHEREAS, the "growth potential" of immature salmon has long been a subject of debate; and

WHEREAS, the ability of management to maximize the benefits to the public depends on knowing when the value of the resource is highest;

NOW, THEREFORE, BE IT RESOLVED, that the Alaska Board of Fisheries does hereby direct ADF&G to initiate a complete study of the Bio-mass value of Chinook salmon throughout their cycle.

Richard W. Lundahl
Box 793
Pelican, Alaska 99832
PERSONAL REQUEST

REGULATION PROPOSAL TO

THE ALASKA ~~DEPARTMENT OF FISH AND GAME~~ BOARD OF FISHERIES

FROM

PELICAN ADF&G ADVISORY COMMITTEE

RICHARD W. LUNDAHL, CHAIRMAN

Sept. 1981

REQUEST FOR MANAGEMENT DIRECTIVE

RELATING TO F.R.E.D. AND FEDERAL HATCHERIES IN OTHER STATES

WHEREAS, the policies of the N.P.F.M.C. are directed toward lowering the OY and reallocating salmon (appearing in our waters and the waters of the FCZ) to the peoples of other states, other Indian tribes, and other nations: and

WHEREAS, our S.E. economies are dependent on our harvesting of these fish; and

WHEREAS, these fish pasture in our waters and feed on our feed stocks; and

WHEREAS, the expertise and technology for raising and enhancing these Washington and Oregon runs is in existence; and

WHEREAS, the bilateral (Canadian and U.S.A.) treaty and several Indian treaties will probably "lock" the OY into "specific" permanent numbers;

NOW, THEREFORE, BE IT RESOLVED that the Alaska Board of Fisheries does hereby direct F.R.E.D. to study the feasibility and benefits of locating several ADF&G Chinook and Coho hatcheries in Washington and Oregon; and

BE IT FURTHER RESOLVED, that the Alaska Board of Fisheries does hereby request the federal government to do the same in our behalf.

FURTHER DISCUSSION: 1. The existence of ADF&G hatcheries in Washington and Oregon would give Alaska a lever in maintaining a reasonably high OY for S.E. Alaska.

2. The possibility of the N.P.F.M.C.'s recommendations for further reducing our activity in the FCZ would be lessened.

Richard W. Lundahl
Box 793
Pelican Alaska 99832
PERSONAL REQUEST

CONTENTS

1. Statewide Troll

2. Hand Troll-Power Troll Allocati ns

3. Treble Hooks

4. Seine Boundary Line in Lisienski Inlet.....request for emergency order for this coming year

5. Yakutat Troll-Gillnet Equal Fishing Hours

6. Extension of Proposal Deadline for Advisory Committees

STEVE LAPOSKI
2/17/82

Potpourri of historically oriented comments pertaining to Alaska fisheries management.

1) I am opposed to the Limited Entry concept. I believe in the free enterprise system backed by strong enforcement and accurate data, supplemented by hatcheries & stream enhancement programs.

2) I believe that sport fishing from commercial boats has a negligible effect on amounts of fish with which we are concerned. Therefore, this regulation should be repealed.

3) If the 3 days on 6 day off closures for trollers in certain areas are still in effect, I feel they should be curtailed and other measures used that would be more acceptable to those involved.

4) I feel that Alaska should consider limiting the size of vessels in other fisheries as they do purse seiners and Bristol Bay gillnetters. I believe in the small boat fleet concept.

5) I feel that we allow too much politics to be played with our fisheries for the sake of some lawmakers and bureaucrats, forsaking, of course, the fisherman.

6) I would like to commend Clem Tillion for his success in the past which effectively brain washed so many people, boards & commissions who appear to be on the opposite side of the fisherman.

REGULATION PROPOSAL FORM
Alaska Department of Fish and Game

Proposal Concerns

Game		Subsistence	
Sport Fishing		Advisory Committees	
Commercial Fishing	X		

* * * SEE OTHER SIDE FOR INSTRUCTIONS ON COMPLETING THIS FORM * * *

Area(s) affected: Statewide

5AAC 39.171 (New Section) Regulation book page no. 158
(Alaska Administrative Code No.)

Purpose of proposal Open all state waters to trolling.

Suggested wording of Proposed Regulation (append if lengthy): TROLL GEAR LEGAL IN ALL AREAS. Troll gear may be used in all areas of the state.

Justification: 1. Troll caught fish are a quality product having a greater dollar value

2. The troll fishery uses a large and extensive network of support and supply businesses

3. The Alaska troll permits are issued as statewide permits.

4. Gives the fishing industry an option of diversifying in the event of poor cycle years thus alleviating heavy pressure on specific stocks.

5. Areas of maximum utilization of the resource could still be protected by area/time closures as is done in Southeast. (cont. on back) (over)

SUBMITTED BY: (Name & Address)
Pelican ADF&G Advisory Committee
Richard W. Lundahl, Chairman
Box 793
Pelican, Alaska 99832

REPRESENTING: Pelican

PHONE NO.

11-33
Revised 7/1/79

Many Alaskans living westward would utilize power troll permits to augment their present fishing incomes.

The percentage of Alaskans (as compared to non-residents) owning and fishing Alaska powe troll permits would probably increas .

Improve locale economics of Westward communities. The reopening of the westward waters to statewide power trolling would:

(a) increase the income and profits of the following local groups:
    (1) the local fisherman;
    (2) the processing plants and their employers; and
    (3) the various support businesses and their employees.
(b) increase economic incentive for processors to invest in Westward plants.

Boards of F & G intro comments

Statement to the Administrative Regulation Review
Committee during the Teleconference hearing on February 10, 1980

Mr. Chairman, my name is Mil Zahn and I am the Executive Director for the Boards of Fisheries and Game. I would like to comment briefly on the role of the Boards in relation to the Department of Fish and Game.

The Boards of Fisheries and Game establish regulations and policy that are implemented by the Department of Fish and Game in the management of Alaska's fish and wildlife resources. The Board function is, by statute, separate from the administrative and management role of the Department.

Through regulations, the Boards formally establish safeguards for the conservation and management of the resources and at the same time, determine the allocation of resources among various user groups. Board decisions are based on biological data and expertise from the Department staff as well as vast amounts of public input to assure local and regional viewpoints being considered. The steadily increasing competition for resources makes allocative decisions more difficult.

The Boards are the primary avenue of public involvement in the regulatory process and support a system of 67 Advisory Committees, statewide that are also organized into 6 Regional Councils. The annual regulatory meetings of the Boards include extensive public testimony, both written and oral, concerning local resource needs and issues. Members of the public have access to the Boards through the Advisory Committee process as well as individual petitions. It may help place these activities in perspective to note that the Fisheries Board considers some 400-600 regulatory proposals annually during some 60 days of meetings.

The Boards and the Department coordinate their respective efforts but their separate legal obligations assure a balanced service that is responsive to the needs of both the resource and the public.

A SUMMARY OF COMMENTS MADE AT A TELECONFERENCE ON DEPARTMENT OF FISH AND GAME REGULATIONS HELD ON FEBRUARY 10, 1982 BY THE ADMINISTRATIVE REGULATION REVIEW COMMITTEE (REP. DICK RANDOLPH, CHAIR.) OF THE ALASKA STATE LEGISLATURE

Southeast Region Staff

Division of Commercial Fisheries

Alaska Department of Fish and Game

Juneau, Alaska

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Comments on time and area closures in Southeast Alaska salmon fisheries.

Comments on the principle of optimum yield as applied to the Southeast Alaska troll fishery.

Alaska Board of Fisheries Management Plan for Southeast Alaska-Yakutat Chinook and Coho Salmon Troll Fisheries.

Report by ADF&G to the Board of Fisheries on the 1981 Southeast Alaska Salmon Troll Fishery.

COMMENTS ON TIME AND AREA CLOSURES

IN SOUTHEAST ALASKA SALMON FISHERIES

My name is Paul Larson and I am the Finfish Coordinator for the Southeastern Alaska Region of the Division of Commercial Fisheries, Alaska Department of Fish and Game. My comments will center on the use of time and area closures in the management of the Southeast Alaska troll fishery.

The troll fishery in Southeast Alaska occurs in State and Federal waters from Cape Suckling southeast to Dixon Entrance. Troll gear, which annually harvest approximately 95% of the total all chinook salmon catch and 65% of the all gear coho catch in Southeast Alaska, is separated into two gear types; power and hand troll gear. The troll fishery is the only U.S. salmon fishery conducted in the Federal Fishing Conservation Zone (FCZ) off Alaska. Annual catches in recent years of chinook and coho salmon by all Southeast Alaska commercial gear types have often exceeded 300,000 chinook and 900,000 coho salmon. These harvests, though substantial, are considerably lower than levels produced betweeen the 1930's and 1950's.

One of the basic principles of modern fisheries management is to control fishing seasons and open and close fishing areas in such a manner as to allow only a harvest of those fish that are in excess to spawning escapement needs. The maintenance of adequate salmon escapement on a yearly basis is necessary to assure that fish abundance in future years will sustain a harvest by commercial, sports, and subsistence use groups.

In the Southeast Alaska troll fishery, as with all other Alaskan fisheries, the control of open fishing areas and fishing times is accomplished by what can be considered as two general types of regulations. The first being the fishing seasons and open areas specified in the published commercial fisheries regulation booklet. These types of fishing regulations are formulated by the Alaska Board of Fisheries, which meets annually to consider new regulatory changes. They are based on an indepth analysis of fishery and escapement trends and establish the general fishing pattern each season. The 8 days on and 6 days off troll fishing pattern in the Icy-Chatham Strait fishing corridor, in the northern portions of Southeast Alaska, is an example of the type of time and area regulation.

The 8 on and 6 off fishing pattern referred to in the written announcement of this teleconference hearing, was adopted by the Board of Fisheries and has been in effect since the 1979 fishing season. The area affected by this regulation is the major migration pathway for chinook and coho salmon entering from the open ocean waters and distributing throughout northern Southeastern Alaska. These salmon runs contribute heavily to the Southereast Alaska troll fishery in the outside and coastal fishing areas as well as the local Juneau and Haines area sports and commercial gill net fishing fleets. The restrictive fishing pattern was established as a conservation measure to assure that salmon escapements in the inside districts could be maintained. The dramatic shift in troll fishing effort to the coastal and outer coastal fishing areas combined with the increasing new troll fishing effort in the Icy-Chatham Strait migration corridor resulted in excessive harvest rates of northern Southeastern Alaska coho salmon stocks to the extend that it was difficult to achieve the needed spawning escapements on an annual basis.

Even with the 8 on and 6 off fishing pattern in effect, it has still been necessary to further restrict the terminal gill net harvest of coho salmon in the Juneau and Haines areas to maintain escapement requirements. If the established fishing pattern were removed, it would be necessary to further restrict the harvest of coho salmon in the terminal fishing areas and/or the coastal and offshore troll fishing areas to meet escapement requirements.

The second type of fishing season and time and area controls are those that result from inseason fishery Emergency Orders issued by Commercial Fisheries Management Biologists by delegation from the Commissioner of Fish and Game. Emergency Orders regulate open areas and fishing seasons in response to developing salmon run strength. These are used to provide real time management of fishery resources according to the availability of fish in relation to conservation objectives. Compared to other commercial fisheries in Southeast Alaska, relatively few Emergency Orders are issued that affect the troll fishery each year. In 1981, a total of 4 Emergency Orders were issued for the Southeast Alaska troll fishery, compared to weekly Emergency Orders issued for the Southeast Alaska net fisheries.

The process of issuing inseason Emergency Orders in the Southeast Alaska troll fishery includes the involvement of the Regional Supervisor, Finfish Coordinator, Troll Management Biologist, Regional Biometrics staff and 5 Area Management Biologists. The Southeast Alaska troll fishery is widespread throughout the Region and considerable staff time and resources are involved in the decision making process to decide if and when Emergency Order affecting troll fishing seasons and open and closed areas are needed for the conservation of the salmon resources.

I hope this discussion has provided a sufficient overview of the fishing time and area regulations employed in the management of the Southeast Alaska troll fishery. If you have any questions, I will be happy to answer them.

COMMENTS ON THE PRINCIPLE OF OPTIMUM YIELD AS APPLIED TO THE SOUTHEAST ALASKA TROLL FISHERY

COMMENTS ON THE PRINCIPLE OF OPTIMUM YIELD AS APPLIED TO THE SOUTHEAST ALASKA TROLL FISHERY ON CHINOOK SALMON

Background

The term "optimum yield" was first used in the actual management of the Southeast Alaska chinook salmon fishery during the 1980 season. For that season, the optimum yield or commercial catch limit was set at 286-320,000 fish by the Board of Fisheries and the North Pacific Fisheries Management Council. Although this limit applied to the catch of chinook salmon by all commercial fisheries, it most directly affected the troll fishery which currently takes about 90-95% of the commercial chinook salmon harvest. At present there are no directed gillnet or seine fisheries in Southeast Alaska on chinook salmon, however these net fisheries take an average incidental catch of about 20,000 fish per year while fishing for other species. All terminal area gillnet fisheries on chinook salmon have been closed since the mid-1970's to provide protection for depressed Southeast Alaska stocks.

The concept of controlling the Southeast Alaska commercial chinook salmon harvest by use of a catch limit - or optimum yield as it is often called - was developed during the late 1970's. At that time, as a result of passage of the Fisheries Conservation and Management Act of 1976, the federal government assumed management responsibility for the Federal Fisheries Conservation Zone (FCZ) which generally consists of that area lying beyond 3 miles of the coastline.

An attempt was made to develop a coordinated state-federal management plan for the Southeast Alaska troll fishery which operates in both State and Federal waters. (In 1981 about 23% of the troll chinook catch was reported taken in the FCZ.) Management of chinook salmon was of primary concern since the majority of chinook harvested by the troll fishery, especially in outer coastal areas, appear to be of non-Alaskan origin.

Many chinook salmon originating in rivers, streams and hatcheries of British Columbia, Washington, and Oregon, including the Columbia River, migrate through Southeast Alaska waters while enroute to and from Gulf of Alaska rearing areas. This information is obtained primarily from tagging experiments in which very small coded magnetic wires or tags are placed in the noses of juvenile salmon before they leave freshwater to begin their ocean migrations.

In developing a management plan for the Southeast Alaska troll fishery, fishery managers were thus faced with a number of considerations:

i) A significant percent, and probably a majority, of chinook salmon harvested by the troll fishery originate in British Columbia and southern coastal states where demand for these salmon is also very intense.

ii) The Southeast Alaska troll fishery is one of the oldest historical fisheries sharing the harvest of these stocks.

iii) Most of the natural chinook salmon stocks from Southeast Alaska to Oregon are seriously depressed and reduced harvest rates are required to rebuild these runs.

iv) Effective stock identification methods are not available and individual stocks of chinook harvested by the troll fishery operating in areas of intermingling stocks can not be identified and run strength assessed in-season.

v) The Southeast Alaska commercial chinook salmon harvest had increased from 301,000 in 1975 to 401,000 in 1978 during a time when more troll vessels were fishing in outer coastal areas where more mixed stock intermingling occurs.

The problem was then how could these considerations be taken into account in a manner consistent with the Fisheries Conservation and Management Act which directed that fisheries be managed for "optimum yield" defined as "that (harvest) which (a) will provide the greatest overall benefit to the nation, with particular reference to food production and recreational fisheries; and (b) is based upon the maximum sustainable yield for a given fishery, modified by relevant economic, social or biological factors."

A rigorous analysis of what actually constituted the optimum yield or harvest which would maximize benefits to all users while allowing for conservation was not possible due to lack of information and the very complex nature of the many commercial, recreational, and subsistence fisheries throughout the coastal communities. Furthermore, due to the inability to assess individual stock strength in-season and selectively harvest stocks consistent with escapement requirements, it was felt that a catch limit established prior to the season would be a reasonable first attempt at managing the troll fishery.

The catch limit - or optimum yield as it was called in the management plan - was therefore intended to address both conservation and catch allocation problems. The limit initially chosen, 286-320,000 was the average annual chinook salmon catch taken by all commercial fishing in Southeast Alaska during the period 1971-77 plus a range to accomodate some variation in yearly catches. The catch limit was to be reviewed annually and adjusted if necessary in response to changes in stock status or fishery conditions.

To make the overall catch limitation more applicable and useful to the management of Southeast Alaska fisheries and chinook salmon stocks originating in Southeast Alaska, a system of time/area regulations has been developed. These time/area regulations aid in maintaining the total chinook harvest within specific limits while achieving certain objectives such as increasing escapements to Southeast Alaska systems to rebuild these runs.

1980 Season

For the 1980 season, the Board and Council used the catch limit or optimum yield of 286 to 320,000 initially developed jointly by State and federal fishery managers as described above. The actual commercial chinook salmon catch for 1980 was 323,000 exceeding the upper end of the range by about 1%.

1981 Season

The catch limit was lowered for the 1981 season, however the Board and Council differed on the amount of reduction imposed. The Board specified approximately a 10% reduction from the 1980 level, resulting in a catch limit range of 272-285,000 while the Council specified a 15% reduction to 243-272,000.

The primary consideration for the Board's action was to initiate a more intense rebuilding program for depressed Southeast Alaska stock and time/area regulations were developed to meet that objective. The reduction in the total catch, however, was also expected to benefit non-Alaskan stocks.

During the 1981 season the ADF&G management plan was based on the Board's catch limit while the federal management plan for the FCZ was based on the Council catch limit.

The 1981 catch of approximately 268,000 chinook salmon fell slightly below the Board range of 272-285,000 and at the upper end of the Council range.

Based on catch projections made in late August and early September, a slightly larger total season chinook harvest near the mid to upper end of the Board range of 272,000 to 285,000 had been expected. The lower catch occurred due to several factors. Catch rates late in the season were lower than projected due to reduced availability of chinook salmon, shifts of effort to relatively strong coho runs in some areas and closure of the FCZ area from August 10 through the end of the summer season on September 20 by federal managers attempting to keep the catch within the lower Council catch limit. In addition, preliminary in-season catch estimates based on hand tabulation of some 30,000 fish tickets were larger than final catch figures based on computer tabulation of fish tickets. Finally, due to the pattern of more open and closed fishing periods in 1981 and a coho only fishing period, fewer freezer boats held chinook salmon for sale at the end of the season.

1982 Season

For the 1982 season, the Board has tentatively established a catch limit of 243-288,000. The Council has tentatively selected a range of 243-272,000 but has indicated a preference for the lower end of that range.

Final decisions regarding the 1982 season will be made in March at a joint Board-Council meeting.

Final decisions on the 1982 season may be influenced by the outcome of several other issues. These include several court cases involving tribal Indian fishing rights to Columbia River chinook salmon, investigation of other management options to deal with conservation problems on Columbia River bright fall chinook stocks and U.S.-Canada discussions on possible actions in Canadian troll fisheries to address Columbia River chinook conservation problems.

Concluding Remarks

The 1981 season was the second season in which the Southeast Alaska troll fishery was managed under the optimum yield or catch limit concept and fairly intense regulation of this fishery has only occurred since 1980. The troll fishery is a complex salmon fishery in which some 2,000 power and hand troll vessels fish most of the waters of Southeast Alaska from Yakutat to Ketchikan including federally managed offshore areas. It is only natural that implementation of new and more intense management systems would generate new problems. These problems are recognized and solutions are being sought.

High on our current priorities is improvement of in-season catch estimates through development of an in-season computerized fish ticket system. We expect to have a trial system in at least one area in 1982 and would like to see a regionwide system by 1983. Other important problems on which additional effort and funding should be expended include improving escapement estimates for coho salmon, development of stock separation techniques, and expanding catch sampling for recovery of coded-wire tags.

ALASKA BOARD OF FISHERIES MANAGEMENT PLAN FOR

SOUTHEAST ALASKA - YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES

5 AAC 33.365. SOUTHEASTERN ALASKA—YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (a) The management of the Southeastern Alaska Area and Yakutat Area chinook and coho salmon troll fisheries is complex because of mixing of the salmon stocks and fishing effort placed upon those salmon stocks by the subsistence, commercial and recreational user groups. The Board of Fisheries is concerned that some user groups, particularly those who traditionally fish the final interception areas for spawning king and coho salmon and the inshore areas may be receiving reduced opportunities to take chinook and coho salmon because of increasing fishing effort by the salmon power troll fleet on mixed stocks of those species of salmon in the coastal and offshore salmon fishing areas as described in 5 AAC 33.312(a) (4) and (5). The board is also concerned that continued increases in fishing effort on mixed chinook and coho salmon stocks may result in overharvest of individual salmon stocks and that individual stock escapements to specific streams in this case may not be of a sufficient level to maintain a sustained yield of those stocks. Because of the above concerns the board has adopted regulations that control the time, area of operation and efficiency of the salmon power and hand troll fisheries.

(b) The board recognized that changes in size and timing of the chinook and coho salmon runs and changes in the distribution of fishing effort by the hand and power troll fleet may require inseason adjustments to salmon fishing seasons, periods and areas to allow chinook and coho salmon to escape the coastal and offshore fisheries and move into the inshore and terminal fishing areas. The department shall make inseason adjustments to salmon fishing seasons, periods and areas for conservation purposes and to limit the total commercial king salmon harvest by all gear types to a range of 272,000 to 285,000 fish (harvest calculations will start with the opening of the winter season described in 5 AAC 33.310(b)) and as follows:

(1) repealed 4/ /81;

(2) repealed 4/ /81;

(3) during the early portion of the commercial coho fishing season the department shall evaluate the size and distribution of the coho salmon run and shall close the Southeastern and Yakutat Areas' salmon troll fishery for approximately 10 days, unless the department determines that the coho salmon run is larger than the last 10 year average and that acceptable numbers of coho salmon are moving into the inshore salmon fishing areas;

(4) following any closure made in accordance with (3) of this subsection, the Southeastern Alaska and Yakutat salmon fishing areas will reopen for salmon hand and power troll fishing as provided for in the salmon hand and power troll fishing regulations contained in 5 AAC 30, 33 and 39;

(5) additional closures of the salmon hand and power troll fishing seasons, periods and areas may be required if the department determines that the strength of the coho salmon run in the inshore and terminal salmon fishing areas is less than required to provide a spawning escapement that will maintain the runs on a sustained yield basis;

(6) recognizing that the hand troll fleet retains a large potential for expansion in efficiency, it is the policy of the Board of Fisheries to regulate the troll fishery in a manner that will result in 80 percent of the troll caught coho salmon being taken by power troll gear and 20 percent by hand troll gear; the department shall evaluate the power and hand troll coho salmon catches during the closure described in (3) of this subsection; if the projected hand troll catch of coho salmon indicates that the hand troll fleet will not take 20 percent of the total coho salmon troll harvest by September 20 the department shall open a coho salmon hand troll fishing season that allows the use of two hand troll gurdies aboard a hand troll vessel;

(7) recognizing that the recent trend of higher percentages of the coho salmon taken in outer coastal areas troll fisheries reduces the manageability of the fishery and intensifies allocation problems, the Board of Fisheries has established the objective of returning inside district coho salmon troll catches to pre-1978 levels by 1984.

Authority: AS 16.05.060
AS 16.05.251(a) (2), (3), (11)

1/ Changed to 285,000 by Board of Fisheries in spring of 1981 meeting.

REPORT BY ADF&G TO THE BOARD OF FISHERIES ON THE

1981 SOUTHEAST ALASKA SALMON TROLL FISHERY

REPORT TO THE BOARD OF FISHERIES

1981 SOUTHEAST ALASKA SALMON TROLL FISHERY

By:

Region I Staff

Southeast Region
Alaska Department of Fish and Game
Commercial Fisheries Division
November 1981

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INTRODUCTION

The troll fishery in Southeast Alaska occurs in State and Federal waters from Cape Suckling southeast to Dixon Entrance (figure 1). Target species are primarily chinook and coho salmon although an increasing number of fishermen also target on pink salmon. Catches of chinook for the period 1970-1980 have averaged 301,000. The 1981 chinook catch by the troll fishery was 247,000. Catches of coho for the period 1970-1980 averaged 619,000. The 1981 coho catch was 861,000. Catches of other species by the troll fishery in 1981 included 576,000 pinks, 9,000 chums and 7,600 sockeye. Annual salmon catches by the troll fishery since 1970 are shown in Table 1. Fishing periods and period catches of chinook and coho for the 1981 seasons are shown in Table 2.

Historically trollers fished coastal and inshore waters but in the last 20 years a trend of increased fishing effort in offshore and coastal waters has occurred. Seventy-two percent of the 1981 troll catch of chinook was taken in coastal State and offshore Federal waters with 26% of the catch reportedly taken in offshore Federal waters (FCZ) only.

Troll gear, which annually harvests approximately 95% of the total all-gear chinook catch and 65% of the all-gear coho catch, is separated into two gear types; power and hand troll gear. The Alaska Commercial Fisheries Entry Commission currently issues 973 power troll permits and 2,150 hand troll permits. Preliminary estimates of gear actually fished during the 1981 season include approximately 850 power troll and 1,150 hand troll units. Hand troll gear permit holders accounted for approximately 13% of the chinook troll catch and 21% of the coho troll catch in 1981.

In recent years, several changes have occurred in the troll fishery that have affected management decisions and consequently the conduct of the fishery.

First, chinook salmon production from Southeast Alaska river systems has remained depressed as a result of decreased spawning escapements. In spite of severe curtailment of terminal area net fisheries, inside troll fisheries and sport fisheries beginning in the mid-1970's, escapements did not initially increase as increased effort by the troll fishery apparently offset inside and terminal area fishery restrictions. In 1980 and 1981, when more restrictive regulations were also extended to the troll fishery, some improvement in escapements occurred although the improvement was generally limited to two major systems, the Taku and Stikine Rivers. Escapements to many of the non-Alaskan chinook systems contributing to the S.E. Alaska troll fishery are also currently below optimum levels.

Second, coho escapements and production have generally declined although not as severely as chinook.

Third, increases in troll fishing effort have occurred. Increased numbers of participants during the 1970's as we as increased actual fishing power due to vessel and gear improvement produced this overall increase in fishing effort.

Fourth, recent restrictions placed on fishing time, gear and areas have resulted in more intense fishing effort during open periods.

Fifth, fishing restrictions, which were initially applied to terminal and inshore areas for the purpose of increasing escapements, transferred more fishing effort to coastal and offshore areas. As more fishermen became aware of better availability of fish in outer coastal areas, this outward shift of effort increased further. This further compounded mixed stock management problems. Harvests remained high in these areas while catches in inside fisheries and escapements of chinook and coho declined.

1981 Season Summary

Prior to the 1981 troll season, several regulatory changes were adopted by the Alaska Board of Fisheries and the North Pacific Fisheries Management Council. The two regulations that most influenced management strategy of the Department in 1981 were the reduction of the optimum yield or guideline harvest range for chinook and specification of the policy to curtail the outside coho catch to allow more fish to reach corridor and terminal areas.

The commercial chinook harvest guidelines established by the Board and Council for the 1981 season differed in that the range specified by the Board required approximately a 10% reduction over the 1980 range of 286,000 to 320,000 while the range specified by the Council required a 15% reduction. In numbers of fish, the Board's range was 272,000 to

285,000[1/] and the Council range was 243,000 to 272,000. Since both of these ranges were significantly below recent years' chinook troll catches, but applied to both net and troll gear, the harvest ceilings represented a major step toward rebuilding Alaska's chinook stocks through providing increased escapements.

Winter and summer seasons were established for purposes of maintaining the traditional winter troll fishery and to facilitate enumeration of catches. The winter troll season was established as October 1 through April 14. To provide maximum benefit to depressed Alaskan stocks of chinooks the Board also specified a closure of the troll fishery to occur from April 15 to May 14. The summer season was established as May 15 thorugh September 20.

A major problem complicating effective coho troll fishery management is the magnitude of catch that occurs in outer areas prior to the time the stocks are segregated and run strength can be assessed. A progressively larger segment of the annual catch has been taken in recent years from coastal and offshore areas as the fish migrate from the offshore feeding areas to the terminal areas and spawning streams. This phenomenon has resulted in more restrictive measures imposed on all gears in the terminal areas to insure escapement which has in turn changed the historical allocation balance of coho salmon between user groups as shown

1/ A harvest guideline of 272,000 to 288,000 initially considered by the Board at the January 1981 meeting, was shown in the 1981 Regulation booklet. However, the final harvest guideline established by the Board at the March 1981 meeting was 272,000 to 285,000.

in Figure 2 and Table 3. The Board adopted a policy in 1981 to return these inside district troll coho catches to pre-1978 levels by 1984, by specifying a 10-day troll closure to allow more coho to move further along their migration routes and to inside waters.

In-season Management Strategy

The 1981 troll fishery was managed to insure that the chinook salmon catch did not exceed the guideline harvest level established by the Board. The guideline harvest level of 285,000 fish included catches by all commercial gear types. This was the second year that a guideline harvest range was established to limit the total commercial harvest of chinook salmon in Southeast Alaska fisheries.

The Department's management plan included provisions for implementing a closure during the latter part of June, if necessary, to extend the chinook season through the end of August. This was to insure that the guideline harvest level was not achieved prior to mid-August, thereby increasing effort on coho stocks and a higher mortality on chinook hooked and released in the resulting coho only fishery. By June 15 it was apparent that the catch levels to that date were above 3 of the 4 most recent years' catches (Figure 3). This indicated that if recent years' catch patterns occurred throughout the rest of the season the harvest level would have been achieved by late July. The troll fishery was then closed for 9 days, June 26 through July 5.

The higher than normal early season catch level was due to a combination of several factors: (1) unusually good weather which allowed access to prime fishing grounds for all of the 42 days between May 15 and June 25, and (2) increased early season effort in numbers of vessels fishing due to predicted poor returns of chinook in Washington and Oregon and corresponding closures, and the reduction of the guideline harvest level in Alaska.

Following the reopening of the troll fishery on July 5, chinook and coho catches were monitored on a weekly basis. Catch projections based on fish ticket accounting systems and port sampling of deliveries were used to estimate fishery performance for chinook and coho.

A system was devised whereby normal fish ticket accounting and early landing reports from major ports were combined. This system provided weekly fishery performance estimates. These weekly estimates were then compared to the 77-80 fishery performance weekly averages and projections were made on chinook total catch and coho run strength.

By the first week of August it appeared that the chinook harvest was comparable to previous years and catch projections indicated that the chinook catch would probably reach the guideline harvest level by the first week of September. Coho returns to inside areas, as determined from inshore and terminal area catches, were poor and below the 10 year average while coho catches by the troll fishery in outer areas were relatively strong compared to recent years (Figure 4).

The troll fishery was closed again on August 10 for 10 days for the purpose of allowing more coho to reach inside areas. The National Marine Fisheries Service issued a similar regulation for the FCZ, but did not reopen the FCZ to trolling for the remainder of the 1981 season because of projections that the Council OY ceiling of 272,000 chinook would be met and significant mortality due to hook and release of chinook would occur during any coho directed fishery.

During the period from August 20 when the fishery reopened to September 3, catches of chinook and coho were monitored closely because catches appeared to be approaching the harvest ceiling for chinook and several districts continued to exhibit poor coho catches.

Historically, effort levels in numbers of vessels targeting on chinook in coastal waters have produced substantial catches during late August and early September. Numbers of vessels continuing to fish during this time period, in 1981, were greater than normal and the Department projected that the guideline harvest level would be achieved by the first week of September. The troll fishery was closed to the taking of chinook salmon in all areas and certain districts were also closed to trolling entirely for coho conservation on September 4. Districts closed to coho fishing to protect weak coho runs were 5, 6, 7, 8, 10, 15 and portions of 9 and 12.

Between September 4 and 10 concerted efforts were made to collect all fish tickets from remote buyers and landing ports to tabulate the chinook catch. By September 10 preliminary figures indicated that the catches of chinook were at the low end of the Board's guideline harvest range of 272,000-285,000. In order to prevent hooking and release mortality of chinook salmon during the ongoing coho fishery, the troll fishery was reopened to the taking of chinook in those areas opened to coho fishing. The fishery remained opened in those areas until the close of the summer season on September 20.

In addition to the foregoing description of actions taken by the Department during the 1981 troll season in Southeast Alaska, the following management measures were also taken.

The waters of District 9 in the near proximity to Little Port Walter and Big Port Walter were not closed on September 4 to allow harvest of coho returns resulting from a surplus of hatchery and lake stocking experiments.

In the Yakutat area, the weekly fishing period for trolling specified in the regulations was extended to seven days for the area between Dangerous River and Sitkagi Bluff in August when it appeared coho returns to the Situk River were near average and catches by troll gear were minimal. Following the opening of the area to 7 day per week fishing by troll gear a period of mild weather and reductions in fishing areas elsewhere in Southeast Alaska resulted in increased effort in the Yakutat area to more than triple from 6 to 20 power troll vessels and 18 hand troll vessels. Coho availability in the area was good and catches by power

Based on catch projections made in late August and early September, a slightly larger total season chinook harvest near the mid to upper end of the Board range of 272,000 to 285,000 had been expected. The lower catch apparently occurred due to several factors, including differences between preliminary in-season catch estimates and final catches tabulated by computer from fish tickets, and lower than expected late season catch rates resulting from reduced availability of chinook combined with a shift of effort to the relatively strong coho runs in some areas. Other factors included the impact of the EEZ being closed from August 10 through the remaining part of the season and an apparent reduction in the number of boats holding and freezing fish during the season to be sold at the end of the season.

Chinook escapements to two of the three major river systems in Southeast Alaska were increased in 1981 (Table 5). The major Taku River tributaries, the Nakina River and the Nahlin River, showed substantial improvement. The major Stikine River tributaries, the Tahltan River and Little Tahltan River, also showed significant improvement. Escapements to several other lesser producing chinook salmon systems including the Chilkat River and the Farragut Bay streams appeared to have improved over recent years.

In the southern portion of Southeast Alaska, escapements to the medium sized streams in Behm Canal were mixed. The Blossom River and Keta River escapements were approximately twice the 1980 escapements, however, the Unuk River escapement was less than 1980 and the Chikamin River escapement showed little improvement. Escapements to the Behm Canal systems were all substantially below minimum escapement goals.

troll vessels of 150-200 coho per day were reported. Trolling was returned to the weekly fishing period specified in the regulations on August 31 when the high effort levels and good catches began to affect inriver net fishery management before coho run strengths could be assessed.

Evaluation of In-season Management Strategy

The primary management goals in 1981 for the troll fishery were: (1) Increase chinook escapement and reverse the trend in declining production from systems in Southeast Alaska; (2) provide for a harvest of chinook by all gear types within the range established by the Board; and (3) reverse the trend of declining escapements of coho and increase the numbers of coho reaching inside areas while providing for a harvest level determined by in-season assessment of run strength.

Preliminary estimates of the total chinook catch by all gear, including that portion of the winter troll fishery from October 1 to December 31, 1980, indicate that a harvest of approximately 268,100 fish was achieved. This includes an estimated 19,500 fish taken incidentally in net and trap fisheries as shown in Table 4. It appears, therefore, that the final catch will probably be near the lower end of the Board harvest guideline range and the upper end of the Council range (Figure 5).

It appears that, for northern Southeast Alaska streams, the fishing restrictions between April 15 and May 14 contributed to the increased escapements. In the southern districts, which have slightly later run timing, the closure did not contribute significantly to increasing the escapements. The Department has submitted proposals to delay the fishing season opening in portions of District 1. These proposals, if adopted, should increase the chinook escapements to southern Southeast streams.

Coho escapements in 1981 appear to have generally improved over recent years, however, surveys are still being conducted and a more complete assessment will be provided at the Board meeting. Exceptions to these improvements were in the middle districts (5-10) where some systems declined in escapements. The northern and southern systems showed generally good escapements. Primary reasons for the increases in coho escapements were the August 10-20 troll closures and the late season net gear restrictions.

Special Problems

The periodic closures during the 1981 season reportedly caused some crowding of boats into certain areas. Many skippers reported that they could not move into distant areas because of the short time during openings. The result was concentrations of 100 200 vessels in several coastal areas. Additionally, problems were reported in landing of the catch when all of these boats came to port following a closure. Difficulties in unloading, re-icing and re-supplying were a direct result of

overcrowding. Processors reported difficulty in maintaining production quality when large volumes of fish were unloaded at the start of a closed period. Some problems also arose during the time beginning August 20 when the federally managed Fishery Conservative Zone remained closed to fishing while state waters were open. Many fishermen were confused regarding the exact delineation of boundaries for the FCZ area.

Observations on Marked or Scarred Fish

A number of chinook and coho caught in the 198 troll fishery were observed to be scarred. The Department will present a short report with visual aids on this subject at the Board and Council joint session January.

The incidence of these external scars was about 1% for chinook and 3% for coho overall, although there were incidences as high as 10% for some deliveries sampled. The scars appear to be caused from encounters with predators and/or fishing gear, possibly nets, of unknown origin. The Department and National Marine Fisheries Service is continuing to investigate the possible sources of these scars.

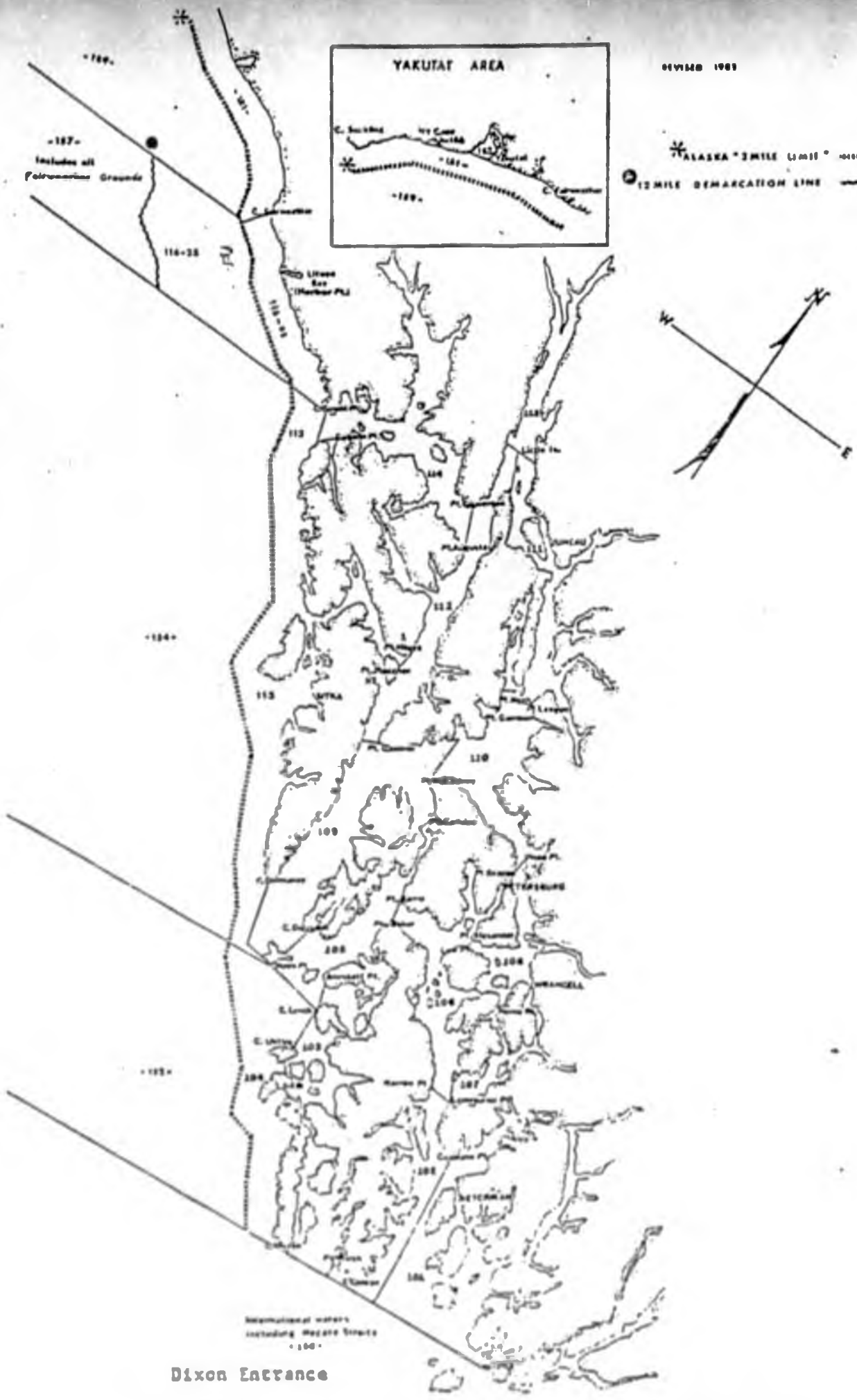


Figure 1 . Southeast Alaska Troll Fishery Statistical Areas

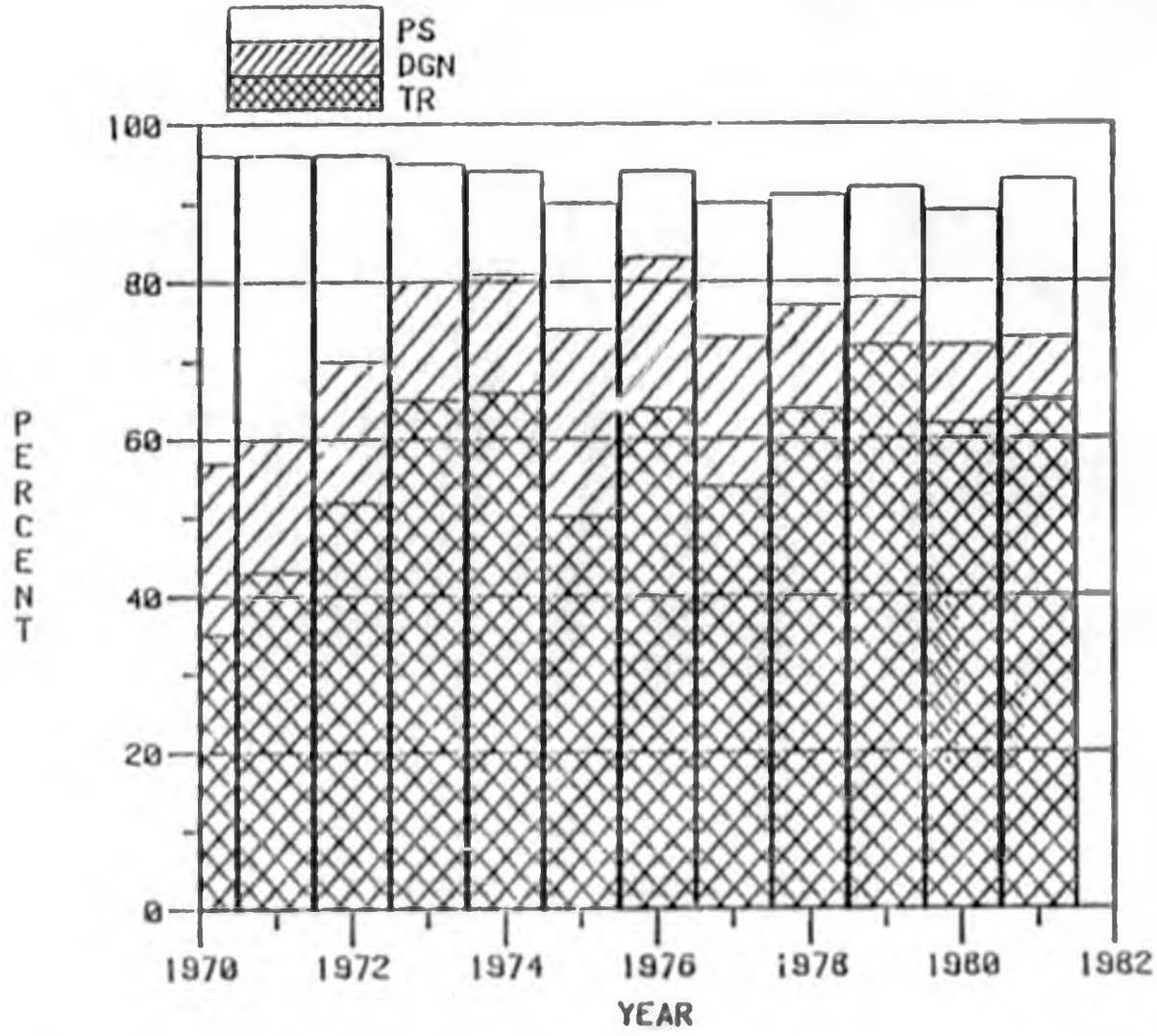


FIGURE 2. PERCENT OF TOTAL SOUTHEAST ALASKA REGION COHO SALMON HARVEST TAKEN BY PURSE SEINE(PS), DRIFT GILLNET(DGN) AND TROLL(TR) GEAR, 1970-81 (ADF&G)

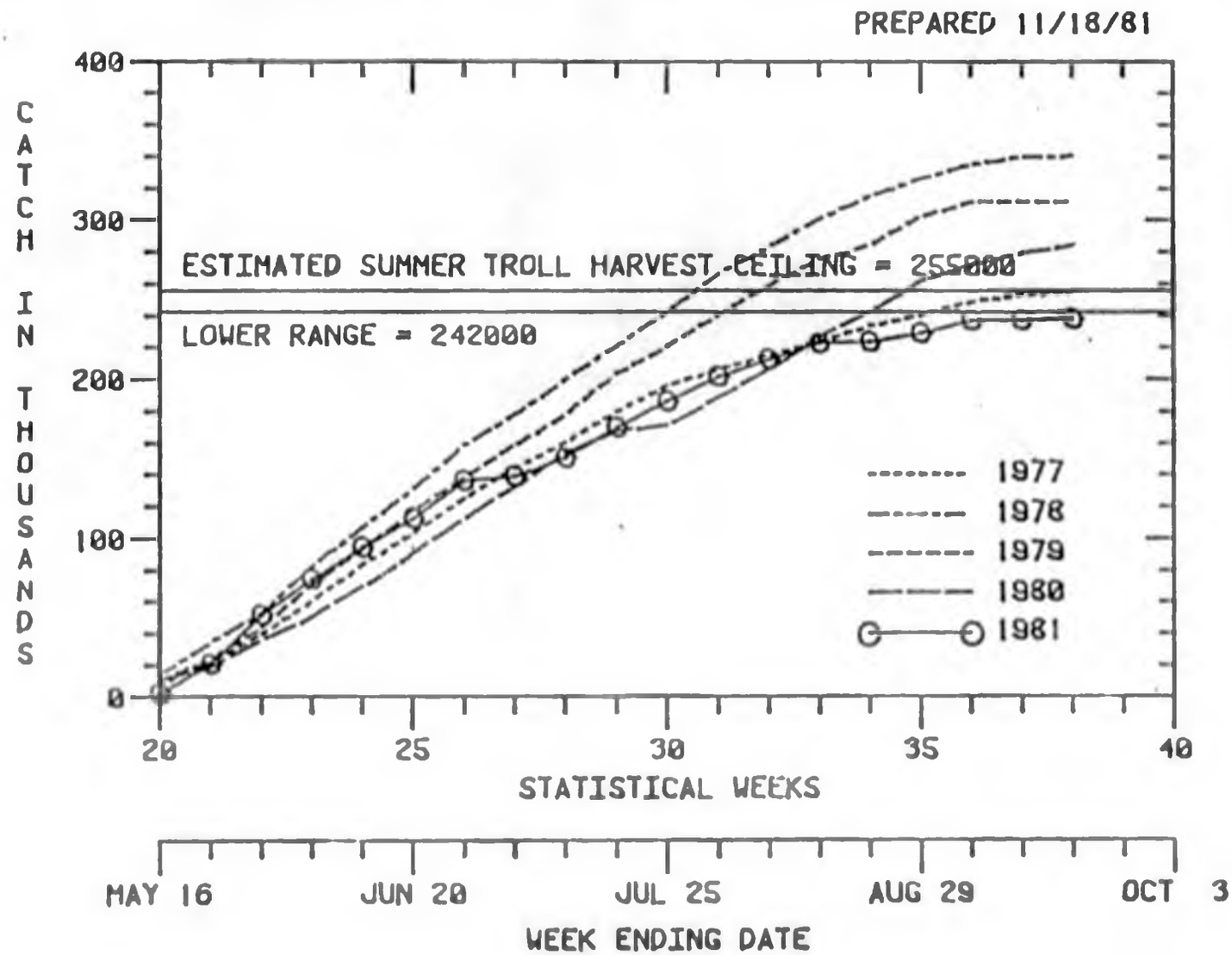


FIGURE 3. SOUTHEAST ALASKA TROLL FISHERY CUMULATIVE CHINOOK SALMON HARVEST BY WEEK BEGINNING MID-MAY, 1977-81 (ADF&G). (1981 DATA PRELIMINARY)

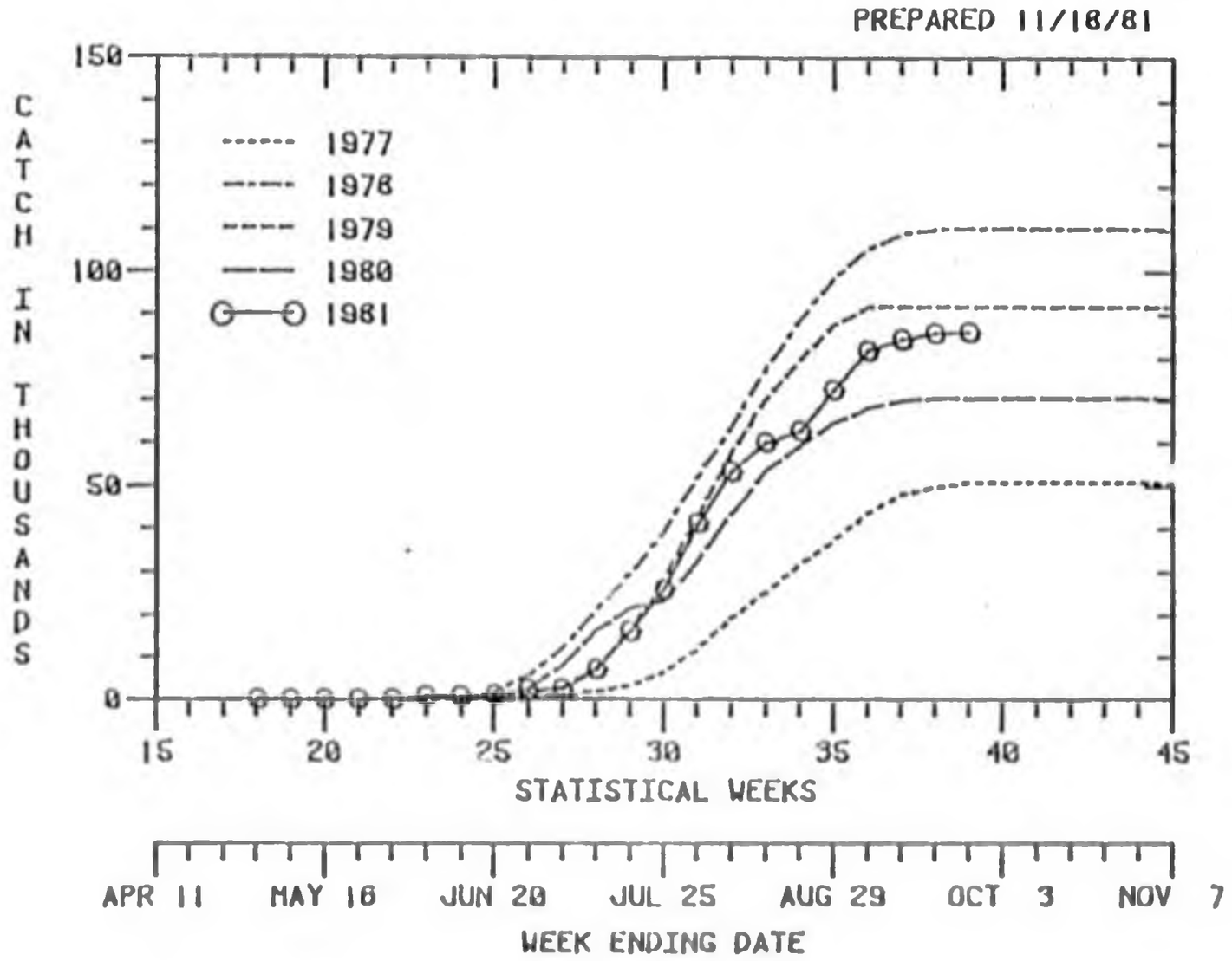


FIGURE 4. SOUTHEAST ALASKA TROLL FISHERY CUMULATIVE COHO SALMON HARVEST BY WEEK BEGINNING MID-MAY, 1977-81 (ADF&G). (1981 DATA PRELIMINARY)

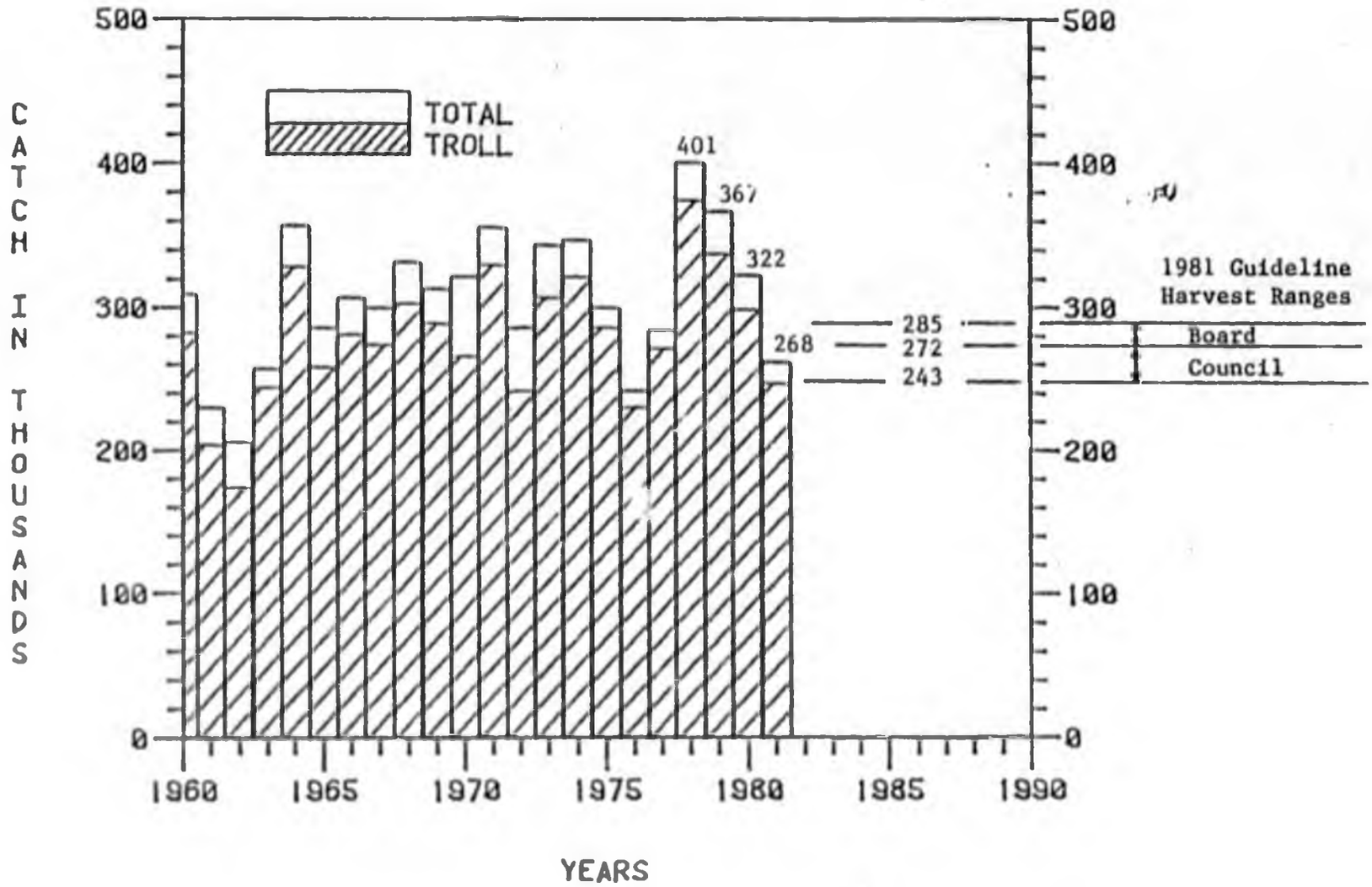


FIGURE 5. SOUTHEAST ALASKA COMMERCIAL CHINOOK SALMON CATCHES, 1960-81

Table 1 . Southeast Alaska region annual commercial salmon catches in numbers by species, 1970 to present (ADF&G 11/12/81).

Gear troll

Year	Chinook	Coho	Sockeye	Pink	Chum	Total
1970	305431	267763	477	70076	2804	646551
1971	333738	391569	936	104633	7672	838548
1972	242095	791668	1068	166853	11680	1213364
1973	307815	540104	1222	134585	10466	994192
1974	322208	846620	2606	263603	13819	1448856
1975	287348	214254	1103	77207	2825	582737
1976	231282	524992	1274	193777	4635	955960
1977	271777	506927	5701	281286	11617	1077308
1978	375624	1102066	2804	617817	26211	2124522
1979	338219	918596	6455	629192	24703	1917165
1980	299930	706521	2902	267465	12213	1289031
Average 1970 to present	301406	61[illegible]189	2413	255136	11695	1189839
1981(Prelim.)	247000	860900	7600	[illegible]000	9000	170[illegible]00

Footnotes: (1) Most recent years data should be considered preliminary.

Table 5. Preliminary estimates of 1981 chinook salmon escapements to selected Southeast Alaska systems (ADF&G 11/81).

Note: Over 30 chinook salmon producing systems exist in Southeast Alaska. However, due to poor surveying conditions in many systems only those included below are currently surveyed in a consistent manner each year to provide a relative measure or index of total chinook salmon escapements to Southeast Alaska systems.

System - Tributary	Type of Survey[1]	Escapements			Minimum Escapement Goal[2]
		Ave. 1975-80	1980	1981	
		Major Systems (3 Total)			
Taku - Nakina	(1)	2,810	4,500	5,100	9,000
- Nahini	(1)	780	1,530	2,940	2,500
Taku Subtotal		3,590	6,030	8,040	11,500
Stikine - Little Tahltan	(1)	620	2,140	3,330	(2,100)
Alsek - Kluckshu	(2)	2,130	1,400	2,110	3,200
		Medium Systems (8 Total)			
Situk	(2)	1,490	1,120	810	(5,100)
Behm Canal Systems					
Keta	(1)	250	190	330	500
Blossum	(1)	100	90	160	800
Chickamin	(1)	220	260	280	900
Unuk	(1)	800	1,050	730	1,800
Behm Canal Subtotals		1,370	1,590	1,500	4,000
		Minor Systems (22 Total)			
King Salmon	(1)	76	70	100	200

[1] Type of Survey Codes (1) - Helicopter peak spawning count (primary method).
(2) - Weir total count.

[2] These minimum escapement goals, established in 1980, represent maximum escapements observed since the 1950's (except for the Situk) when Southeast Alaska chinook stocks were seriously depressed. Revision of goals for some systems, in particular the Situk and Stikine, is expected pending further data analysis.

Table 4 . Preliminary 1981 Southeast Alaska Commercial Chinook Salmon Catches by Gear (ADF&G 11/81)

Fishery	Preliminary Catch
Troll Fishery	248,600 1/
Seine Fishery (incidental harvest)	9,700
Gillnet Fishery (incidental harvest)	8,800
Trap and miscellaneous	1,000
Est. Total Commercial Harvest	268,100

1/ Includes approximately 1,600 fish harvested during that portion of the winter season from Oct. 1 through Dec. 31, 1980.

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER / SUBPORT BUILDING — JUNEAU 99801

June 9, 1966

Mr. Leo Land
Box 122
Haines, Alaska

Dear Mr. Land:

You are correct in stating that no set net sites have been leased in Southeastern Alaska. Further, the setting out of buoys or anchors, does not constitute a legal claim to a set net site--------as you say, it has been and still is a "Gentleman's agreement" type of operation.

The Department of Fish and Game has no jurisdiction in any dispute over set net sites. We do regulate the distance between nets, but this does not necessarily result in any advantage to the individual who may have fished a site prior to the arrival of any late comer.

For your protection, I would suggest that you file for a tide land lease, covering your set net site. While no set net leases are in effect in Southeastern Alaska at the present time, the enabling act is still in effect and application for such leases may be made. Address your questions or requests to:

Mr. Fred Ferrara
Division of Lands
Box 1071
Juneau, Alaska 99801

Yours truly,

ALASKA DEPARTMENT OF FISH AND GAME

Stephen C. Smedley
Area Management Biologist

SCS:ff

THE INDIVIDUALS LISTED BELOW ARE IN JEOPARDY OF LOSING THEIR LIMITED ENTRY PERMITS DUE TO NONRENEWAL FOR THE YEARS 1980 AND 1981:

NAME	PERMIT NO.	AMOUNT DUE FOR 1980	AMOUNT DUE FOR 1981	TOTAL DUE TO BRING CURRENT
ALEXIE, Evan J.	S04W 64077O	$ 40.00	$ 40.00	$ 80.00
ANDERSEN, George, Jr.	S03E 62381I	$ 75.00	$ 75.00	$150.00
ANDREW, Nicolai	S04W 63022O	$ 40.00	$ 40.00	$ 80.00
ANDREWS, Edward	S04Y 62730F	$ 40.00	$ 40.00	$ 80.00
BALDWIN, Ann	S04H 62081H	$ 40.00	$ 40.00	$ 80.00
BEAN, Ronald, Sr.	S01A 59331W	$150.00	$150.00	$300.00
BERG, Richard	S15B 55688V	$225.00	$225.00	$450.00
BOOTH, Henry, Sr.	S04X 64328B	$ 40.00	$ 40.00	$ 80.00
BULLARD, Sophie	S04T 60086B	$ 40.00	$ 40.00	$ 80.00
CURTIS, John, Sr.	S04X 64404U	$ 40.00	$ 40.00	$ 80.00
FLORESTA, Domingo (EST.)	S04T 57414F	$ 40.00	$ 40.00	$ 80.00
GAMBLE, Shari	S04D 58971V	$ 40.00	$ 40.00	$ 80.00
GOODWIN, John, Sr.	S04X 63873X	$ 40.00	$ 40.00	$ 80.00
HIRATSUKA, Hannah	S04T 64739V	$ 40.00	$ 40.00	$ 80.00
JACOBSON, Allen (EST.)	S04H 60723R	$ 40.00	$ 40.00	$ 80.00
JOHNSON, Harry	S04T 65146N	$ 40.00	$ 40.00	$ 80.00
JOHNSON, Matilda	S04T 64699Z	$ 40.00	$ 40.00	$ 80.00
KATCHATAG, Joseph, Jr.	S04Y 63878R	$ 40.00	$ 40.00	$ 80.00
KENWORTHY, Roderick	S04X 63662P	$ 40.00	$ 40.00	$ 80.00
NEKEFEROFF, William	S03T 65132S	$ 75.00	$ 75.00	$150.00
NICK, Sarah M.	S04W 64029K	$ 40.00	$ 40.00	$ 80.00
ODEM, Anita (EST.)	S04T 60120S	$ 40.00	$ 40.00	$ 80.00
OKITUN, Isaac	S04Y 65064E	$ 40.00	$ 40.00	$ 80.00
PETER, James, Jr.	S04W 64337Z	$ 40.00	$ 40.00	$ 80.00
RAPHAEL, Wilfred	S04Y 63480Q	$ 40.00	$ 40.00	$ 80.00
SUSKUK, Sophie	S04T 56229X	$ 40.00	$ 40.00	$ 80.00

FEES MUST BE RECEIVED BY THE COMMERCIAL FISHERIES ENTRY COMMISSION WITH A SIGNED RENEWAL FORM ON OR BEFORE DECEMBER 31, 1981 OTHERWISE THE PERMIT WILL BE FORFEITED TO THE COMMISSION. (Fees vary for residents and nonresidents; figures given are based on information in Commercial Fisheries Entry Commission files. If residency status has changed, the appropriate fees must be submitted.)

S01 Purse seine S03 drift gillnet
S04. ~~Setnet~~ S05 hand troll

Feb. 14, 1982

FEB 18 1982

Dear Sir

Regarding the regulations prohibiting sport fishing off troll vessels I feel they are very unfair & should be repealed.

Sport fishing is allowed off all other vessels, seiners, gillnetters, etc. A large share of the hand troll vessels just put their numbers on with friction tape & remove them whenever they desire to sport fish. This leaves only the power ~~troll~~ vessels that you are unable to sport fish from.

We had our power troller custom built in 1978 so we could accomodate guests once in a while, mostly grandchildren & relatives. That same year they passed the regulation prohibiting sport fishing from a troll vessel.

Since our numbers are permanently mounted we are unable to sport fish at any time from our vessel.

In reference to the method used by the Dept. of Fish & Game to determine potential fish catch statistics there has always been a large margin of error in their statistics.

They depend a lot on creel catch statistics locally ~~in~~ in a few of the boat harbors here to regulate our commercial closures.

We are not notified of closures far enough in advance. Last year we fueled up, bought ice & bait & hired a puller, leaving here on June 21st & travelling out about 100 miles to the fishing grounds. We heard on June 23rd they were having a 10 day closure starting on June 26th. This short notice was a financial hardship on us having

spent all this money for food, fuel ice, & bait & a puller plus the long run out & back.

My brother-in-law & his wife planned on coming up & fishing with us for two weeks, & purchase non-resident crew member licenses for them. After talking to Fish & Game & being told if ther was another closure it would be in late July we decided they should come up Aug. 1. They closed the season Sunday midnight Aug. 9 so counting our travelling time to the grounds We only got in 7 days fishing.

I am sure there are numerous other reasons that have been presented to you & instances of poor management. Hoping to see favorable action on this.

Your Truly
Kenneth L Scott
Box 297
Akutan, AK 99821
F V Sylvan

Board of Fisheries Decision on
Sport Fishing From Commercial Trolling Vessels

17 Feb 82
(Mil Zahn
Exec Director, Boards of Fisheries & Game)

In considering the allocation of harvest among troll fisheries the Board was concerned over accurate monitoring of the various harvests.

It was widely perceived, as indicated by public testimony at Board meetings, that some sport caught troll salmon were being sold on the commercial market.

In addition there was a fluctuating shift of effort by vessels that fished both sport and hand troll seasons and areas on an opportunistic basis. The result was that the sport and hand troll harvest figures could not be separated accurately for management purposes.

The Board felt that prohibiting a sport catch from hand troll vessels would limit the overall commercial trolling effort. In essence, the Board decision was intended as a control on increasing harvests.

LYNN CANAL NEWS

SATURDAY

OCTOBER 30, 1976

PAGE ONE

AFTER ONE SEASON'S OPERATION VIRTUALLY NO MORTALITY WAS OBSERVED WHICH COULD HAVE BEEN ATTRIBUTED TO THE WEIR AND ITS OPERATIONS RUMORS OF INDIVIDUALS FISHING FROM THE WEIR HAVE BEEN INVESTIGATED AND FOUND TO BE BASICALLY UNFOUNDED . A FEW INDIVIDUALS HAVE ATTEMPTED TO USE THE CATWALK AS A FISHING PLATFORM, BUT SUCH ATTEMPTS ARE DISCOURAGED BY THE TECHNICIANS IN ATTENDANCE. THE CHILKOOT AND CHILKAT LAKES PROVIDE A VALUABLE RESOURCE AND GREATLY ENHANCE THE ECONOMY OF THE HAINES AREA. IN ORDER TO EFFECTIVELY MANAGE THIS RESOURCE, DEPARTMENT BIOLOGISTS MUST HAVE ACCURATE INFORMATION ON THE MAGNITUDE OF THE ESCAPEMENT AND OTHER RELATED BIOLOGICAL DATA. THE CHILKOOT WEIR IN ITS FIRST YEAR OF OPERATION HAS PROVEN TO BE A VALUABLE ASSET IN ACQUIRING THIS INFORMATION .

LYNN CANAL NEWS
SATURDAY
OCTOBER 30 ,1976
PAGE ONE

THE CHILKOOT WEIR: VALUABLE ASSET

THE CHILKOOT WEIR CONSTRUCTED IN FEBRUARY OF 1976 AND IN OPERATION BY JUNE OF THIS YEAR IS OFFERING ALASKA DEPARTMENT OF FISH AND GAME BIOLOGISTS ACCURATE INFORMATION FOR RESEARCH PROGRAMS RELATED TO ALASKA'S FISHERIES RESOURCES . THE WEIR IS SITUATED IN THE CHILKOOT RIVER NEAR HALINS. TECHNICIANS OPERATING THE CHILKOOT WEIR ALLOW THE FISH TO PASS A MINIMUM OF OF THREE TIMES A DAY , HOWEVER , [redacted] THE WEIR IS OPENED AND FISH ARE ALLOWED TO PASS [redacted] THROUGH THE CHANNEL. TWO TECHNICIANS ARE IN ATTENDANCE AROUND THE CLOCK AT THE WEIR AND DURING PEAK PERIODS AN ADDITIONAL PERSON IS ON DUTY. THE CONSTRUCTION OF THE WEIR IS SUCH THAT OPENINGS CAN BE CREATED ANYWHERE ALONG ITS LENGTH . THE PROCEDURE IS QUITE SIMPLE. ALL THAT IS REQUIRED IS THE REMOVAL OF A NUMBER OF PICKETS CREATING AN OPENING OF APPROXIMATELY TWO FEET. AS THE FISH PASS THROUGH THIS OPENING THEY ARE COUNTED. THE PICKETS ARE PLACED INDIVIDUALLY AND HAVE A GAP OF 2 AND 9/16 INCHES WHICH ALLOWS PINK SALMON, CHUCKO AND MOST TROUT TO PASS FREELY THROUGH THE WEIR. DEPARTMENT REPRESENTATIVES HAVE RECEIVED EXPRESSIONS OF CONCERN FROM THE PUBLIC THAT THE CHILKOOT WEIR MAY ADVERSELY AFFECT THE ANNUAL RUN OF SOCKEYE AND THAT THE POOR RUN THIS YEAR WAS BROUGHT ABOUT BY THE STRUCTURE'S PRESENCE. DEPARTMENT BIOLOGISTS PRESENT AT THE FACILITY DURING THE SOCKEYE RUN THIS YEAR OBSERVED THESE FISH PASSING FREELY BETWEEN THE PICKETS AND SPAWNING HALF OF A MILE UPSTREAM. BIOLOGISTS NOTED THAT NATURAL POPULATIONS ARE SUBJECT TO FLUCTUATIONS IN SIZE AND THAT 1976 APPEARS TO HAVE BEEN A LOW CYCLE YEAR. [redacted] HAVE BEEN RECEIVED FROM THE PUBLIC. THE CONCERN WAS EXPRESSED THAT THE FISH MIGHT HAVE BEEN KILLED BY THE WEIR. THE PRESENCE OF THE CARCASSES MAY BE EXPLAINED BY THE FACT THAT AFTER SPAWNING ALL PACIFIC SALMON DIE. MANY SALMON SPAWN AND DIE IN THE RIVER BELOW THE WEIR AND MANY IN THE RIVER AND LAKE ABOVE THE WEIR AFTER THE CARCASSES OF FISH THAT HAVE SPAWNED ABOVE THE WEIR LODGE AGAINST THE STRUCTURE. TECHNICIANS, IN THE PROCESS OF CLEARING DEBRIS FROM THE STRUCTURE, PUSH THESE CARCASSES OVER THE WEIR AND THEY CONTINUE TO DRIFT DOWNSTREAM TO LODGE IN RIFFLES OR ALONG THE SHORELINE. IT MUST BE STRESSED THAT THIS STRUCTURE WAS DESIGNED WITH THE SAFETY OF THE FISH IN MIND AND

Fishing Days Icy Straits

886

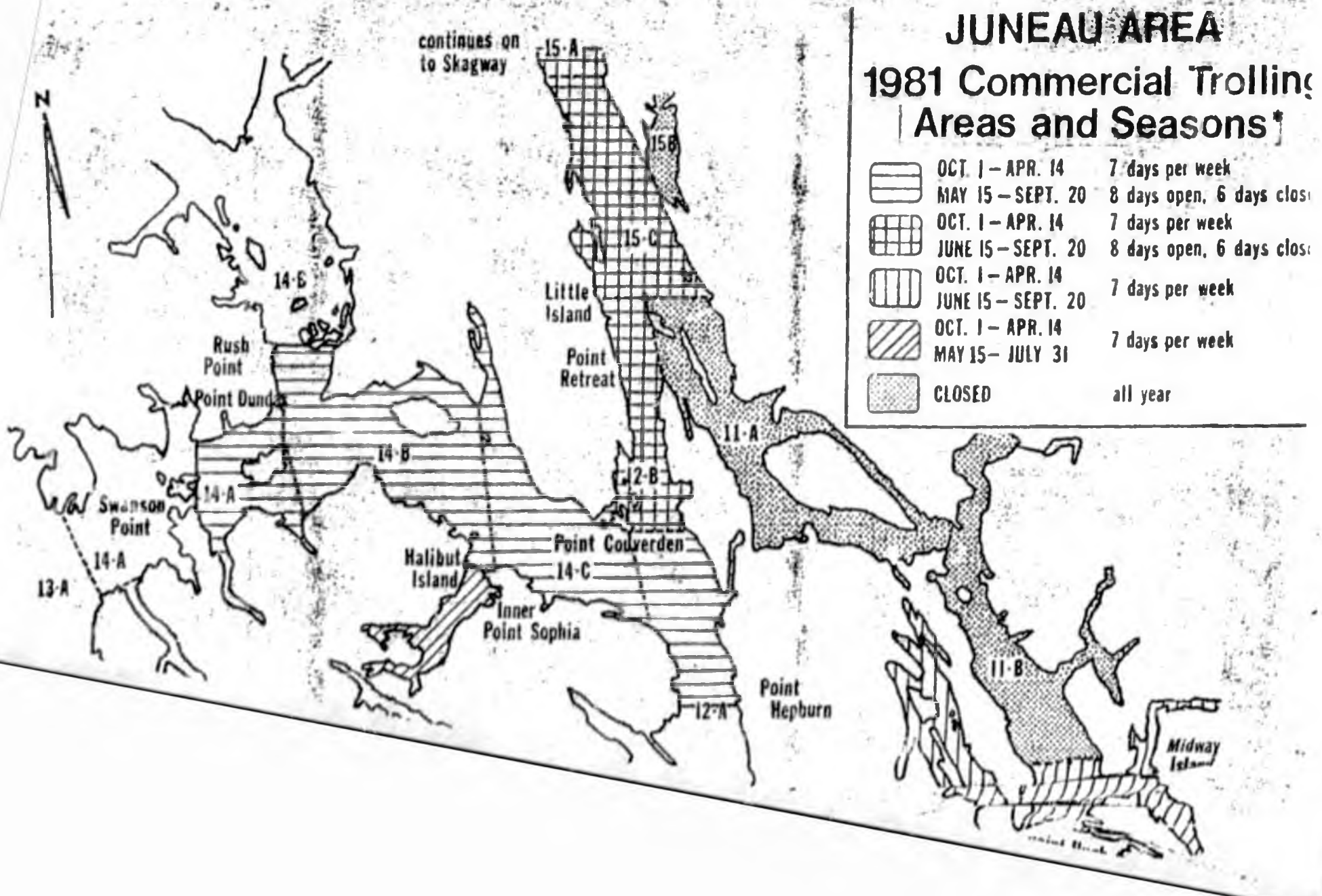
April 15	16	17	18	19	20	21	22	23	24	25	26	27	28
May 29	30	1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24	25	26
27	28	29	30	31	June 1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25	26	27	28	29	30	July 1	2	3	4	5	6	7
8	9	10	11	12	13	14	15	16	17	19	20	21	
22	23	24	25	26	27	28	29	30	31	Aug 1	2	3	4
5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	Sept 1	2
(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	11	12	13	14	15	16
17	18	19	20										

	no. of Handtroll Permits used	no. of Fishing days in Icy Straits
"78"	2622	158
"79"	2206	129
"80"	1666	96
"81"	1135	62

JUNEAU AREA

1981 Commercial Trolling Areas and Seasons

	OCT. 1 – APR. 14	7 days per week
	MAY 15 – SEPT. 20	8 days open, 6 days clos
	OCT. 1 – APR. 14	7 days per week
	JUNE 15 – SEPT. 20	8 days open, 6 days clos
	OCT. 1 – APR. 14 JUNE 15 – SEPT. 20	7 days per week
	OCT. 1 – APR. 14 MAY 15 – JULY 31	7 days per week
	CLOSED	all year



Klukwan ,Alaska

February , I5. I982 FEB 1 8 1982

Representative , Dick Randolf

And Members of A.R.R.C. Committee.

Alaska State Legislature
Pouch V. State Capitol
Juneau , Alaska 998II

Chairman, Dick Randolf,

It was my Intent to testify via teleconference February I0th I982, However, due to the difficulties within the system at that time, all communities were disconnected . Therefore , the following is parts of my concerns, although not new, but supportive of the numerous complaints received by ..R.R.C.

(I) I believe the adequacy on statstics claimed by the department of fish and game on resource management methods are unjust to our fishery , as it affects commercial fishermen.

(2) I suppoef the Introduction of a Bill that would allocate funds to a private resarch agency to Investigate fish and game methods of collecting and evaluating stastliss regardeng fisheries stocks.

(3) In reference to time and area closures , I will enclose letters directed to area biologist Ray Staska, with c.c. to other s.

(4) Other related letters.

(5) News Artacle, relating to fish weir. (Haines News)

My opposition to Chilkat fish weir, It is detrimental to commercial fishermen because our commercial fishing time is regulated to the excapement into to the lakevia the fish weir , more so during the sockeye season . It is located about twenty five miles away from salt water and our weekly fishing period is adjusted accordingly, therefore it is detrimental to our commercial fishing. furthermore, my descussion with Dave Cantillion , Jim Duncan, Mike Miller and a representative from the govenors office , Indicated by Cantillion that there was a tremendous Increase in Taku after the fish weir was removed. Also most recently, Ray Staska reported that he found forty streams and tributaries below the Chilkat Weir. I would appreciate it if needed to testify before your committee. Thank you kindly,

Sincerly,

Joe Hotch

Joe Hotch

enclosure letters
cc file

Klukwan, Alaska

Mr. Ray Staska
Area Biologist

Haines, Alaska

Dear Mr. Staska:

It is very difficult for me to accept your theory for closing the fall season of Lynn Canal gillnet commercial fishing.

With the large amount of fishermen that met with you at your office before your announcement, that expressed their view on why it should have been kept open even as a test fish 12 hours or more per week was a demanding and a justifiable unanimous position.

1. I highly disagree with your position that should you keep this area open, you would discriminate against non-residents, which in this case would be out of state fishermen, as you pointed out. If they desire to leave this state or remain has no sound bearing in you making your decision upon our request for test fishing.

2. I believe your concentration on the river escapement does not fully protect either sockeye, chum or coho salmon. Salt water salmon protection is also necessary, fishermen should not be permitted to leave port before day break, opening date and gillnet vessels anchored between Juneau and Haines prior to opening date should be checked for salmon.

3. I believe all fishermen that were at the meeting were disappointed that the Commissioner would not meet with us to discuss continuation of salmon fishing.

4. And as I had stated at the meeting, I have a strong position that before too long salmon will be spawning within Pyramid Island to Glacier Point area because it had been closed to commercial fishing for many years, and you have held that same position since you have been stationed here also.

Salmon does not go up river within it's proper time frame as it use to in the past to its proper spawning areas. I submit this theory over your title as area biologist for the State of Alaska.

Sincerely,

cc: Governor Jay Hammond
Commissioner, Fish & Game
Representative Jim Duncan
Representative Mike Miller
Ronald Williams, ANB

Dear Editor,

I would like to comment on the three percent tax on fishermen that seems to have passed by the recent voting held, I have been voting against it all along, I agree with Mr Mackie upon the voting procedure used the aquaculture associations , as I must have gotten six envelopes each with a ballot enclosed, some fishermen might have voted several times . I have opposed it for several reasons, One there is no guarantee that my children or any of my family members will be a part of the program should I be out of the fishery by one reason or another.
Two; there is no acknowledgement of my three percent already paid , being received by the aquaculture associations or state to date and the associations or the state has been taking the three percent for several years now. Other than the cannery tickets showing it being taking there is no word saying we have recieved your three percent from the cannery for respective season. If I am not acknowledged as a part , I have no reason to support such a program that will only ask for my financial support. It appears that remarks of those that are operating such hatcheries are hard to have a positive attitude towards an aquaculture program. All we need is someone that will listen to proper local knowledgeable people and receive knowledge and understanding of our natural salmon stock are span in areas. I firmly believe that the fish and game representatives in all areas should meet in each community and long term look at fishery should be the goal , right now only the immediate regulations are discussed and taking our choices hasty , too many times the ear only listens to the fisherman that delivers the most salmon, it is good to see someone deliver a large amount of salmon however, the knowledge of the area is not really within the amount of catch or of the many fishermen that come from other areas using modern equipment. Enforcement is needed by time and time on the grounds , state police are not involved in activities on the waters.
Mr. Fred Mowatt , never was once, since he was the agent, a fisherman was stopped right now if there was a violation, and the south boundary lines were moved recently, . two hundred fatoms distance was enforced, nets were tied to there nets when fishing you never let your end go , only to untie ends or deliver your salmon to the tender. Salmon was counted when it was bought by per salmon. when it was switched to weight wise it was not counted but is being averaged out , so the count is not even near accurate, on a thousand

pounds , there is a loss of up to twenty salmon.
and the point of delivery is almost immaterial because salmon caught on the Chilkat side is sometimes delivered on the Chilkoot or mud bay side and Chilkoot or mud bay can be salmon is delivered on Chilkat side.
Also the understanding of entry permit , at the beginning was, it would limit those that enter alaska for commercial fishing from other states which is non residents fishermen. if this was not the intent than we were mislead to believe it as such. should the hatchery produce as being told to us, our fish prices would go down because of over abundance of salmon, as it is we are hearing from the canneries , as not selling as in the past. warehouses are still selling a large amount of canned salmon , we've been told for several years now. cost of operating vessel, machinery and gear has increased considerably over the few years.
these are a few of my concerns.

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

6

and strength

also chil[illegible] salmon , now
the smaller [illegible]

2. Having fully [illegible] seals, sealions,
[illegible] harbs and whale[illegible] Lynn Canal and eat many
fish that the state fish and game consider having for escapement.

3. Several years [illegible] the sockeye streams on the
Chilkat river and [illegible] closed Lynn Canal to commercial
fishing at that time.

4. Not enough attention [illegible] natural salmon areas rivers
and streams. [illegible], stumps and [illegible] debris has filled
Chilkat river over the years with out attention.
The fish wheel [illegible] does not answer the needs to
resolve escapement [illegible] increase of salmon.
over a period of [illegible] rises and drops
[illegible] reasons that salmon
[illegible] small streams.

[illegible] salmon
[illegible], [illegible] very wide across
the river. [illegible] and deep place where
[illegible]

[illegible] salmon in Lynn Canal
[illegible] , Lynn Canal
[illegible]
[illegible] season, a

[illegible] any other business person.
[illegible] dated by the state exc..
[illegible]
[illegible] would before we receive our
[illegible]
[illegible] to fishermen in Lynn Canal
district if [illegible] closures is established by the state
[illegible] with an average of the preceding
year and even [illegible] for those that may
[illegible]
[illegible] should be considered
for [illegible] emergency closurers in all
[illegible]

On July 17, [illegible] , I met with representative Jim Duncan and his assistant and discussed the eight points of concerns, and compensation for fishermen in [illegible] waite an opening and compensation to be applicable when ever an area is closed by the fish and game department.

And that an unemployment type of insurance be considered for fishermen that are effected by [illegible] disasters.

I was pleased with the meeting and it was latter decided that the next day that the governors representative and fish and game representative be present also representative Mike Miller, district representative .

On July 18, [illegible] , Bob Waters governors representative , Dave Cantillion fish and game representative, Mike Miller district representative and Jim Duncan district representative and I again discuss the eight points along with compensation and unemployment Insurance , with the unemployment receiving approval to have within the next legislature , a legislation be introduced.

With copies of the eight points in each individuals hand I asked if there were any questions or remarks on any one or all eight points? there were no questions or remarks , therefore I feel these points are justifiable concerning our Lynn Canal fishery and fishermen.

representatives Jim Duncan and Mike Miller requested Dave Cantillion to respond to me by letter upon his review again.

Employment for fishermen of Klukwan was also discussed , which involves the cleaning of the Klehini River of logs stumps and other debris .

All were receptive to my concerns and I am confident that a officials each will work along with our fishing concerns of this area.

[illegible] proposal

[illegible] ver

[illegible] proposed project [illegible] clear open river water [illegible] which [illegible] no importance to salmon, [illegible] during fall months when [illegible] already [illegible].

[illegible] families will [illegible] because of closure of Lynn Canal through out summer season.

project to be in as soon as possible after the river has receded in the fall.

[illegible] to be involved would be [illegible], logs, stumps and other debris and burn on river away [illegible] river.

[illegible] at Klukwan river, [illegible] river towards Klukwan and [illegible] down towards mouth, [illegible] or else will not permit completion of clearing [illegible] could be proposed for the following year [illegible] men could work from 10 mile down with another crew.

The number of men [illegible] involved from Klukwan would be as follows:

[illegible] --- [illegible] $8.00 per hour- $64.00 per day

[illegible] ---------- $1,200.00 per day

[illegible] ---------- $12,000.00 per month

[illegible] ---------- $35,000.00 [illegible]

KLUKWAN A.N.S.

Camp No. 8

P.O. Box 220 ★ Haines, Alaska 99827

(907) 766-2805

. J, '4 ':20

Jim Duncan

Representative District 5

Juneau , Alaska (;01

Dear Mr. Duncan,

As the president of Klukw[illegible] . would like to meet with you as the representative of district 5, to discuss the recent emergency closures that may soon be a complete closure for all salmon season in district 15 to Lynn Canal fishermen.

It affects alot of [illegible] fishermen and twenty one family members directly in Klukwan [illegible] boat, in waters that are [illegible].

I would like to discuss [illegible] with you for immediate consideration, [illegible] of the [illegible] that have been emitting an [illegible] in Klukwan [illegible].

[illegible] the Governor of Alaska [illegible] or legislative , to which my justifications for [illegible] would be [illegible].

[illegible] desirable .

[illegible] of this letter will be [illegible] also.

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

TESTIMONY OF CHRISTOPHER J. PACE TO THE ADMINISTRATIVE REGULATION REVIEW COMMITTEE VIA TELECONFRENCE ON FEB. 17, 1982

FEB 22 1982

" I'm Chris Pace, a troller from Petersburg.

1) On the question of allocation of funds to a private research agency to investigate Fish & Game methods of collecting and evaluating statistics regarding fish stocks; I think that this money would not benefit anyone other than the private biologists and analysts conducting the study. Their conclusion, I suspect, would be that ADF&G's methods and assumptions are basically sound, but that often their surveys lack sufficient intensity to prevent the possibility of erroneous estimates of stock size or composition. Point estimates of certain smaller crab stocks in Western Alaska occassionally have 75% confidence intervals as great as plus or minus 110%! These errors are caused primarily by very low levels of pre-commercial sampling in relation to the estimated value or abundance of a resource. Most often this low sampling intensity is not the intention of Fish and Game personnel, but rather the result of budgetary constraints which force the staffs to adopt a posture of "managment by crisis".

In the case of Southeast salmon fisheries, we, as fishermen, suffer from Fish & Game budget cuts which reduce helicoptor and aircraft stream survey time, temporary help for port sampling and foot surveys of streams, cuts which prevent tagging and enumeration of our Alaskan salmon stocks, and research into the migration of these stocks to determine, for instance, how and why our coho are returning from the ocean with net marks.

Rather than fund a duplicate research effort by a private group, this money could be better spent to fund basic research on Alaska's most important renewable resource, its fisheries.

2) As for sport fishing being prohibited from a Troll vessel - this is obviously discriminatory. I know crabbers and seiners who can use their boats for sport and subsistance fishing, and there should be no differences for any Alaskan commercial fishing vessels.

3) The matter which I feel most warrents the attention of this committee in the way of regulation review is the power of the State Board of Fisheries to adopt regulations without the necessity of public input. We give the legislature similiar power, but you are elected officials and are subject to the ballot box. Members of the Board of Fisheries are political appointees. As a means of instilling the democratic process into the actions of the Boards, formal calls for proposed regulation changes are made to the public and the staffs of concerned State Agencies. These proposals are then compiled into a package for comment, review, and recommendation by staff, public, and local advisory committes. The Boa d should then weigh these opinions to decide on the best cource of action with regard to the condition of the resource and the public interest.

I can think of two recent examples where the Board has adopted regulatory changes which never appeared in the proposal packet:

A) The 1981 decision to limit handtrollers to one line, and

B) The recent decision to reduce the 1982 King Salmon O.Y. to 243,000 fish.

The Board claims that by publishing legal notice of their intent to "ammend, adopt, and review" regulations in a certain fishery, that this gives them carte blanc authority to create any regulations which they feel necessary. These meetings are expensive, lengthy, and difficult to attend for the average resident of the state, and this is why we send representitives of our local advisory committes, or have the opportunity and the advance notice to send written comments and testimony.

I, so far, have been unable to identify how the public interest is served through such an administrative short-cutting of a citizen's ability to provide comment and input into the decision making processes, and feel that it is detrimental to the image of the Board as a democratic institution.

I ask the legislature to review this aspect of the Board's regulatory authority to see if it is consistant with our rights as outlined in the State Constitution, and

suggest that their regulatory authority be limited to acceptance, rejection, or discussion of only those regulation changes, amendments, or deletions contained in the current proposal package.

Thank you

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

FEB 25 [illegible]

February 17, 1982

Mr. Richard L. Randolph
State Capitol
Pouch V
Juneau, Alaska 99811

Dear Mr. Randolph:

I am enclosing a copy of a letter which I wrote to Govenor Hammond concerning the troll fishery in Southeast Alaska. I would appreciate it deeply if you would take time to read this letter so that you may become more aware of the unfortunate situation in which we find our fishery today.

Thank you, in advance, for your time and consideration.

Sincerely,

David R. Carlson
F/V Quest
PO Box 1232
Petersburg, AK 99833
772-3765

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

February 16, 1982

The Honorable Jay S. Hammond, Govenor
State of Alaska
Pouch A
Juneau, Alaska 99811

Dear Mr. Hammond:

I am a commercial Salmon Power Troller in Southeast Alaska. I am writing this letter to you to apprise you of the dire situation in which we now find our fishery. I will try to make this letter as short and brief as possible but there are certain facts and events which have recently taken place of which I believe you should be aware.

Presently, and since 1973, our fishery has been under Limited Entry which has limited the number of participants in the fishery. Although the concept of Limited Entry has been ruled unconstitutional by Judge Carlson, I trust that the Alaska Supreme Court will uphold the Limited Entry Law. In 1980, the Alaska Board of Fisheries in conjunction with the North Pacific Management Council (NPFMC) imposed a "Quota" or "Optimum Yield" on the King Salmon harvest for the first time. This allowed us a harvest of 320,000 King Salmon which was supposed to be the last ten year average of King Salmon harvests in Southeast Alaska. However, this did result in a substancial reduction from the 1979 harvest level. We were led to believe that this harvest level would remain in effect for the forseeable future thus stabilizing our harvest levels. This quota or optimum yield was imposed, for the most part, because both boards believed, although scientific data was grossly inadequate, that we were harvesting a large number of the Columbia River Bright stock of King Salmon which was not reaching the desired excapment goal as outlined by the Washington Department of Fish and Wildlife. In 1981, the Alaska Board of Fisheries and the NPFMC again recommended a further reduction of the King Salmon harvest level. There was, however, a difference of opinion as to whether the reduction whould be ten or fifteen percent. No agreement was reached so we fished last season under a quota or optimum yield range of 272,000 to 288,000 King Salmon. The net result of these quotas or optimum yields and subsequent reductions resulted in a loss of approximately 40% of fishing time as compared to 1979.

In January of this year, the Alaska Board of Fisheries and the NPFMC again met to discuss the Southeast Troll Fishery and regulations for the 1982 season. The NPFMC again recommended another reduction which would lower our King Salmon Harvest to 243,000. The Alaska Board of Fisheries declined to vote in favor of this further reduction at this time. Thus, we now have a range in the quota or optimum yield

of 243,000 to 238,000 King Salmon. Both boards will meet again in March to decide on which figure, or somewhere inbetween, will be the King Salmon harvest for 1932. The Alaska Board of Fisheries did not agree with the NPFMC recommendations for the following reasons: In 1981, we harvested 52,000 fewer King Salmon than in 1980. Although our quota for 1981 was 272,000 to 288,000 King Salmon, we actually harvested only 268,000 King Salmon. (This figure includes harvest by all gear types in Southeast Alaska). This was because Alaska Fish & Game made a "double-entry" error with their computer calculations which resulted in an additional closure late in the season. Bear in mind, now, that the primary purpose for these reductions in our King Salmon harvests was to allow more escapment of the Columbia River Bright stock of King Salmon. As a result of this reduction of 52,000 fewer King Salmon harvested in 1981, the number of King Salmon reaching the Bonneville Dam near the mouth of the Columbia River increased by a paltry 2000 fish. This indicates a cost-benefit ratio of 25 to one. In other words, for every 25 King Salmon we allow to pass through Southeast Alaskan waters, one makes it to the mouth of the Columbia River. The worst of the situation is yet to come. By the time these fish made it to the McNary Dam and, thus, to their spawning grounds (I believe four dams and about one hundred miles upriver) there were actually fewer fish than there were in 1980. It is obvious that the reductions in King Salmon harvests in Southeast Alaska have had absolutely no effect on this stock of King Salmon. The escapement goal as proposed by the Washington Department of Fish and Wildlife for the Bright stock of King Salmon is 40,000 fish. 63,900 made it to the Bonneville Dam but only 25,500 made it to the McNary Dam. That means an interdam loss of SIXTY PERCENT. What happened to these fish? Well, the dams certainly don't help the fish on their way to the spawning grounds but poaching and other illegal harvesting of these fish is certainly to be considered. The Washington Department of Fish and Wildlife has refused, or at least been very reluctant, to solve the problem. It has been much easier to point their finger at Alaskans than at the problem in their own "backyard". It has already been determined that if we were not to harvest any King Salmon at all in Southeast Alaska, the escapement goal would still not be met for these stocks of fish. In fact, the Washington Department of Fish and Wildlife has now built in a 60% interdam loss in escapment goals. They are obviously not willing to determine the reasons or attempt to alleviate this loss of King Salmon between the dams. An obvious solution, although perhaps an unorthodox, one, would be to truck these King Salmon the hundred or so miles to the upriver side of the McNary Dam and thus to their spawning grounds. So Washington and Oregon again approached the NPFMC and the Alaska Board of Fisheries to further reduce our harvest quota or optimum yield which history has shown will provide no benefit to these stocks of King Salmon. It must

also be pointed out that the Canadians harvested more than three times the number of King Salmon that we harvested in 1981. I'm sure you are aware of the fact that geographically they are much closer to the Columbia River than we are in Southeast Alaska.

This brings me to the purpose of writing this letter to you. I urge you to support and encourage the Alaska Board of Fisheries to adhere to their 288,000 harvest range of King Salmon for 1982. Further reductions will NOT reduce or alleviate the problem of the Columbia River Bright King Salmon stocks. We simply DO NOT catch that many to make any significant consequence. Our King Salmon harvest has already been reduced by approximately one-third since 1979. Further reductions would deal an almost fatal blow to our troll fishery.

I purchased a permit in 1979 and the value of that permit has been reduced by a third since then. The vessel I own is essentually unsellable for a "fair" price because no one is willing to enter the fishery with all the "chaos" we have been going through for the past two years. Although our seasons and harvest levels have been significantly reduced over the past two years, the level of participants allowed in the fishery has remained the same. It doesn't take a mathimatical genius to figure out that reduced harvest levels and fishing seasons means less money for the fisherman. I am unable to make a living at trolling, however, I cannot sell out because the present market values would not cover the existing loans I have on the boat and permit. Since 1979, we have had absolutely no stabilization in our fishery. Every year we have been confronted with even further cuts and reductions in our harvest levels and seasons. This year, again, we will not know how many King Salmon we can harvest or what our fishing seasons will be until the end of March. Somehow, someone has got to make some coherent sense out of this situation if there is to be any hope at all of maintaining this fishery for those other than school teachers, vacationers, etc.

I offer the following recommendations or suggestions to save the fishery from virtually becomming extinct:

1. Support the Alaska Board of Fisheries with their 288,000 King Salmon harvest level and urge them to resist any further reductions until it can be shown, for biological and NOT political or allocation reasons, that further reductions will benefit the fishery.

2. Take a hard look and make revisions in the Limited Entry system so that reductions in our harvest levels will result in a reduction of participants allowed to enter the fishery so that those remaining in the fishery have a reasonable opportunity to make a living which was the whole purpose of instituting Limited Entry in the first place. I purchased my permit expecting to have this opportunity. With all the reductions imposed on us over the past two years, I can no longer do this..

3. Urge our two Senators and one Representative in the United States Legislature to offer an amendment to revise the Federal Marine Fisheries Act to allow more representation by Alaskans on the NPFMC. At the present time, Alaskans do not even have a voting majority on this body; the very body that regulates our traditional fisheries. In addition, all persons appointed to the NPFMC should fully support Alaskans and their fisheries. Clem Tillion, a present member of the board, has repeatedly been quoted as saying that if he has a choice between voting for the fisherman or the fish, he will vote for the fish every time. He has voted for the fish but the fish he has voted for in our situation have wound up in the hands of Canadian or Washington fisherman or in some cases, poachers on the Columbia River. It would also be exceedingly helpful if there was a troller on the NPFMC. As long as this body is going to continue to concentrate on the troll fishery, we need an Alaskan troller to represent and convey our interests and concerns.

4. Mandate that all regulations be reviewed by the local advisory boards. At present, most regulations that are passed by the Alaska Board of Fisheries are not those which have been reviewed and considered by the advisory boards. This has led to a total lack of confidence by fishermen in these boards. This does not help in promoting trust in government.

5. Lastly, I, and many other trollers, would like to know what the future of our fishery is going to be. If it is the desire of the State of Alaska and the Federal Government to put trollers out of business, I'd like to know it now so I can do something else. We can't take being "nickled, dimed, and quartered" to death. We HAVE to have some stabilization and confidence in this fishery if it is to survive.

I know this letter is lengthly and I apologize but I am very concerned and dissappointed over what has happened to our fishery and my investments and livelihood. I rely on fishing to support my family and make a living. I can no longer do this. I would appreciate your assistance in this matter.

Thank you for taking the time to read this letter.

Sincerely,

David R. Carlson
F/V Quest
Po Box 1232
Petersburg, Ak 99833
772-3765

LEGISLATIVE AFFAIRS AGENCY

SITKA LEGISLATIVE INFORMATION OFFICE
210 LAKE STREET, (BOX 737)
SITKA, AK. 99835 PHONE: 907-747-6276

MEMORANDUM

February 11, 1982

TO: SIGRID FRY, ARR Committee Staff

FROM: ELAINE SUNDE, Sitka Legislative Information Office

FEB 17 1982

Enclosed is original hand-written testimony from a Sitka resident. He requested that the Legislative Office transmit his testimony, via computer, last night to assure that his comments were before the Committee, along with other testimony.

You may wish to have his original document in lieu of the computer message.

Just use Julie's telecom copy not original letter Sigrid.

Testimony of Joseph Malley a troller, member of ATA, Troll-pac.

J. Malley Box 865 Sitka, Ak 99835

Eric McDowel in an earlier testimony mentioned six sources of error that in aggregate accounted for a one million dollar 'mistake'. This 'mistake hurt all trollers & right of the bat I'd like to mentio that I find it morally reprehensible that no one responsible for this 'mistake' has come forth with an admission of error & a formal apology.

Perhaps then a one million dollar mistake may be too insignificant to justify an apology. So hereafter I'll address myself to one error whose effect upon the future of all our salmon fisheries shall far exceed one paltry million dollars.

The error that I am referring to is simply that the statistical methodology employed by management in our fisheries is not even formally (that is mathematically) proper. The only adequate statistical tool to employ in a modeling problem as complex as that posed by the regulation of the salmon fishery is called a multiple regression program. Now in two minutes I'm not going to be able to explain what a multiple regression is, but I'll just mention that multiple regression is standard practice throughout industry of virtually every description. [redacted]

My question is this: What efforts are being made by the ADF&G statistical branch to generate a multiple regression analisys of the salmon harvest, and where do they get off subjecting user groups to the hardships imposed by the lack of one.

In closing I'd just like to mention that there is virtually no chance for a mistake in a proper regression analisys.
(of the typical historical magnitude)
Can the State of Alaska afford to be without one?

COPY

MSG 82-00007514 PRTY 1 IN= 0018
FROM: SITKA LIO TO: JUN/INFO..
ACCT: KINNEY SUBJ: FISHERIES REG. TESTIMONY TYPE: PAGE 1

TO: REPRESENTATIVES RANDOLPH, ABOOD, MOSS
SENATORS ZIEGLER SR., COLLETTA, HOHMAN JR.
FM: JOSEPH MALLEY
MEMBER OF ATA, TROLL PAC
P.O.B. 865
SITKA, AK 99835
RE: FISHERIES REGULATIONS
SIRS: ERIC MCDOWEL IN AN EARLIER TESTIMONY MENTIONED SIX SOURCES OF ERROR THAT IN AGGREGATE ACCOUNTED FOR A ONE MILLION DOLLAR 'MISTAKE'. THIS 'MISTAKE' HURT ALL TROLLERS AND RIGHT OFF THE BAT I'D LIKE TO MENTION THAT I FIND IT MORALLY REPREHENSIBLE THAT NO ONE RESPONSIBLE FOR THIS 'MISTAKE' HAS COME FORTH WITH AN ADMISSION OF ERROR AND A FORMAL APOLOGY.
PERHAPS THEN A ONE MILLION DOLLAR MISTAKE MAY BE TOO INSIGNIFICANT TO

FROM: SITKA LIO TO: JUN/INFO.
ACCT: KINNEY SUBJ: FISHERIES REG. TESTIMONY TYPE: PAGE 2

JUSTIFY AN APOLOGY. SO HEREAFTER I'LL ADDRESS MYSELF TO ONE ERROR WHOSE EFFECT UPON THE FUTURE OF ALL OUR SALMON FISHERIES SHALL FAR EXCEED ONE PALTRY MILLION DOLLARS.

THE ERROR THAT I AM REFERRING TO IS SIMPLY THAT THE STATISTICAL METHODOLOGY EMPLOYED BY MANAGEMENT IN OUR FISHERIES IS NOT EVEN FORMALLY (THAT IS MATHEMATICALLY) PROPER. THE ONLY ADEQUATE STATISTICAL TOOL TO EMLOY IN A MODELING PROBLEM AS COMPLEX AS THAT POSED BY THE REGULATION OF THE SALMON FISHERY IS CALLED A [redacted] NOW IN TWO MINUTES I'M NOT GOING TO BE ABLE TO EXPLAIN WHAT A MULTIPLE REGRESSION IS, BUT I'SS JUST MENTION THAT MULTIPLE REGRESSION IS STANDARD PRACTICE THROUGHTOUT INDUSTRY OF VIRTUALLY EVERY DESCRIPTION.

MY QUESTION IS THIS: WHAT EFFECTS ARE VEING MADE BY THE ADF&G STATISTICAL BRANCH TO GENERATE A MULTIPLE REGRESSION ANALYSIS OF THE SALMON HARVEST, AND WHERE DO THEY GET OFF SUBJECTING USER GROUPS TO THE HARDSHIPS IMPOSED BY THE LACK OF ONE.

MORE _
MSG 82-00007514 PRTY 1 IN= 0010
FROM: SITKA LIO TO: JUN/INFO.
ACCT: KINNEY SUBJ: FISHERIES REG. TESTIMONY TYPE: PAGE 3

IN CLOSING I'D JUST LIKE TO MENTION THAT THERE IS VIRTUALLY NO CHANCE FOR A MISTAKE OF THE TYPICAL HISTORICAL MAGNITUDE IN A PROPER REGRESSION ANALYSIS. CAN THE STATE OF ALASKA AFFORD TO BE WITHOUT ONE?

MORE _

REOPENING THE WATER WEST OF CAPE SUCKLING TO TROLLING
The Only Solution to a Critical Situation

Submitted by

Richard W. Lundahl
2/17/82

I. SITUATION AS OF 2/1/82.

A. Chinook Stocks.

1. Chinook stocks South and East of Cape Suckling are generally depressed.

2. Chinook stocks North and West of Cape Suckling are generally in good shape. These stocks have just this year had a reduction in harvest level by foreign trawlers of approximately 600,000 Kings.

B. Harvest Level -- O. Y.

1. Both the N.P.F.M.C. and the A.B. of.F. have drastically cut the O.Y. recently for conservation reasons and for political reasons.

2. Both the N.P.F.M.C. and the A.B. of F. are now intending to further cut the O.Y. by an additional 10 percent.

C. Judge Craig.

1. Judge Craig has stated his intention to see that the U.S.A. will uphold its treaty obligations to the Wash. Treaty Indian Tribes.

2. Judge Craig via the N.P.F.M.C. is seriously looking at the Alaskan Troll Fisheries as a real threat to these obligations.

D. The Alaska Troll Fisheries are overcapitalized because of Government Mismanagement.

1. The issuance of permanent permits to the troll fisheries clearly implies (practically guarantees) the viable, permanent, and professional status of these fisheries. We have bought and sold permits and taken out loans with this understanding.

2. The area designation of "Statewide" strongly implies that the Troll fisheries will again be allowed to fish West of Cape Suckling when the biological condition of these stocks allows. We have bought and sold permits and indebted ourselves with this understanding. This was board intent in 1973 when trolling was restricted to Southeast.

3. The enactment of the 200 mile limit (The F.C.M.A.) strongly implied to the public that the Federal Government intented to protect the American Fisherman from foreign harvests in our waters.

4. Despite depressed stock conditions South and East of Cape Suckling and down into Washington and Oregon, and serious habitat degradation problems to the South, and the threat to Alaskan Trollers of the Judge Boldt Decision; managers allowed high harvests until 1979.

5. Low interest Government loans during periods of high inflation rates, Government contruction fund incentives, and Tax incentives have all encouraged the fisherman to invest in his boat and equipment, especially in leiu of # 1, 2, 3, and 4 above.

6. The number of Power Troll permits was based upon fishing efforts from 1968 thru 1972 when we were allowed to fish Statewide. In essence managers have restricted a "Statewide" fishery to one region and then blame the trollers for over-fishing that Area.

7. Legislative over-sight and A. B. of F. inaction allowed the Hand Troll Fleet to grow out of all proportion. This "Statewide" Fishery is also restricted to Southeast.

E. Approximately ¼ of the Power Troll Fleet is facing Bankruptcy. The current policies are going to hurt us all.

1. At least ¼ of the P. T. Fleet is unable to meet their financial obligations at current harvest levels.

2. Because of the economic situation in the lower '48 these fishermen can not sell their boats. Who wants to go into debt to fish in a severely restricted fishery.

3. The bankers don't want to repossess these boats because they can't get rid of them. Who would buy them. Besides, if you repossess it; you have to maintain it.

4. These fisherman are thus encouraged to try another year or to try alternate fisheries. Another year's interest is piled onto the priciple and/or the fisherman buys new gear.

II. OPTIONS --- A REALISTIC LOOK.

A. Hatcheries and Enhancement.

1. Too long term. The troll fleets need a solution now.

2. Not even a long term solution. The Kings that spawn in Southeast Alaska live and feed in waters West of Cape Suckling.

3. Possibly Hatcheries in the lower '48 (placed there in our behalf) would be a solution; but again, it's too long term.

B. Buy Back.

1. Not acceptable to vast majority of trollers as of Spring of 1981.

2. Unfair. Why should we bear the brunt of government's mismanagement? Besides, Who can afford the 7% tax on our gross. We're paying a voluntary 3% tax on our gross already for hatcheries.

3. Too long term. It would be several years to set the system up and get it working. We need a solution now.

C. Alternative Fisheries.

1. A possible solution; but not very probable. Subsistence considerations.

2. The established lucrative fisheries are already fully exploited and many are protected by Limited Entry. Who can afford to change fisheries now?

3. New fisheries are very uncertain. New markets would have to be found and developed for many. Who can afford to experiment now? Possibly too long term to be an effective solution.

4. New fisheries can create biological problems. Many species have very low fecundity. Lack of biological data on these fish could seriously deplete these resources thru overharvesting and mismanagement.

5. Many of the species currently not being used in large commercial fisheries are used in rural communities by subsistence users.

D. Status Quo and/or raising the O.Y.

1. The Chinook stocks South and East of Cape Suckling are generally in a depressed condition.

2. The A. B. of F. initiated a 15 to 20 year program of allowing increased escapement in order to rebuild these runs (started during 1981 season).

3. In reasing the O. Y. on Southeast stocks could destroy the rebuilding program besides endangering the resource.

4. The troll fleet is in serious even critical trouble now -- with the present O.Y. Status Quo, while being a biological solution, is not an economic solution. It is just too long term.

E. Reopen Westward to Statewide Trolling.

1. The Chinook stocks West of Cape Suckling generally are in good shape.

2. These Stocks have within the last year received a major shot in the arm --- the extreme curtailment of (prohibited) foreign fleet harvests. This amounts to 350,000 to possiblly over 1,000,000 extra Kings for escapement and Alaskan fishermen.

3. There is no biological reason for restricting Statewide Trollers to Southeast any longer.

4. There is a tremendous need for biological data about Chinook Salmon. Managers need to know migration patterns and concentrations, feeding patterns, habits, and concentrations, rearing areas, etc. Replacing foreign trawl fleets with Alaskan trawl fleets on the high seas, in the F.C.Z. and in State waters does not reduce the danger of harvesting mixed stocks with high catch rate fisheries.

5. The Troll fisheries are slow attrition fisheries with low catch rates. The Troll fisheries are the only safe way to harvest mixed stocks on the high seas, F.C.Z. and State waters, besides being the cheapest and fastest way to gather the necessary biological data. This data is going to be needed if the managers are going to protect the mixed salmon stocks and the Alaskan subsistence user from incidental and accidental over-harvest of salmon by Trawl fleets.

6. The Troll caught salmon has the best quality and highest market price of any salmon on the comercial market.

7. Statewide Troll is biologially acceptable and needed. It enhances the managers need for data to ensure the subsistence priority, Statewide Troll maximizes the benefits to the public and ensures the health of the Southeast fishing economy.

III. Conclusion.

Reopening Statewide waters to the Troll fleet is the only solution to a critical situation in this fishery. This solution ensures the conservation of the resource, satisfies the subsistence priority, and maximizes the benefits to the public.

Ed Bergeron

Preliminary Report

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

PILOT OBSERVER PROGRAM FOR THE TROLL SALMON FISHERY OFF ALASKA

Contract No. 78-9

September 22, 1978

Craig Juleen
Troll Fishery Biologist
Alaska Department of Fish and Game

OCEAN TROLL FISHERY OBSERVER PROGRAM

To meet the objectives of the observer program data was collected by on-board observers to help identify salmon species by catch, age, length, weight, sex, mature and sub-legal (shaker), catch by gear type, and influencing environmental factors for various statistical areas and times. Troll logbook information was also obtained in conjuction with comments recorded on daily record sheets.

See Table 1 for a list of the observer trips by statistical area and location.

The total catch (all species) for the observer program was:

Chinook	Coho	Pink	Chum	Chinook Shakers	Sockeye	Salable Halibut
715	1,778	873	38	300: 233 Good 27 Fair 40 Poor	7	15

Unsalable Halibut	Ling Cod	True Cod	Turbot	Rockfish
45	17	10	1	509

Total Landed Chinook and Coho Weight Per Trip:

Vessel	Chinook(lbs.)	Coho(lbs.)
North Star	238.40	
F/V Rambler	1,375.00	
Gota		6.50
Germaine	124.74	13.20
C-Rae	1,132.11	593.25
Carolyn L	1,491.36	46.98
F/V Sea Kin	1,394.00	3,390.20
Myrth	558.54	98.46
F/V Duke	559.77	360.36

Vessel	Chinook(lbs.0	Coho(lbs.)
Defense	758.43	5,879.97
Coronation	214.40	2,148.80
Chief Seattle(for 3 areas fished)	155.25	550.20
	455.40	1,721.98
	12.54	162.80
Defiance (2 areas fished)	2,828.00	851.00
	207.00	959.00
Combined Total Weight for All Trips -	11,504.94	21,782.10
Combined Catch Average for All Trips-	16.00	7.00

Overall Shaker to Legal Chinook Incidence
(Total shaker divided by total chinook) = 0.42

Scale and gonad samples were taken from every fifth chinook and coho salmon. Laboratory analysis will begin September 20th to determine age composition, maturity and stock origin. Recorded lengths and weights for each landed chinook and coho salmon were on the daily record sheets for the separate areas and times (Specific and detailed information can be obtained from the individual trip data sheets).

Trips by statistical areas were separated and statistics for total and average chinook and coho weights were computed. Shaker to legal chinook incidence was recorded for all given areas. The results are displayed in Table 2.

The observers were asked to look at gear type and possible influential effects on catch composition. It was noted that the various boats observed used a varied assortment of gear. The following is collected data pertaining to each individual vessel:

Gear Type: (Flashers were used at all times in conjuction with baited hooks, and in the majority of cases with hootchies.)

1. North Star - 8 lines, 49 hooks - 28 spoons, 10 hootchies, 11 bait
2. Rambler - 4 lines, 32 hooks - 2 plugs, 4 spoons, 13 hootchies, 13 bait. 40-45 fathoms of wire out.
3. Germaine - 3 lines, 15 hooks - 15 hootchies. 20 fathoms of wire out.
4. Gota - 4 lines, 20 hooks - 6 spoons, 14 hootchies. (hook baited with herring used once) 28 fathoms of wire out.

5. C-Rae - 4 lines, 30 hooks - 22 spoons, 4 hootchies, 3 bait, 1 plug. 50 fathoms of outside wire. 25 fathoms inside wire.

6. Carolyn L - 4 lines, 29 hooks - 7 spoons, 13 hootchies, 9 bait. 6 lines, 36 hooks - 8 spoons, 17 hootchies, 11 bait

7. Sea Kin - 6 lines, 48 hooks - 24 spoons, 24 hootchies. 40 fathoms of wire out. Coho gear.

8. Myrth - 4 lines, 22 hooks - 2 plugs, 8 spoons, 6 hootchies, 6 bait. 28-30 fathoms of outside wire out. 26 fathoms of inside wire out.

9. Duke - 4 lines, 41 hooks -26 spoons, 15 hootchies.

10. Defense - 4 lines, 26 hooks - 22 spoons, 4 hootchies. (Coho gear) 15-18 fathoms of wire out.

11. Coronation - 4 lines, 46 hooks - 26 spoons, 20 hootchies. (Coho gear) 20-30 fathoms of wire out (varied for the different areas fished)

12. Chief Seattle - Coho gear - 4 lines, 54 hooks - 44 spoons, 10 hootchies.

The gear was periodically changed due to good or poor fishing conditions or a shift to a new location. The choice of gear noticeablely affected the catch composition. Those fishermen using coho gear* (Chief Seattle, Coronation, Defense and Sea Kin) caught a much larger percentage of coho in relation to chinook salmon, while the C-Rae and Myrth using hooks baited with herring and copper chinook spoons caught a higher percentage of chinooks compared to the coho catch.

Feed varied with time and area. The following data pertains to stomach contents in order of abundance.

Rambler - Chinook and coho feeding on: 1) needlefish, 2) Krill

Germaine - Chinook and coho feeding on: 1) needlefish, 2) juvenile needlefish

Gota - Coho examined contained needlefish.

C-Rae - Chinook feeding on: 1) herring, 2)needlefish, 3) juvenile pollock. Coho feeding on: 1) juvenile pollock.

Carolyn L - Salmon contained shrimp, herring, needlefisn and capelin

* Small spoons and hotchies utilizing bright colors.

Sea Kin - Chinook feeding on: 1) shrimp, 2) herring, 3) juvenile pollock, 4) prowfish. Coho feeding on: 1) shrimp, 2) herring.

Myrth - Chinook and coho feeding on: 1) needlefish, 2) juvenile needlefish

Duke - Chinook and coho feeding on herring.

Defense - Chinook and coho feeding on: 1) herring, 2) juvenile herring.

Chief Seattle - Chinook and coho feeding on herring

It was discovered on some fishing trips chat most salmon were landed between 0645-1000 and 1845-2045 hours. When fathometers were used, most feed showed up on the graph in the early morning and evening hours.

Observers also took note of environmental influences on the salmon harvest. When seas became larger, it was hard to see the poles rattle. Also, when the weather became nasty, fishermen spent more time in their wheel houses.. Both of these environmentally-related factors led to higher mortality rates of sub-legal fish due to the dragging of hooked fish. During this past (1978) fishing season there was a large intermittent amount of pelagic seasquirts, a gelatinous, free-swimming, Urochoradate (genus Salpa). By continually fouling both hooks and line, they became a perpetual headache to the fishermen.

The observers for this first on-board program encountered a few problems. Perhaps the major difficulty was finding skippers willing to have observers aboard. Reasons for not wanting observers onboard were: 1) No room - not enough back space, 2) distrust of Fish and Game management programs and 3) violation of personal space. When onboard, there were a few drawbacks in collecting data. Noting catch by bait type, sampling, cleaning, weighing, observing, keeping balance, etc., did become a dilemma when large pallets of fish were encountered at one time. Pandemonium ran high with fish flapping everywhere. (Boats with small working decks should be avoided.) Shaker conditions when released can also be questioned due to the continual forward progress of the boats and not wanting to get in the way of fishing operations. Those shakers marked good on the daily record sheets may have actually been impared. Normal trip practices of shaker release may have been changed by having a Fish and Game observer on board. Other proplems were: 1) ocean fatique, 2) wind, rain and large seas making data collection extremely rough and 3) personality conflicts.

A comparison of observer logbook data with the fishermen's log shows that there were varying observed and recorded variances pertaining to information regarding shaker numbers, abundance of bottom fish and marine mammals. Memories of such data are not clear after a hard day or trip of fishing.

From all of the data, observations and observer comments, it was found that an onboard program does work. The skippers who took the observers were congenial and cooperative. The biological samples, daily statistical record sheets, observer log, and individual trip summarations will definitely be useful tools in helping form a comprehensive management plan.

Table 1. OBSERVER TRIPS BY STATISTICAL AREA AND LOCATION

Location	Statistical Area	Vessel	Observer	Dates	Average Fishing Time	Sea Conditions	No. of Fish Caught and Average Wt.	Shaker to Legal Chinook Incidence	Other
St. Lazaris Island	113	Gota	Craig Juleen	7/20-7/22	1½ hrs. 1-harbor day 2-fishing	3-4 ft.	1 coho- 6.5 lbs. 2 shakers- 1 good 1 fair	---	Engin troub
Gornoi, Gulf & Biorka Is.	113	Germa	Robert Hernacki	7/26-7/27	6-3/4 hrs.	slight	9-chinook-13.86 lbs. 2-coho-6.6 lbs. 2-shakers- 1 good 1 fair	0.22	
St. Lazaris Is. to Cape Edgecumbe	113	C-Rae	Craig Juleen	7/26-7/30	14 hrs.	5-7 ft.	63-chinook-17.97 lbs. 113-coho - 5.25 lbs. 6- shakers-4 good 2 fair	0.10	
Sandy and Snipe Bay	113	Myrth	Craig Juleen	8/5-8/10	9½ hrs.	3-4 ft.	29-chinook-19.26 lbs. 18-coho- 5.47 lbs. 20-shakers- 17 good 1 fair 2 poor	0.69	
Off Cape Edgecumbe	113	F/V Duke	Robert Hernacki	8/26-8/29	10½ hrs.	slight to 5 ft.	29-chinook-20.68 lbs. 44-coho- 8.19 lbs. 5-shakers- 4 fair 1 poor	0.17	
Surge Bay-Hoktaheen Area	113	F/V Coronation	Linnea Neuman	8/1-8/9	9½ hrs.	2-8 ft.	13-chinook-16.8 lbs. 316-coho- 6.8 lbs. 13-shakers-11 good 2 poor	1.00	

Location	Statistical Area	Vessel	Observer	Dates	Average Fishing Time	Sea Conditions	No. of Fish Caught and Average Wt.	Shaker to Legal Chinook Incidence	Othe
Surge Bay	113	Chief Seattle	Linnea Neuman	8/18-8/20	6¼ hrs.	3-6 ft.	9-chinook-17.25 lbs. 60-coho-9.17 lbs. 2-shakers- 1 good 1 poor	0.22	
From Redfish Cape to Biorka Island	154	F/V Sea Kin	Robert Hernacki	7/28-8/5	16½ hrs.	2-6 ft.	68-chinook-20.50 lbs. 460-coho- 7.37 lbs. 10-shakers-7 good 1 fair	0.15	
Between Cape Addington & Cape Cherikof	104	F/V Rambler	Gary Gunstrom	5/19-5/30	14 hrs.	15-20 ft. 8-fishing 2-harbor days	101-chinook-13.75 lbs. 32-shakers-26 good 2 fair 4 poor	0.32	
).Inner Bank-Outside of Stat. Area-116-25		North Star	Randy Timothy	5/24-6/1	7¼ hrs.	5-7 ft. 3-fishing 3-harbor days	16-chinook-.4.90 lbs. 8-shakers-5 good 3 fair	0.50	
1.Nine miles off Cape Fairweather	181-05	Carolyn L	Linneau Neuman	6/16-6/22	14 hrs.	3-8 ft.	104-chinook-14.34 lbs. 9-coho- 5.22 lbs. 16-shakers-11 good 4 poor	0.14	
2.Ocean Cape, Dangerous River	181-05	Chief Seattle	Linnea Neuman	8/21-8/22	5¼ hrs.	3-8 ft.	1-chinook-12.54 lbs. 20-coho- 8.14 lbs. 2-shakers-1 good 1 fair	2.00	
3. Ten-12 mi. off inner bank	181-25	Defiance	Linnea Neuman	7/17-7/22	14¼ hrs.	2 ft.	163-chinook-17.35 lbs. 112-coho- 7.60 lbs. 20-shakers-12 good 8 poor	0.12	

Location	Statistical Area	Vessel	Observer	Dates	Average Fishing Time	Sea Conditions	No. of Fish Caught and Average Wt.	Shaker to Legal Chinook Incidence	Oth
14. Between Lituya Bay & Icy Point	116-05	Defense	Craig Juleen	8/23-8/29	14½ hrs.	slight to 2 ft.	53-chinook-14.31 lbs. 827-coho- 7.11 lbs. 84-shakers-64 good 12 fair 8 poor	1.58	
15. La Perousse Glacier Area	116-05	Chief Seattle	Linnea Neuman	8/14-8/17	10 hrs.	4-6 ft.	30-chinook-15.18 lbs. 179-coho- 9.62 lbs. 60-shakers-54 good 4 poor	2.00	
16. North Pass, Cape Cross Area	116-05	Defiance	Linnea Neuman	7/14-7/23	7½ hrs.	2 ft.	14-chinook-14.80 lbs. 133-coho- 7.21 lbs. 20-shakers-15 good 1 fair 4 poor	1.43	

Table 2. COMBINED TOTALS FOR VARIOUS STATISTICAL AREAS

COMBINED TOTALS FOR STATISTICAL AREA 116-05 (3 trips)

Total chinook weighted for 97 landed fish	-	1,420.83 lbs.
Average Weight	-	14.65 lbs.
Total coho weight for 139 landed fish	-	8,560.95 lbs.
Average weight	-	7.52 lbs.
Shaker to legal chinook incidence (164 shakers)		1.69

* Note: Area 116.05 had triple or greater the number of shakers when compared to the data collected in the other areas.

COMBINED TOTALS FOR STATISTICAL AREA 113 (7 trips)

Total chinook weight for 152 landed fish	-	2,744.76 lbs.
Average weight	-	18.06 lbs.
Total coho weighted for 544 landed fish	-	3,770.77 lbs.
Average weight	-	6.81 lbs.
Shaker to legal chinook incidence (50 shakers)		0.33

COMBINED TOTALS FOR STATISTICAL AREA 154 (1 trip)

Total chinook weight for 68 landed fish	-	1,394.00 lbs.
Average weight	-	20.54 lbs.
Shaker to legal chinook incidence (10 shakers)		0.15
Total coho weight for 460 landed fish	-	3,390.20 lbs.
Average weight	-	7.37 lbs.

COMBINED TOTALS FOR STATISTICAL AREA 104 (1 trip)

Weight for 101 landed fish	-	1,375.75 lbs.
Average weight	-	13.75 lbs.
Shaker to legal chinook incidence (32 shakers)		0.32

COMBINED TOTALS FOR STATISTICAL AREA 116-25 (1 trip)

Total chinook weight for 16 landed fish	-	238.40 lbs.
Average weight	-	14.90 lbs.
Shaker to legal chinook incidence (8 shakers)		0.50

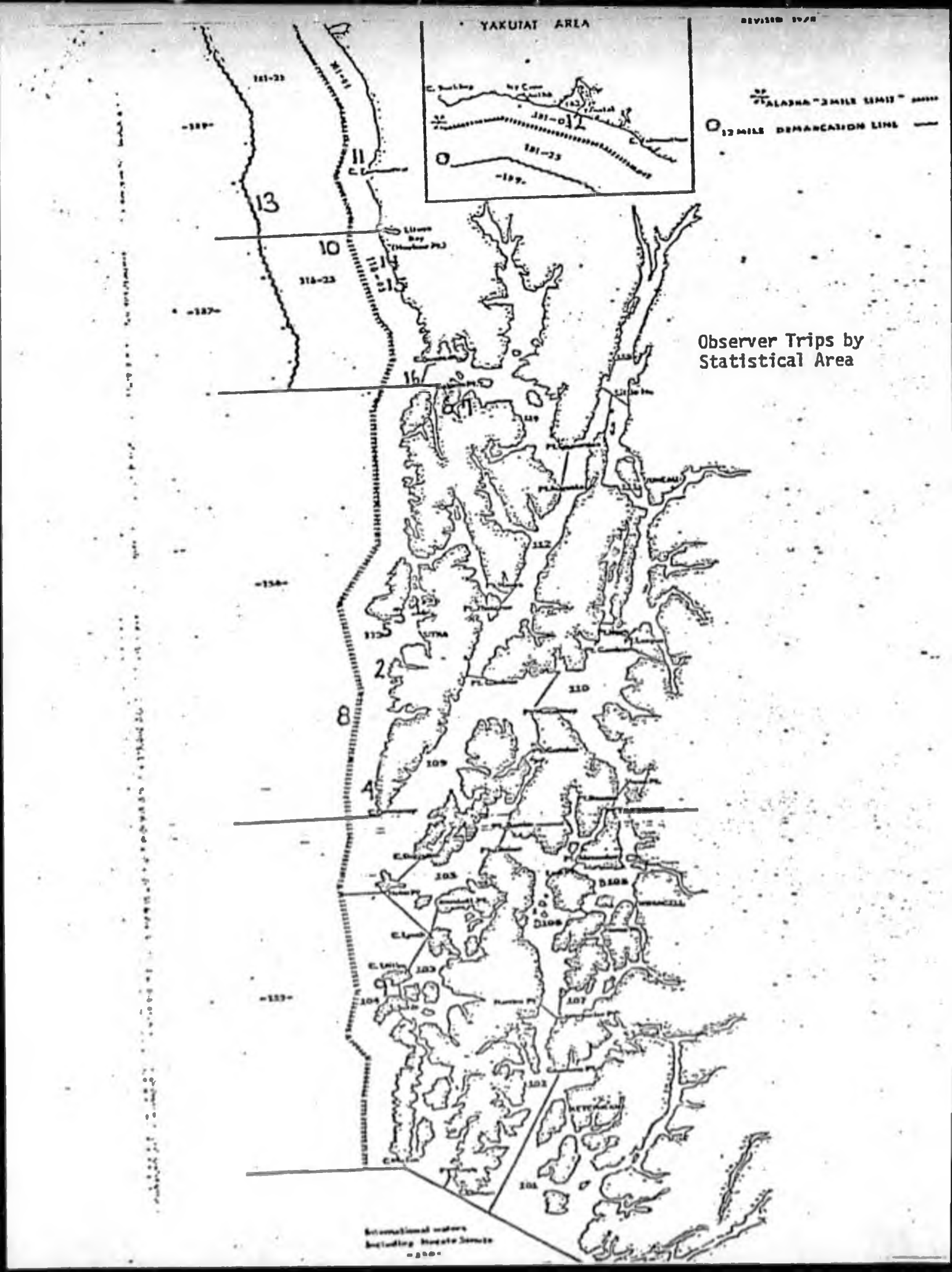
COMBINED TOTALS FOR STATISTICAL AREA 181-25 (1 trip)

Total coho weight for 117 landed fish	-	851.00 lbs.
Average weight	-	7.60 lbs.
Total chinook weight for 163 landed fish	-	2,828.00 lbs.
Average weight	-	17.60 lbs.
Shaker to legal chinook incidence (10 shakers)		0.12

COMBINED TOTALS FOR STATISTICAL AREA 181-05 (2 trips)

Total chinook weight for 105 landed fish	-	1,503.90 lbs.
Average weight	-	14.32 lbs.
Total coho weight for 29 landed fish	-	209.79 lbs.
Average weight	-	7.23 lbs.
Shaker to legal chinook incidence (17 shakers)		0.16

Predators


YAKUTAT AREA
ALASKA "3 MILE LIMIT"
12 MILE DEMARCATION LINE
Observer Trips by
Statistical Area
13
10
11
16
8
2
4
International waters
beginning three miles

REPORT TO THE BOARD OF FISHERIES

RESEARCH TROLL FISHERY

SPRING, 1981

By:
Mike Bethers

ABSTRACT

A troll research fishery was conducted in northern S.E. Alaskan waters from April 16 to May 11, 1981. During the study, 764 chinook salmon were tagged, elevin stocks of chinook salmon in the study area were identified, and a study of the efficiency and hook-induced mortality of single and treble fish hooks was conducted.

As of September 30, 1981, 45 disc tags with complete information had been recovered. Chinook salmon tagged in outside areas were recovered at nearly three times the rate of fish tagged in Inner Icy Strait; 12.8% as compared to 4.7%, respectively. The percentages of Alaskan and non-Alaskan recoveries of fish tagged in outer areas were 28.6% and 71.4%, respectively as compared to 80.6% and 19.4% respectively for fish tagged in inner Icy Strait. Overall, 29 (64.4%) tag recoveries were made in Alaskan waters and 16 (35.6%) were made in non-Alaskan waters.

Of the nine coded wire tagged chinook salmon caught, 6 had been released from hatcheries in S.E. Alaska, 1 from British Columbia and 2 from Oregon. No coded wire tagged wild Alaskan chinook salmon were caught.

Hook performance data suggests that the hooking rate for treble hooks is significantly higher than single hooks, and that treble hooks could be expected to produce an 18% higher catch. It is indicated that a lower hook injury rate occurs with treble hooks than for single hooks, however additional data would be required to determine whether the difference is statistically significant.

RESEARCH TROLL FISHERY

SPRING 1981

Historically, the chinook salmon troll fishery in S.E. Alaskan coastal waters has been open to fishing from April 15 to October 31. In an attempt to conserve the depressed stocks of mature chinook salmon returning to S.E. Alaskan streams, the Alaska Board of Fisheries, in January, 1981, delayed the opening of the troll season until May 15th by closing all State waters to commercial trolling from April 15th to May 14, 1981. This action stimulated concern regarding potential loss of "in-fishery" recoveries from approximately 150,000 coded wire tagged Taku and Stikine River chinook currently at large in the ocean.

This research troll fishery stemmed from the Board's decision to close the April 15th to May 14th segment of the season and was conducted to:

1) Determine stock identification, run timing, migration routes, and transfer to other fisheries of chinook salmon passing through the Icy Strait-Cross Sound corridor areas.

2) Determine important juvenile chinook feeding areas and contribution of chinook stocks to the troll fishery by recovering coded wire tagged fish.

3) Evaluate the catch efficiency and hook-induced mortality of single and treble hooks on commercial chinook salmon troll gear.

Four power trollers fished under short term vessel charter for the Department during the study. Two boats fished at any one time; one in inner Icy Strait and one in the Cross Sound - outer coastal areas.

Vessels fished in their normal fashion, except that both single and treble hooks were used. Only one type of hook was used on a troll line at one time, so that individual hook type data could be collected. Hook types were switched among the vessels main lines, to prevent bias. A biologist from the Alaska Department of Fish and Game or the Alaska Troller's Association was aboard each vessel during the course of this study.

Hooked fish were retrieved to the side of the boat and were lead into an electrified landing basket, instead of being gaffed. Larger fish remained in the electrified basket in a state of electronarcosis during sampling and tagging. Chinook salmon under approximately 24 inches were lifted aboard, by the leader, and restrained by hand in a smooth plastic lined tagging trough for sampling and tagging.

The public was informed of the tagging program through articles in local newspapers, Fish and Game news releases and radio spots. The recovery of disc tags was accomplished primarily through voluntary angler returns. Each tag returned with catch date and location data was worth a $2.00 reward to the angler. As an added incentive, one angler received a $500.00 bonus via a lottery drawing of the tags turned in.

RESULTS

Between April 16th and May 11, 1981, a total of 846 salmon were caught by the four trollers. A total of 764 chinook and one coho were tagged and released. Seventy nine chinook were retained, as they were either adipose fin clipped or mortally wounded. Fish were tagged in the Icy Strait-Cross Sound area and on the outer coast from Cape Cross to Icy Point (Fig. 1 & 2)).

As of September 30th, 1981, 45 disc tags with complete information had been returned to the Department. An additional eight disc tagged chinooks were known to have been observed, but usable data was not available. Of the 45 recoveries, 4 were made in Alaskan chinook river systems, 25 in Alaskan fisheries, 13 in British Columbia fisheries, 2 in Washington fisheries and 1 in Oregon fisheries. A total of 14 recoveries (12.8%) of the fish tagged in the outer areas were recovered, as compared to 31 (4.7%) of the fish tagged in inner Icy Strait. It is apparent that fish tagged in inner Icy Strait tended to be recovered in inside waters and fish tagged in outside areas tended to be recovered in outer areas. Only 19.4% of the recoveries of fish tagged in inner Icy Strait were made in non-Alaskan waters, as compared to 71.4% of the chinook tagged in outside waters. A comparison of recovery locations of chinook tagged in inside and outside waters is presented in Table 1.

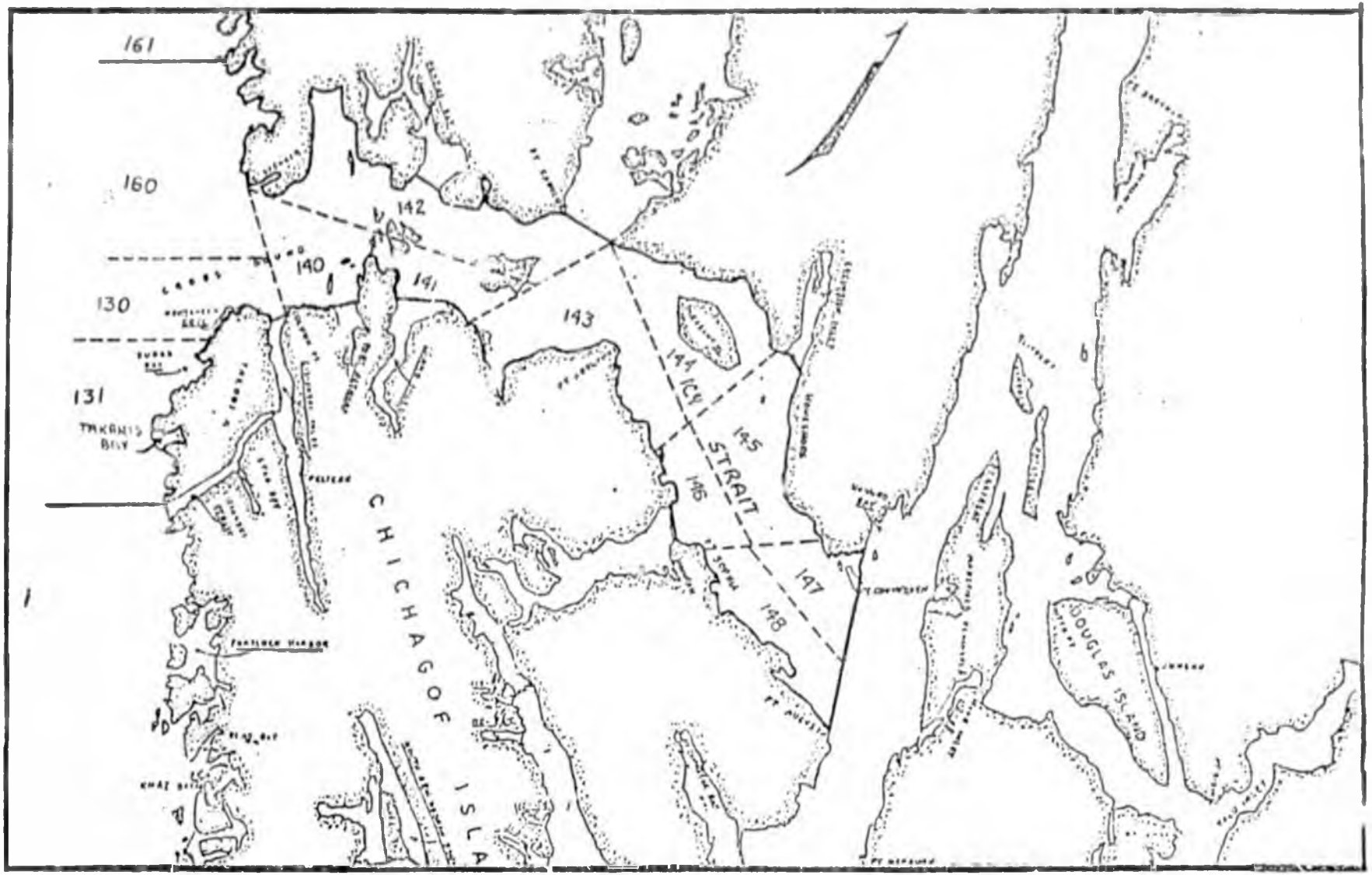
A total of 12 adipose fin clipped chinook were caught during the study. Of these, 9 had coded wire tags. Of the 9, 6 were from Alaska, 1 was from British Columbia and 2 were from Oregon. All tagged fish were from hatchery releases. Of the 12 adipose clipped chinook caught, only 2 were of legal troll length (28 inches).

Of the 6 coded wire tagged Alaskan chinook recovered, 5 were recovered in inner Icy Strait and only 1 was recovered in the outer area. Of the 3 non-Alaskan tagged fish recovered, 2 were recovered in outer areas and 1 was recovered in inner Icy Strait.

Hook type data was collected on 829 chinook during the study. Of these, 443 (53%) were 28 inches or greater in total length (legal troll length) and 340 (47%) were sublegal.

The results of this study indicate that the hooking rate for treble hooks is significantly higher than for single hooks. Single hooks could be expected to catch 67 fish per 100 bites compared to 79 fish per 100 bites for treble hooks, i.e., an 18% higher catch rate.

FIGURE 1. FISH TAGGING AREAS, CROSS SOUND - ICY STRAIT TEST TROLL FISHERY, 1981



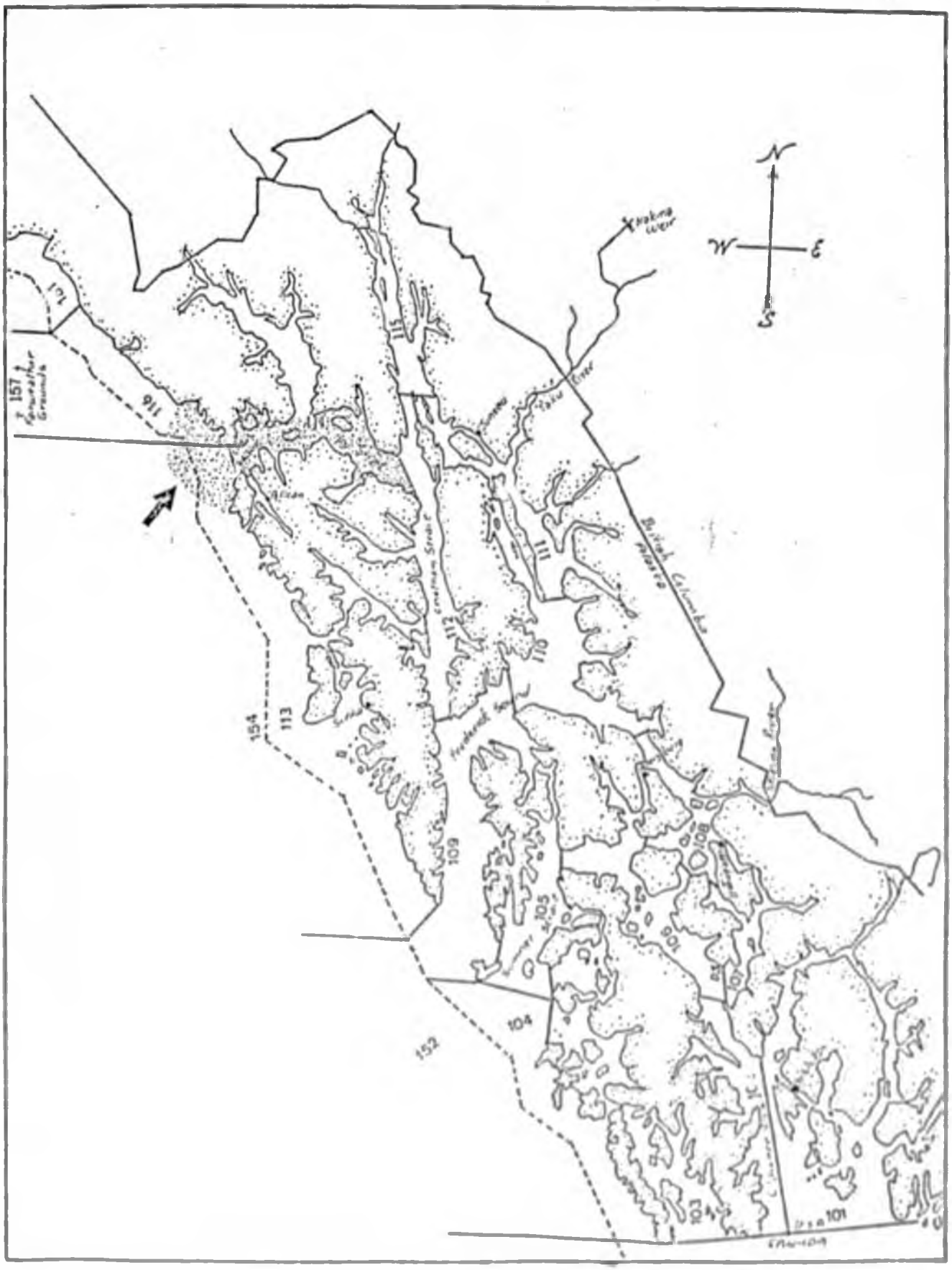


Figure 2. Study Area, 1961 Troll Research Fishery.

Table 1. A Comparison of Recovery Areas of Chinook Salmon Disc Tagged in Inner Icy Strait and Outside Coastal Areas.

Recovery Area	Tagging Locations: Outer Areas n (%)	Inner Icy Strait n (%)	Total
ALASKA:	4 28.6%)	25 (80.6%)	29 (64.4%)
Milling (within 5 mi. of tagging location)	0 (00.0%)	6 (19.4%)	6
Inside waters of Alaska	0 (00.0%)	15 (48.3%)	15
Outside waters of Alaska	4 (28.6%)	0 (00.0%)	4
Alaskan Chinook systems	0 (00.0%)	4 (12.9%)	4*
NON-ALASKAN:	10 (71.4%)	6 (19.4%)	16 (35.6%)
A) British Columbia	7 (50.0%)	6 (19.4%)	13
B) Washington	2 (14.3%)	0 (00.0%)	2
C) Oregon	1 (07.1%)	0 (00.0%)	1
TOTAL	14/109 (12.8%)	31/656 (4.7%)	45/765 (5.8%)

* 3 from Taku, 1 from Stikine River

An analysis of the data also indicates that a lower hooking injury rate occurs with treble hooks than with single hooks; however, additional data would be required to determine whether this difference is statistically significant.

It should be emphasized that great care was taken in removing hooks from the fish. Therefore, the results may not be representative of hook performance in the commercial troll fleet.

A comparison of recovery rates of disc tagged chinook caught on single and treble hooks is presented below.

F.L. (mm)	Single Hooks	Treble Hooks	Total
673mm+ (legal)	17	15	32
673mm- (sublegal)	4	9	13
No. recovered by hook type	21 (46.6%)	24 (53.3%)	45 (100%)
No. released by hook type	369 (48.5%)	391 (51.3%)	760 (100%)

Scale samples and length data collected during the study could not be analyzed in time for this report. When analyzed, this data may shed some light on the origins and ages of fish tagged in the study. From this, important juvenile feeding areas may be identified.

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Eleven stocks of chinook salmon were identified by the use of coded wire tags and "in river" recoveries and observations of chinook salmon tagged in this study.

Following is a list of chinook salmon stocks identified by the recovery or observation of disc tagged fish in spawning systems.

	Recovery Data		Tagging Data	
Stock		Date	Location	Date
(AK) Stikine		6 03/81	Excursion Inlet	4/28/81
(AK) Nakina (Taku)	1)	6/03/81	Homeshore	5/09/81
	2)	8/07/81	Homeshore	5/04/81
	3)	8/10/81	Homeshore	4/17/81
(AK) Chilkat		7/06/81	?	4/16-5/11/81
(AK) Nahlin (Taku)	1)	7/22/81	?	4/16-5/11/81
	2)	7/22/81	?	4/16-5/11/81
	3)	7/22/81	?	4/16-5/11/81
(WA) Quinault		9/22/81	P.D. Grounds	5/02/81
(OR) Nehalem		9/24/81	Soapstone	4/25/81

Stocks of chinook salmon identified by the recovery of coded wire tagged fish during the study are listed below.

	Tagging Data			Recovery Data	
Stock	Rel. Site		Date	Location	Date
(AK) Unuk	L. P. Walter	1)	5/79	Excursion Inlet	4/27/81
		2)	5/80	Homeshore	5/09/81
		3)	4/79	Homeshore	5/11/81
		4)	4/79	Port Althorp	4/26/81
(AK) Andrews Creek	C. L. Hatchery	1)	6/77	Homeshore	5/04/79
		2)	5/78	Homeshore	5/05/81
(B.C.) Robertson Creek	R. Cr. Hatchery		5/77	Icy Point	5/02/81
(OR) Willamette	Below Falls		11/77	Homeshore	5/11/81
(OR) Nestucca	Nestucca River		11/79	Port Althorp	5/05/81

The number of tagged chinook recovered by area and gear type is presented below.

Recovery Area	Recovery Type	Tagging Area: Outer Areas	Tagging Area: Inner Icy Strait	Total Per Gear
AK	Stream Survey	0	3	3
	Stream Sport	0	1	1
	Troll	5	8	13
	Gillnet	1	3	4
	Marine Sport	0	10	10
B.C.	Troll	3	2	5
	Gillnet	2	3	5
WA	Gillnet	2	0	2
OR	Stream Sport	1	0	1
	TOTALS	14	30	44

DISCUSSION

Of the 842 salmon caught during the study, 596 were taken at either Homeshore or Excursion Inlet in inner Icy Strait. This was due to both boats fishing inside at the beginning of the study because of bad weather on the outside coast. Also, the Homeshore - Excursion Inlet drag was fished continuously by one boat throughout the study as it is normally a reliable producer of chinook salmon during the early season. The large catch in inner Icy Strait provided substantial hook type catch data, however, it would have been more desirable to have used additional boats to spread the catch over more tagging locations.

Fish handling procedures used in this study worked well and the use of electricity to stun large salmon for handling is recommended for further study and use. Small chinook (under approximately 24 inches) were not suitably stunned by the electric landing basket. It is not known whether this was due to a possible difference in the voltage required to stun smaller fish, or to the design of the basket.

Even though this study was much smaller in scope than that conducted by Parker and Kirkness in the early 1950's, it is indicated that this project will show similar results.

Results of both tagging studies showed that:

1) Fish tagged in inner waters of S.E. Alaska tended to be recovered in inside Alaskan waters and fish tagged in outside areas were recovered in outside waters. Generally, there was little exchange of fish from outside to inside waters or vise versa.

2) Fish tagged on the outside coast tended to be recovered in southern non-Alaskan waters to a much greater degree than fish tagged in inside Alaskan waters.

In the Parker-Kirkness study, 5.2% of fish tagged from Cape Spencer to Cape Fairweather were recovered during the same year as tagging. In our study 12.8% of the fish tagged in outside areas were recovered during the year of tagging. This difference may be indicative of increased fishing pressure.

Of the 842 chinook caught, 12 (1.4%) were adipose fin-clipped. Nine of the fish retained coded wire tags. Seven of the 9 tagged fish were of sublegal length. The high number of adipose fin-clipped sublegal chinook caught, coupled with the usual 30% sample of the commercial catch may indicate that the Department is recovering only a small percentage of the potentially recoverable tagged chinook available. Even though the actual numbers of tagged sublegal chinook taken in the commercial fishery may be less than that observed in this test fishery, a regulatory proposal was submitted to the board of fisheries that would allow retention of sublegal chinook in the troll fishery. This proposal will allow recovery of young age classes of chinook in the troll fishery, which to date have not been legally available for recovery.

Treble hooks did catch a higher percentage of the fish hooked, as was predicted by many fishermen. It was also indicated that treble hooks did less damage, as they tended to hook the fish shallower than single hooks. It appeared as though chinook would get hooked on treble hooks usually on the first time the bait was mouthed and consequently would be hooked close to the lips. On single hooks it appeared as though the fish would mouth the bait longer and consequently would not actually get hooked until the hook was farther into the mouth.

Analysis of hook type data collected in this study indicates that there is no justification to continue the ban on treble hooks in the S. E. Alaskan troll fishery.

Appendix I. Discription of condition codes and comparison of hooking and injury rate of single and treble hooks on commercial gear.

Fish caught were "graded" according to the amount of damage caused by hooking. The condition codes used in this study were:

"A" = Negligible injury, very slight.

"B" = Definite injury, however, complete recovery expected

"C" = Severe injury, recovery doubtful.

"M" = Terminal injury, fish killed by hook.

Appendix I (Continued)

I. Comparison of Hooking Rates

Hook Type		Catches	Losses	Total Bites
Single -	#	408	200	608
	%	67.1%	32.8%	
Treble -	#	421	109	530
	%	79.4%	20.6%	
TOTAL		829	309	1,138

II. Comparison of Hooking Injury Rate

A. Sublegal Fish (less than 673 mm fork length)

Hook Type		Fish Condition (Condition Codes) Good (A,B)	Poor (C,M)	Total fish
Single -	#	148	28	176
	%	84.1%	15.9%	
Treble -	#	192	18	210
	%	91.4%	8.6%	
TOTAL		340	46	386

III. Comparison of Hooking Injury Rates

B. Legal Fish (673 mm fork length and larger)

Hook Type		Fish Condition (Condition Codes) Good (A,B)	Poor (C,M)	Total Fish
Single -	#	165	67	232
	%	71.1%	28.9%	
Treble -	#	175	36	211
	%	82.9%	17.1%	
TOTAL		340	103	443

Appendix II

FISH TAGGING AREAS DESCRIBED,
NUMBERS OF FISH TAGGED, MORTALITIES,
ADIPOSE CLIPPED SALMON CAUGHT BY AREA,
TROLL RESEARCH FISHERY, 1981

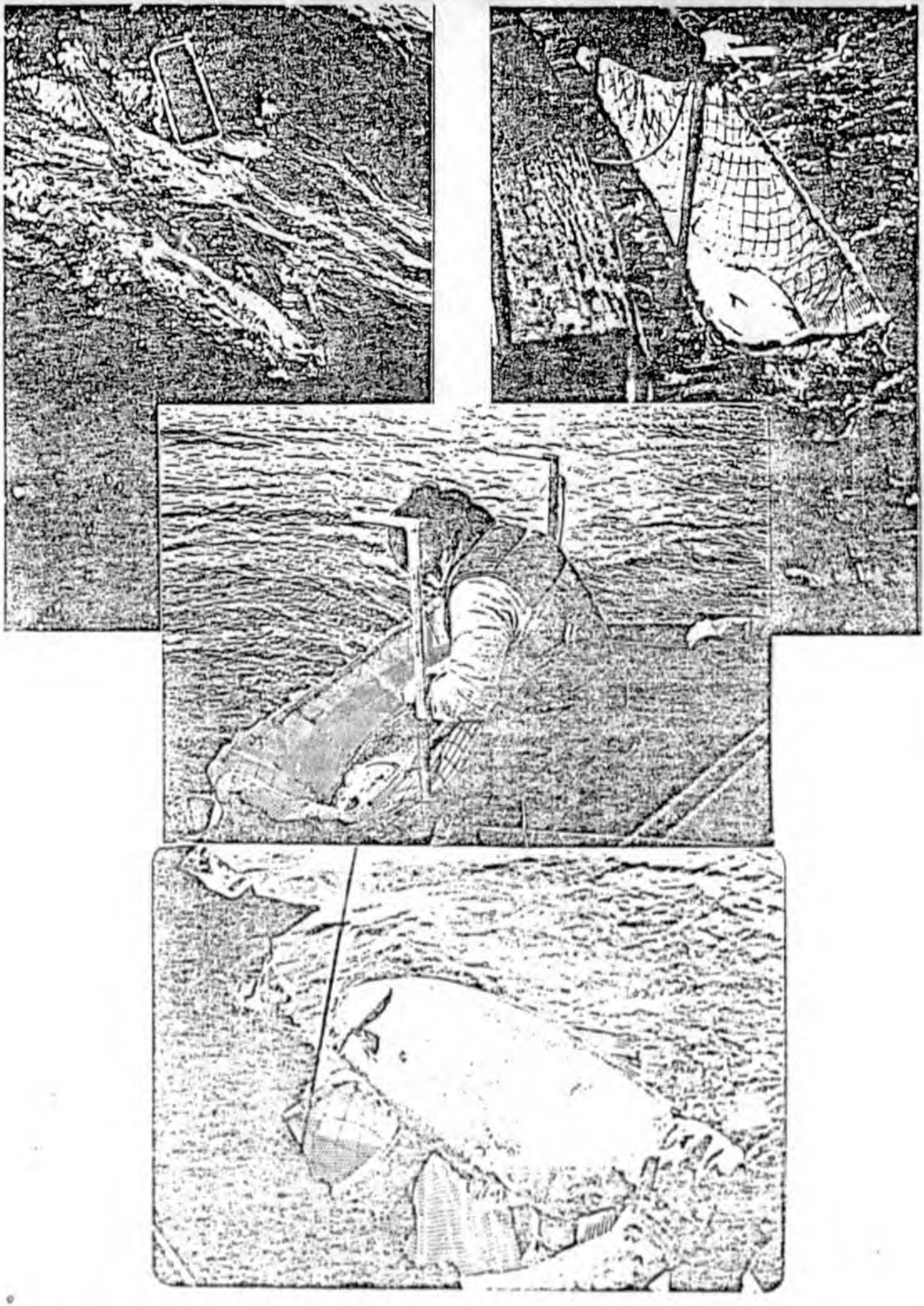
FISHING AREAS

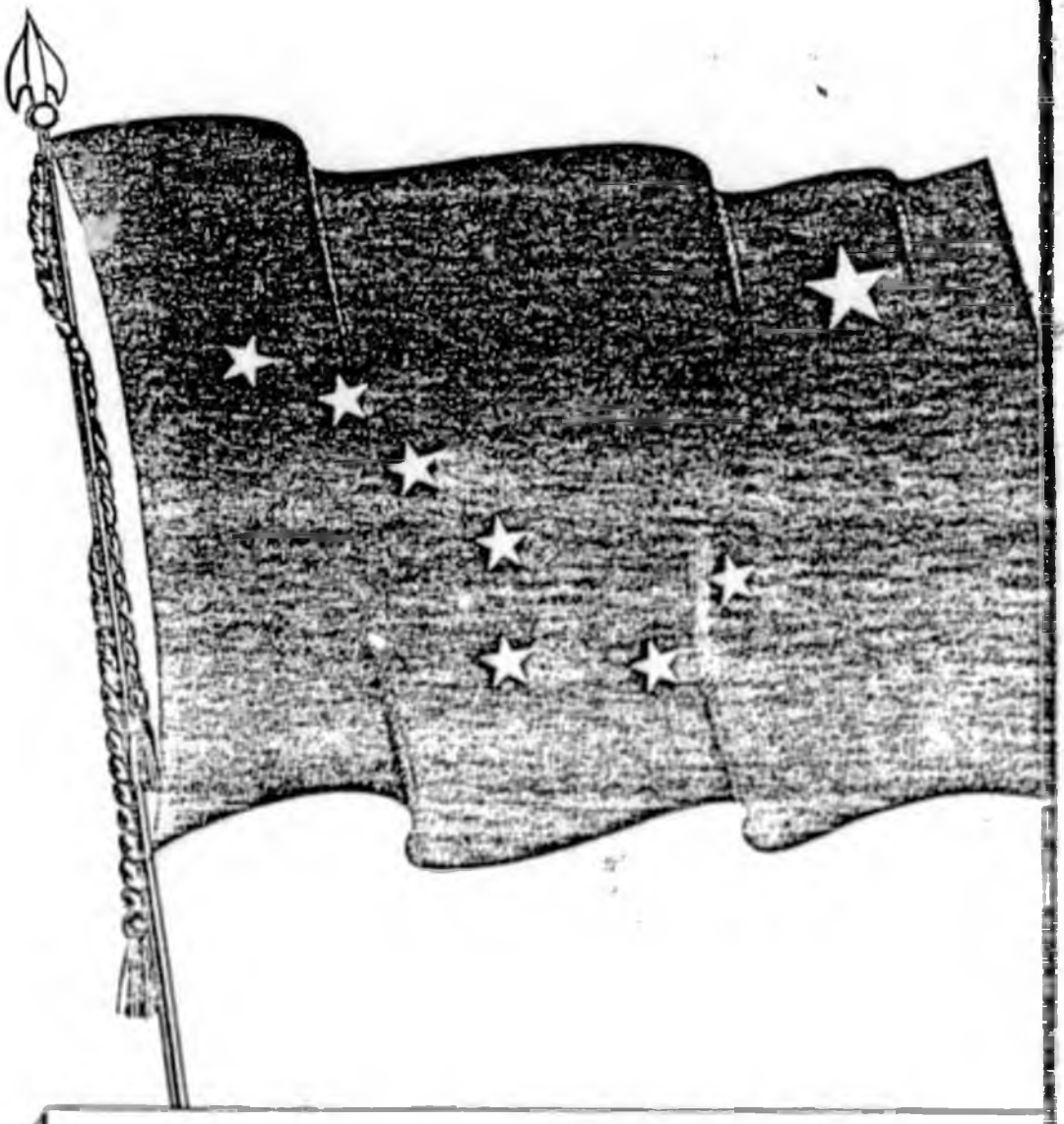
Number	Descriptive Area	Number tagged	Number Mortalites	Number Ad. Clips
130	Soapstone Pt. (SS)	49	3	-
	Hoktaheen (HK)	4	-	-
131	Cape Cross (CC)	1	1	-
140	Port Althorp (AL)	47	1	2
	Three Hill Is. (3H)	[illegible]	-	-
	Cross Sound (CS)	12	-	-
141	Idaho Inlet (II)	1	-	-
142	Dundas Bay (DB)	1	-	-
143	Point Adolphus (PA)	-	2	-
	Pinta Cove (PC)	3	-	-
	Eagle Point (EP)	-	-	-
144	Pleasant Island (PI)	-	-	-
145	Homeshore (HS)	477	45	6
	Excursion Inlet (XI)	120	11	2
146	Point Sophia (PS)	-	-	-
147	Point Couverden (PC)	3	-	-
148	Spasski-Whitestone (SW)	-	-	-
160	Cape Spencer (CS)	2	-	-
	Graves Harbor (GH)	20	3	-
	Dixon Can (DC)	4	-	-
	Torch Bay (TB)	4	-	-
	Libby Island (LI)	1	-	-
	Polka Rock (PR)	-	1	-
161	Dixon Harbor (DH)	2	-	-
	Sugarloaf Island (SI)	1	-	-
	P. D. Grounds (PD)	1	-	-
	Astrolabe Point (AS)	6	1	-
	Bousole Bay (BB)	5	1	-
	Palma Bay (PB)	2	-	-
	Icy Point (IP)	7	-	2
	TOTALS	765	69	12

Appendix III. A Summary of Adipose Fin Clipped Chinook Caught in the Research Troll Fishery, 1981.

Recovery Data				Tag and Release Data		
Location		Date	F.L.	Location	Date	Tag Code
Excursion Inlet	(145)	4/27	470mm.	Little Port Walter, AK	5/79	3-16-36
Homeshore	(145)	5/04	820	Crystal Lake Hatchery, AK	6/77	4-16-16
Homeshore	(145)	5/05	610	Crystal Lake Hatchery, AK	5/78	4-18-36
Homeshore	(145)	5/09	415	Little Port Walter, AK	5/80	3-17-4
Homeshore	(145)	5/11	530	Little Port Walter, AK	4/79	3-16-33
Homeshore	(145)	5/11	580	Willamette River, OR	11/77	9-16-31
Port Althorp	(140)	4/26	620	Little Port Walter, AK	4/79	3-16-31
Port Althorp	(140)	5/05	490	Nestucca River, OR	11/79	7-18-51
Icy Point	(161)	5/02	680	Robertson Cr., B.C., CANADA	5/77	2-16-35
Homeshore	(145)	4/21	620	Adipose Only - No C.W.T.		
Excursion Inlet	(145)	4/22	468	Adipose Only - No C.W.T.		
Icy Point	(161)	5/02	630	Adipose Only - No C.W.T.		

Appendix IV. Landing and Tagging of Chinook in Electric Basket.





KING SALMON AND THE OCEAN TROLL FISHERY OF SOUTHEASTERN ALASKA

RESEARCH REPORT NO. 1
Alaska Department of Fisheries
Juneau, Alaska

KING SALMON AND THE OCEAN TROLL FISHERY OF SOUTHEASTERN ALASKA

By

Robert R. Parker and Walter Kirkness

Research Report No. 1

ALASKA DEPARTMENT OF FISHERIES

Juneau, Alaska

September, 1956

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FOREWORD

The following research report is the first of an intended series, published with the belief that a well informed citizenry is the key to proper utilization of a renewable resource. Subsequent reports will be published by the Alaska Department of Fisheries when scientific studies are sufficiently complete to provide reliable evidence for presentation.

Research reports are free and may be obtained upon request from the Department Librarian.

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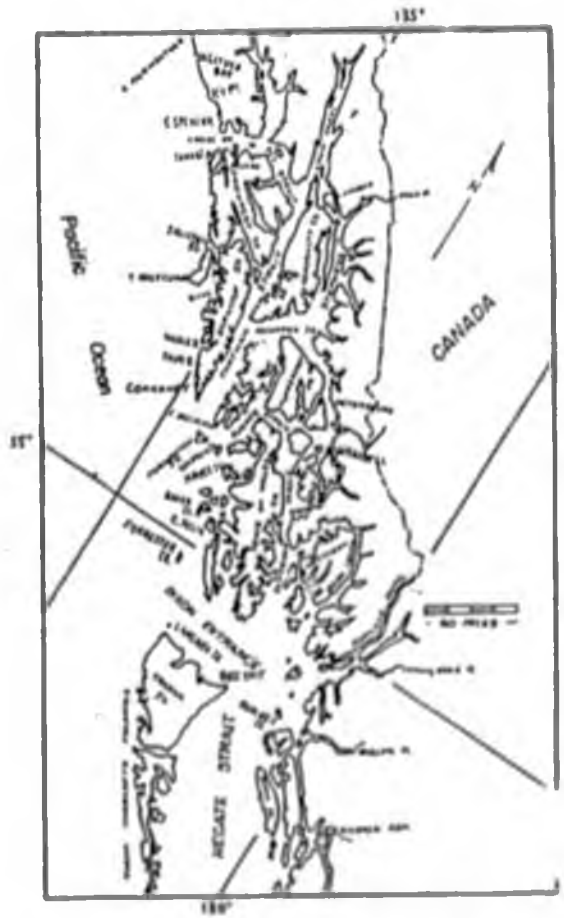


Figure 1. A map of the Pacific Coast of North America from Cape Fairweather, Alaska, to Cape St. James, Queen Charlotte Islands.

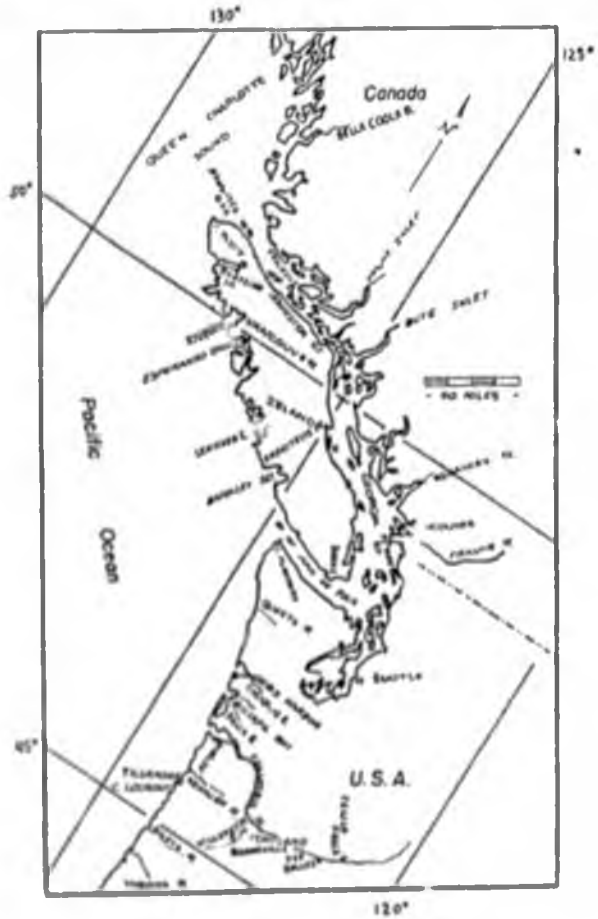


Figure 2. A map of the Pacific Coast of North America from Cape St. James to the Yaquina River, Oregon. Figure 2 is contingent with Figure 1.

KING SALMON AND THE OCEAN TROLL FISHERY OF SOUTHEASTERN ALASKA

Robert R. Parker and Walter Kirkness

STATISTICAL HISTORY King salmon (*Oncorhynchus tschawytscha*) and the troll fishery have been a permanent part of Alaska's economy since early 1900's. Cobb[1] stated:

> "For some years the Indians here (Southeastern Alaska) had been catching king salmon for their own use during the spring months, and about the middle of January, 1905, king salmon were noticed in large numbers in the vicinity of Ketchikan. Observing the Indians catching these, several white fishermen decided to engage in the pursuit, shipping the product fresh to Puget Sound ports. They met with such success that 271,644 pounds, valued at $15,400 were shipped. The next year several of the wildcat dealers established plants in this region, -- and as a result the fishery has grown until in 1915, 2,170,400 pounds of king salmon . . . . . were caught and marketed."

By 1918 production of this species by trolling had increased to 8,177,818[2] pounds. Record production of nearly 17 millions of pounds was reached in 1937; since that date annual production has fluctuated in the magnitude of nine-million pounds annually.

The value of the troll production of king salmon in 1950 was an estimated 2,951,000 dollars, computed at first wholesale value.[3] When this value is considered as a return from

(1) Cobb, 1921, p. 81.

(2) Cobb, 1921, p. 147. See footnote b of Table 1.

(3) First wholesale value is here defined as the monies received by the fishermen for their catches. In 1950 approximately 1,041,000 pounds of troll king salmon were caught and marketed. This catch was graded into large and fred mustad, approximately 11 pounds or larger, dressed, head off, small red and white. Approximately 84 percent (estimate) consisted of the catch were graded large red and sold for a seasonal average of approximately 43 cents per pound. The small red and white were sold for a seasonal average of approximately 29 cents per pound.

capital invested, the actual cash value of the resource becomes very large. In terms of local and governmental economy, the fact that the majority of the fishermen reside in Southeastern Alaska and are a stable part of the communities is a valuable asset and the troll fishery as an industry and the king salmon as a resource must be maintained. What has been said for the value of the industry that uses this resource applies equally to values accrued by sports fishermen. This phase of development is in its infancy in Southeastern Alaska, is rapidly growing and has a very large potential.

To facilitate an understanding of the history of the troll fishery for king salmon, Table 1 has been prepared. Here estimates of the annual production in pounds dressed, head on, are presented for the years 1906 to 1953. These data will not be understood unless defined by the factors that have, in part, caused them and limited them. The authors, then, have attempted a definitive history of the fishery to accompany the statistical presentation. Table 1 shows, in general, a period of rapid expansion from inception to about 1919. A second of exploration and increasing annual production ended about 193[illegible], when a third stage of slowly declining production began and continues at present. Within these general trends are severe fluctuations.

DEFINITIVE HISTORY

Trolling began as a hand line operation – a single line trolled in a row boat. Power boats entered the fishery early in the 1910's and increased the amount of gear fished per boat. Power gurdies came into general use in the 1920's allowing the use of steel lines, heavier weights, and an increase in the number of lures fished. Boats have increased in size and efficiency until the modern day troller which averages over 40 feet in length. Aids to navigation such as radio-telephone, direction finders and echo-sounders have turned the fleet as a whole into a highly efficient and mobile unit, capable of a swift change in grounds as new schools or concentrations of salmon are located. From a

Table 1. Estimated troll catch of king salmon, Southeastern Alaska, 1906-1953(a)

YEAR	CATCH	YEAR	CATCH
1953	9,235	1929	8,493
52	8,936	28	6,947
51	9,824	27	12,498
1950	7,061	26	6,606
49	9,443	25	10,493
48	9,182	24	9,676
47	9,499	23	8,524
46	10,529	22	10,137
45	7,686	21	10,928
44	6,587	1920	7,510
43	7,769	19	11,292
42	10,742	18	7,434(b)
41	11,911	17	6,414
1940	8,550	16	7,581
39	12,798	15	4,537(b)
38	14,117	14	5,155
37	16,923	13	6,514
36	12,933	12	5,959
35	11,910	11	5,489
34	9,944	1910	4,096
33	7,950	9	2,402
32	11,915	8	1,235
31	8,465	7	6[illegible]
1930	11,519	1906	1,165

(a) Catch given in 1,000's of pounds. Data taken from Heath and Cobb (1908-11), Chamberlain and Cobb (1913-13) Bower and Parsons (1914) Bower and Allen (1915-18) Bower (1919-48) and Thompson (1913-54). 1953 data furnished by Rhodolo (footnote 6).

Fishermen give catch by boxes to numbers of fish. These have been converted to pounds dressed using the factor of 20.

(b) Data given in this table are at variance with those of other authors. Cobb (1921) gives the catch of troll caught kings in 1915 as 2,170,400 lbs., 1918 – 8,177,818 lbs. Undoubtedly, a conversion of 20 lbs. per dressed fish is not proper for these early years. Many buyers were refusing fish at their buying stations that were less than 18 lbs. and a higher conversion would be in order. However, the authors are at a loss to arrive at a more reasonable figure and to what point to effect the change. Present methods of obtaining catch statistics give the raw data in lbs. of fish, which are converted to numbers of fish by dividing by 20. The authors, wishing to present the catch data in pounds have simply reconverted. The more serious error lies in extrapolating the conversion backward to the historical catch records. This has been done, in lieu of a better method, in order to present as complete a catch record as is possible.

cluster of row boats fishing in the vicinity of a buyer, the trolling fleet has emerged as a group of vessels capable of fishing for two weeks per trip and of transporting their iced catches safely to a distant buyer. Even the weather ceases to be an dominant a factor, for the use of stabilizers(6) now allows the fishermen to work in weather that would have been deemed impossible a decade ago. In the face of all these technological developments(7) the annual catches have been decreasing rather than expanding. Why?

Commensurate with technological development, the fishing grounds have been changing. Chamberlain and Cobb (1913) described Forrester Island as being the most important trolling ground in 1912. In 1913 Forrester Island and Cape Ommaney were listed as the most important (Bower and Fassett, 1914). Expansion of the fishing grounds is shown to be in progress as in 1914 (Bower and Aller, 1915) Forrester Island, Cape Ommaney, Point Lemesurier, Point Casmano, Kashakes Point, Craig, Wrangell and Sunny Bay are all listed as important trolling areas. In 1916 (Bower and Aller, 1917) the most important waters were near Port Conclusion (Cape Ommaney), Noyes Island and Forrester Island.

The present trolling grounds of the Alaska fleet extend from Northern Hecate Strait on the south to Cape Fairweather on the north. Occasional landings originate west of Cape Fairweather but are not of sufficient magnitude to enter into the present discussion.

The history of Forrester Island may be further followed in historical records (Rich and Ball, 1933). The catch of kings in the vicinity of Forrester Island was in 1912, 22,380 fish; in 1913, 20,689; 1914, 82,122; 1915, 13,356; 1916, 595; 1917, 17,154; 1918, 11,463; 1919, 2,500; 1925, 1,160; 1926, 920. Production is seen to drop rapidly after a high in 1914, and during a time of expanding markets and demand. Today

(6) Scofield, 1950, gives a description of stabilizers as used by trollers.

(7) Fry and Hughes, 1951, give an adequate description of modern trolling methods and gear. Alaska I also has trollers by law on the use of 4 lines per boat.

the Forrester Island ground is rarely visited by the troller.

Rich and Ball (ibid.) lists the junction of Frederick Sound with Chatham Strait, and Cape Ommaney as important trolling grounds, saying:

> "Hundreds of trollers resorted to these regions and made phenomenal catches of salmon."

The catches of king salmon by lines in Southern Chatham Strait (includes above important areas) show a peak production of 373,427 fish in 1924 and a "normal production level" of 144,124 fish in 1927. No data are available for this specific area until 1951 when 11,526 kings and 1952 when 16,951 kings were landed.(8)

It is only possible to pinpoint the period of decline by the records(9) of mild cure salmon produced at Port Alexander, near Cape Ommaney. In 1930, 385 tierces(10) of kings were mild cured. In 1933 the pack was 1,020 tierces; 1937, 1,182 tierces and in 1938, 342 tierces. Production remained substantially at this level until 1942 (256 tierces). In 1943, only 43 tierces and in 1944 only 59 tierces were packed. Since that time mild curing has not been resumed at Port Alexander.

A comparison of catch from several trolling areas, past and present, are presented in Table 2. Area designation follows as closely as possible that of Rich and Ball (ibid.). It will be seen that South Chatham Strait and the West Coast of Prince of Wales Island production has fallen to comparatively low levels. We are able to see, then, the virtual disappearance of important king salmon trolling grounds during a period of exploration, expansion, and technological development. It is not remarkable that such events should occur in almost perfect correlation with the destruction of the Columbia River spawning grounds.

(8) Data by courtesy of E. C. Standish, Supervisory Statistician U. S. Fish and Wildlife Service.

(9) Pacific Fishermen yearbook series. These records are incomplete but do show consistency for mild cure production at Port Alexander for the period 1927 on down.

(10) A tierce of mild cure equals approximately 825 lbs. of which 500 lbs. of dressed troll king salmon are required to fill one tierce.

Table 2. Comparison of catches in selected trolling areas of Southeastern Alaska of years prior to 1928 with 1952. Catches in numbers of fish.

AREA	PEAK YEAR(a)	PEAK CATCH	1927 CATCH	1952 CATCH(b)
Icy Strait	1927	43,086	43,086	32,032
North Chatham Strait	1919	18,947	3,498	4,459
South Chatham Strait	1924	373,427	144,124	16,951
West Coast Baranof and Chichagof Islands	1923	298,071	113,239	159,399
West Coast of Prince of Wales Island	1913	146,615	14,646	43,521

(a) Peak year refers to peak catch up to and including 1927. 1928-1951 catches are not available.

(b) 1952 data courtesy of E. C. Hinedale, Supervisory Statistician, U. S. Fish and Wildlife Service.

A STRONG WARNING

A warning note to the industry was sounded by Dr. Rich when in 1932 he wrote(9):

"This constant increase in the catch of this species (king) has been due undoubtedly to a corresponding increase in the amount of trolling, in which type of fishing kings and cohos (*O. kisutch*) are taken almost exclusively. It has been mentioned . . . that tagging experiments have shown that many of the kings taken by troll off the coast of Southeastern Alaska and British Columbia are native to the Columbia River and to a lesser extent to the rivers farther south . . . . Under such conditions the conservation of this species in Southeastern Alaska is not at all a local matter, but is intimately involved with the troll fishery off the coasts of British Columbia, Washington, Oregon, and California, as well as the important fisheries in the Columbia River.

"The Columbia is undoubtedly the most productive stream in the world so far as king or chinook salmon are concerned and evidently dominates the catch throughout at least the northern part of the western coast. The Columbia River runs have been fished intensively for many decades and show unmistakable signs of depletion . . . .; the spawning areas have been greatly reduced by the erection of dams and the drain on the resource has been gradually increased by the development of the fishery in the river and more recently by the increase in trolling. The future seems doubtful and a continuation of the increase in the catch of kings in Southeastern Alaska seems most unlikely, although certainly there is no indication of reduced catches in the data herein considered. If this valuable fishery resource is to be preserved, however, a complete and detailed study of all the influences that bear upon the maintenance of the Columbia River kings should be undertaken without delay."

(9) Rich and Ball, 1933, page 662.

The Fishery agencies of the States of Oregon and Washington in cooperation with the U. S. Fish and Wildlife Service have stated(10):

"1. The Federal Government has constructed 40 dams on the Columbia River watershed during the period 1902 to 1942.

2. Thirty-five of these dams constitute total barriers to fish migration.

3. Any dam which necessitates a fish ladder causes a substantial loss through delay, injury, and death to both upstream and downstream migrants.

4. In the Columbia River watershed still available to salmon there are 14 large Federal water diversion projects, six of which are screened. Of the total migration, of young salmon through the average diversion canal, it is known that as much as 100 per cent have been lost through inadequate or defective screen units or through improper care.

5. Seventy per cent of the original total stream mileage of the Columbia River watershed has been lost to anadromous fish as a result of Federal dam construction.

6. The spring chinook salmon fishery of the Columbia River has been reduced to less than 10 per cent of its original magnitude, principally as a result of Federal dam construction."

SITUATION UNCHANGED

The situation today, concerning our king salmon and our troll fishery is no less critical than in 1947, despite the vast sums expended in both research and correction. In an address to the Eighty-third annual meeting of the American Fisheries Society, Mr. John L. Farley, Director of the Fish and Wildlife Service, stated(11):

(10) Anon. 1947 – p. 12

(11) Farley, 1953, p. 15

"The most serious threat to the maintenance of Pacific Coast salmon is the construction of major dams, particularly on the Columbia River watershed."

He further stated,

"The States of Washington and Oregon joined with the Fish and Wildlife Service and the Corps of Engineers in 1949 in a comprehensive program for the rehabilitation and development of all possible tributary streams *below* the site of McNary Dam." (12) (emphasis the authors')

This statement seems to exclude the possibility of maintenance of king salmon stocks, *status quo*, above the site of McNary Dam. It appears that civilization marches with a longer pace than science.

(12) McNary Dam was completed and dedicated in 1954.

RACIAL COMPOSITION

LITERATURE REVIEW

Proof of the influence wielded by the Columbia River on the troll fishery of Southeastern Alaska was given by the results of a tagging experiment conducted by the U. S. Bureau of Fisheries in 1927. Rich and Ball (ibid. p. 575) reported:

"It is also known that the king salmon of these coastal waters (Southeastern Alaska) are not all destined to the streams of Alaska, ... , but are members of several populations, probably representing runs to the rivers of the mainland from the Columbia River northward. This wide dispersion of king salmon from these localities was shown by an experiment in 1927 when 382 troll-caught kings were tagged and released off the west coast of Baranof Island. Of the 38 recaptured, 22 were taken at the Columbia River, ..."

Pritchard (1934) in summing up a series of Canadian experiments has shown: (1) kings tagged off the coast of Canada show a predominant southward movement to the natal streams. Counter movement is barely in evidence; (2) a regression of the percentage of Columbia River kings in the catches in areas from south to north, and (3) contributions of practically all major rivers from the California-Oregon boundary northward. Pritchard postulated a series of "northern limits of influence", i.e. as one fishes northward he would pass through a predominantly Columbia River stock and into a Fraser River zone, Skeena River zone, etc.

On the basis of all tagging experiments, Silliman (1948) further advanced the theory of a regression of Columbia River influences from south to north giving the equation R = 65.9 - .413L where R is the percentage of Columbia River recoveries of tags and L is the north latitude less 48 degrees, expressed in minutes and divided by five. Using this regression Silliman corrected the estimated catches of kings landed in Ketchikan, Sitka, and Pelican by the factors 0.30, 0.21 and 0.16, respectively, to obtain the Columbia River contributions.

We have, then, a hypothetical measure of the contributions of the Columbia River to the troll catches of king salmon in Southeastern Alaska.

A RE-APPRAISAL

Feeling that, on the basis of historical developments as related, the troll fishery for king salmon in Southeastern Alaska had a perilous future, the Alaska Department of Fisheries undertook in 1950 a re-appraisal of the present condition of the stocks as fished. The remainder of this report will be confined to a description of the stocks of king salmon as found in the ocean fishery, the stocks found in inside waters to be the subject of a future report. This research program was designed and conducted coincident with a similar program sponsored by the Pacific Marine Fisheries Commission[13], formed by the States of California, Oregon and Washington. Canada joined in the efforts with a similar program off the Canadian Coast.

The most direct approach to the question of racial composition of the present stocks of king salmon as fished by the Alaska troller is through tagging. Two main areas were selected for study, (1) the west coast of Prince of Wales Island (Area III), and (2) the west coast of Chichagof Island (Area II). These areas support the most productive fisheries of the present areas fished and are widely separated. Counter migration, if it existed, would be shown by such a selection. A third area bounded by Cape Spencer and Cape Fairweather (Area I) was studied, not as a principal production area but because of a possible future increase in trolling intensity.

TAGGING METHODS

King salmon for tagging were bought directly from the fisherman. Arrangements were made for the scientist to accompany the vessel for trips of 10 to 14 days, all fishing operations, such as area, gear, and methods used were left to the discretion of the fisherman. The duties of the scientist were limited to the tagging of the fish and recording of the data. Reimbursement for the fish was made on the basis of estimated dressed weights obtained through length-weight studies and the prevailing price for fish at the nearest cold storage port of landing. The fish tagged and sampled are considered as representative of the troll catch of kings landed in the areas sampled.

Only fish in reasonably unharmed condition were purchased for tagging and these were graded according to the extent of their injury and their apparent condition. The returns of tags have indicated that apparent condition at the time of tagging is a reliable measure of chance of survival. For the arbitrary grades "A" (best), "B" and "C" the 1950 percentages of recovery of 1950 tagging were 13.9, 10.5 and 0, respectively. These returns led to the elimination of "C" grade fish from the tagging data and such fish were not tagged in further experiments.

In 1950 and 1951 the standard "Petersen" type tags were used, consisting of two celluloid discs five-eighths of an inch in diameter with a centered hole and a pure nickel pin. One disc was colored red and the other white; both were printed with "Alaska Dept. of Fisheries, Juneau" and bore identical serial numbers. To attach the tag, one of the discs was placed next to the head of the pin and the fish was pierced in the region immediately below the insertion of the dorsal fin. The second disc was then threaded on the pin and a knot tied in the exposed end of the pin to prevent the tag from separating. In the 1952 tagging an adaptation of the Petersen tag was used in the nose. The pin bearing a disc three-eighths of an inch in diameter was inserted through the roof of the mouth just posterior to the oral flap. A five-eighths inch baffel was then affixed to the dorsal surface of the nose and a knot tied in the pin. This later "nose-tagging" method appears to have several advantages over the fin position, yielding a higher percentage of tags recovered and showing less evidence of skin abrasion.

(13) Results published under various authorship in Bulletin 2, Pacific Marine Fisheries Commission, 1951.

A canvas-lined box holding approximately 80 gallons of water was used as a live box. The fish were placed therein as caught and the fishing gear carefully removed from the mouth. Several methods were used for landing the fish including dip nets and gaff hooks but the most successful was to lift the fish directly aboard by the trolling g ar. On fish weighing in excess of 20 pounds this method is seldom feasible and careful gaffing in the lower jaw gave the best results with a minimum of injury. The live box was continuously supplied with fresh sea water by means of a mechanical pump and the fish were tagged, measured, and a scale sample obtained while supported in water. Figure 3 illustrates this method of tagging fish and a fin tag in place.

The several individual tagging experiments are grouped in Table 3 according to the main areas of tagging as previously set forth in this text. Table 4 presents the recoveries grouped according to area. Complete recovery data by tag number are presented in Appendixes I–III.

Table 4 indicates the contributions of the Columbia River to the Alaska troll fishery. A finer analysis of the data illustrates that 21 of 27 stream recoveries (78 percent) from Area I were of Columbia origin. For Area II and III the Columbia River recoveries were 18 of 44 (41 percent) and 6 of 13 (46 percent) respectively.

The Fraser River is also a large contributor to Alaska's troll fishery. Of stream recoveries from Area I, 3 of 27 or 11 percent were of Fraser origin. Stream recoveries from Area II were 44 of which 12 or 27 percent were from the Fraser. For Area III, 4 of 13 stream recoveries or 31 percent were recovered in the Fraser. This comparison shows a striking similarity of king salmon found in Areas II and III, and a dissimilarity between Area I and Areas II and III, Area I is characterized by a high percentage of Columbia River king salmon.

Direct use of these data for calculating the contributions of these rivers to the Southeastern Alaska troll catch should be made with discretion. Silliman (1948)[14], recognizing the

(14) Silliman (1948) pp. 1 and 2.

inherent errors in such an application, stated:

> ". . . it is well to recognize that their (tagging and recovery data) suitability for this purpose is entirely dependent upon the fishing intensity and recovery effort . . the various regions. For instance, we assume a stock of 1500 tagged salmon, composed of 1,000 British Columbia and 500 Columbia River fish. Disregarding other mortality, and assuming 100 percent recovery of tagged fish caught, a fishing intensity of 25 percent in British Columbia and 50 percent in the Columbia River would result in 250 recoveries of tags in each region, and evidence from recoveries alone would point to 50 percent Columbia River fish instead of the true 33 1/3 percent. When efficiency in recovering the caught fish, as well as fishing intensity itself, varies, the situation is further complicated. . . . the consideration of another source of error . . . the application of the tagging results to years other than those during which the experiments were performed. It is necessary here to realize that the percentage of Columbia River fish on the British Columbia trolling grounds depends upon the abundance of other fish as well as those from the Columbia. If other fish increase in numbers the percentage of Columbia River fish will decrease, even though their absolute number remains the same."

Recognizing these sources of error, and lacking the necessary data to correct for them leaves the authors little choice but to summarize the tagging data as follows, but with reservations on the relative importance of the Fraser and Columbia Rivers:

1. The largest single source of supply of king salmon for the Southeastern Alaska troller is probably the Columbia River.

2. The second largest single source of supply is probably the Fraser River.

3. All major streams from Southern Oregon northward to Southeastern Alaska contribute, but to a lesser degree.

Of the fish known to be of Columbia River origin, further analysis is possible. The data presented in Appendixes I–III give the date of recapture of all recoveries.

It is seen, that according to the month and recoveries made, there were two in April, three in May, three in July,



Figure 3. Illustrating the method used for handling fish for tagging aboard a troller at sea.

Table 3. Schedule of tagged fish released and recoveries by time and area of tagging.

AREA	DATES	NO. TAGGED	NO. RECOVERED	PERCENT RECOVERED
Area I				
Cape Spencer to Cape Fairweather	June, July, 1950	132	22	.166
	June, July, Aug., '51	75	9	.120
	May, June 1952	158	26	.164
	Total	365	57	
Area II				
Sitka to Cross Sound	May, June, July Aug., Sept. 1950	358	68	.190
	June 1951	22	6	.273
	Total	380	74	
Area III				
Warren Island to Cape Fells	May, June, July 1950	173	26	.150

Table 4. Percentage recovery of tagged king salmon by area.

AREA OF TAGGING	AREA OF TAGGING					
	Area I		Area II		Area III	
	No. rec.	% rec.	No. rec.	% rec.	No. rec.	% rec.
Oregon Coast Streams	0		6	8.1	0	
Columbia River	21	36.8	18	24.3	6	23.1
Washington Coast streams	1	1.8	4	5.4	1	3.8
Fraser River	3	5.3	12	16.2	4	15.4
British Columbia streams	0		4	5.4	2	7.7
Alaska streams	2	3.5	0		0	
Washington inside waters	0		3	4.1	1	3.8
British Columbia inside waters	1	1.8	5	6.8	3	11.6
Alaska inside waters	1	1.8	1	1.4	0	
Oregon ocean fishery	0		1	1.4	1	3.8
Washington ocean fishery	2	3.5	0		0	
British Columbia ocean fishery	13	22.8	8	10.8	5	19.3
Alaska ocean fishery	13	22.8	12	16.2	3	11.6
TOTAL	57		74		26	

fourteen in August, twenty-one in September, and two in October. Silliman (1950) states[15]:

> "In contradistinction to the legal fishing seasons noted, certain large and obvious fluctuations in the catch during the fishing season have been recognized by fishery biologists and have led them to speak of at least three separate Chinook salmon runs. These are more readily apparent for data from early seasons, before certain of the runs were reduced in abundance . . ."

Roughly these runs are (1) the spring run of May, (2) the summer run of June and July, and (3) the fall run of August, September and October. Without considering the effects of closed periods of fishing[16] the recoveries show a large majority of the Columbia River king salmon tagged were of the fall run, possibly in excess of 80 percent.

The recovery of tags by locality in the Columbia River strongly suggests that the stocks Alaska is concerned with are of upriver (above Bonneville Dam) origin. Of 37 recoveries in the fall run, 12 were recovered at The Dalles or at Celilo. The various component races of the fall run are hopelessly mixed in the lower Columbia River and nothing can be said of tag recoveries from that area except that the majority of them could have belonged to upriver races. Until the problem of salmon and dams is satisfactorily solved, it seems obvious that with the completion of each new dam on the Columbia River, a further depression of abundance of king salmon available to the Alaska troller will be certain.

(15) Silliman, 1950, p. 367.

(16) Since these deductions are based entirely upon tags returned and these are almost entirely due to commercial fishing, the periods of closed season will markedly affect the analysis. No ready means of correction have occurred to the authors, and the data are herewith presented as face value.

STOCK CHARACTERISTICS

For the remainder of the rest, it is the objective of the authors to present data and make analyses that may in general be used to describe the characteristics of the stocks of king salmon, as found in the coastal waters of Southeastern Alaska during the years 1950 to 1952, inclusive. The conclusions drawn may not accurately describe conditions during years other than those sampled, for the stocks are dynamic in regard to racial origin, as well as being subjected to everchanging environmental influences, both of natural and human origin. In addition to kings tagged and released, measurement data were taken from fish unfit for tagging and these two series of measurements are combined to describe the stock as a whole for each area.

SIZE FREQUENCY

The length frequency of the fish sampled is presented as an estimation of the length frequency of the stocks found in Areas I, II and III. Original measurements were obtained by holding the specimen against one side of the tagging box to which was affixed a ruler marked in inches. The measurement used was straight line distance from the tip of the snout to the end of the center rays of the caudal fin. This measurement is known as "fork length." Measurement was taken to the closest one-half inch. The manner of obtaining these measurements leaves much to be desired, but principal importance was placed upon returning tagged fish to the water with as little abuse as possible. The lengths presented then, are not strictly accurate, but do reflect the size composition of the stock. The original data have been grouped in two and one half inch size groups for presentation in Table 5.

A comparison of the stocks of kings as sampled in the three areas reveals an apparent regression in average size from south to north. Prominent modes are displayed at the 35.0 and 37.5 inch groups in Area III, at the 30.0 and 32.5

inch groups in Area II and at the 27.5 and 30.0 inch groups in Area I. Further evidence of these apparent differences may be determined from an examination of Table 6. Data are available for 1950 from only the Ketchikan and Sitka landings. No data are available to properly weight these averages into a seasons total except to note that the principal fishery for kings occurs during May, June and July. During this period the average weights for the Ketchikan landings are consistently greater than for the Sitka landings. The same relationship is apparent for landings originating from south of Cape Spencer compared with landings originating northwest of Cape Spencer in the years 1953 and 1954. Also apparent is the manner in which the average weight falls as the season progresses. In addition Table 6 illustrates the dynamic status of the populations from year to year. The 1954 season was characterized by an early run of large fish and this feature is reflected in the data.

We may summarize the size characteristics of the king salmon by stating (1) the average size of the king salmon found in the offshore waters of Southeastern Alaska increases from northern extremity to southern extremity, and (2) the average size may be expected to decrease as the season progresses in any given year. A full explanation will be offered later in the text.

AGE ANALYSIS

In order to understand the size composition of the stocks of king salmon it becomes necessary to transpose the discussion into terms of age classes or year groups. From each fish sampled a group of scales was taken for use in age analysis. Procedures used in assessing age to particular fish were standard, and interpretations follow those outlined by Fraser (1917) and Rich (1925). The symbols used to designate age are the year of life in which the fish is taken with a subnumber designating the year of life in which the fish entered the sea. Thus the notation 5_3 designates a fish captured in its fifth year that migrated from the natal stream to the sea during its second year. The ages receiving the subnumber

Table 5. Length frequency of king salmon as sampled in the outside waters, Southeastern Alaska, in two and one half inch size groups, 1950 - 52.

Call Boundary Inches	Call designate Inches	AREA I No.	AREA I Percent	AREA II No.	AREA II Percent	AREA III No.	AREA III Percent
11.25 - 13.75	12.5	1	0.2				
13.75 - 16.25	15.0	10	2.2	4	0.8		
16.25 - 18.75	17.5	9	2.0	2	0.4		
18.75 - 21.25	20.0	19	4.1	3	0.6		
21.25 - 23.75	22.5	35	7.6	11	2.1	3	1.5
23.75 - 26.25	25.0	56	12.1	40	7.6	3	1.5
26.25 - 28.75	27.5	147	31.9	83	15.8	13	6.6
28.75 - 31.25	30.0	114	24.7	117	22.4	26	13.3
31.25 - 33.75	32.5	42	9.1	117	22.4	31	15.8
33.75 - 36.25	35.0	21	4.6	91	17.3	46	23.5
36.25 - 38.75	37.5	6	1.3	43	8.2	47	24.0
38.75 - 41.25	40.0	1	0.2	10	1.9	23	11.7
41.25 - 43.75	42.5			1	0.2	3	1.5
43.75 - 46.25	45.0			1	0.2	1	0.5
46.25 - 48.75	47.5						
48.75 - 51.25	50.0			1	0.2		
Total		461	100.0	524	100.1	196	99.9

Table 6. Average weights of kings sampled in cold storage ports of landing – Ketchikan, Sitka, and Pelican.(a)

Period	Average weight in pounds					
	Ketchikan 1953	Sitka 1953	South of C. Spencer 1953	1954	[illegible] of Spencer 1953	1954
May 1-10			19.02	21.75		
11-20				21.96		18.55
21-30	14.67		18.37	21.78		16.10
31-June 9	16.80		17.93	19.47	16.35	15.86
10-19	17.39	16.38	17.96	18.20	14.89	16.96
20-29	18.93	17.14	18.13	17.99	18.47	16.04
30-July 9	18.13	16.69	18.10	17.79	18.12	18.69
10-19	17.68	16.88	17.61	16.62	15.78	15.28
20-29	18.26	17.28	17.60	18.31	16.66	12.79
30-Aug. 8	19.71	16.96		17.45		11.74
9-18	14.96	17.74		16.65		10.82
19-28	12.17			16.84		9.00

(a) Ketchikan landings include Hecate Strait and Dixon Entrance in addition to West Coast of Prince of Wales Island. 1953-4 data supplied by Pacific Marine Fisheries Commission. Sampling was done at Pelican Cold Storage.

designation 1 are the "ocean type" of Fraser (ibid.) and Rich (ibid.), those receiving the subnumber 2 are the "stream type."

In a study of this type, considerable room for doubt of correct interpretation exists, particularly in distinguishing a stream type from an ocean type nucleus. In their treatment of the material, the authors have made every effort for a "correct" interpretation but realize the possibility of error. The interpretations are consistent with each other, for repeated checks of the material have yielded materially the same interpretation.

From a total sample of 1181 specimens, 110 or 9.3 percent of the scales were unreadable for a variety of reasons. These fish were assigned age designations by length groups according to maximum likelihood as determined by the rest of the sample.

Table 7 presents the results of the age analysis. The size frequency data previously discussed (Table 5) are seen to reflect the age composition of the stocks encountered in Areas I, II, and III. A regression is apparent in age from Area III to Area I.

Table 7. Age composition of king salmon as sampled in the outside waters of Southeastern Alaska, 1950-2

Age	AREA I			AREA II			AREA III		
	No.	Total	Percent	No.	Total	Percent	No.	Total	Percent
3_1	17	18	3.9	7	7	1.5			
3_2	1			0					
4_1	94	115	24.9	36	40	7.6	9	10	9.1
4_2	21			4			1		
5_1	231	285	61.8	100	320	61.1	73	85	43.4
5_2	54			20			12		
6_1	28	41	8.9	117	146	27.9	73	91	66.4
6_2	13			29			18		
7_1	0	2	0.4	7	11	2.1	3	18	9.1
7_2	2			4			7		
Total	461	461	99.9	524	524	100.0	196	196	100.0

The phenomenon displayed in the average weight data of decreasing size as the season progresses is also reflected in the age frequency of Area I. Table 8 presents this material by 30 day periods. Area I is characterized by a large percentage of immature fish. The older, more mature, fish leave the area during the spring months and early summer resulting in an increasing percentage of immature fish as the season progresses. This same exchange is undoubtedly true for Area II and III, except that a smaller percentage of immature fish is present throughout the season.

Table 8. Percentage age composition by 30-day periods in Area I.

Period	AGE 2	3	4	5	6	Total
May 1-30	2	8	70	20		100
May 31-June 29	1	10	80	6	2	99
June 30-July 29	8	29	58	5		100
July 30-Aug. 28	1	51	42	6		100

AGE-SIZE RELATIONSHIP

The relationship between age and size is dynamic throughout the season. The samples were drawn from a population at the height of the growing season; age, on the other hand, is determined from year to year with no intermediate designations. Having insufficient samples to break into small units of time and describe several age-size relationships, the authors have measured a large sample of the available scales from Areas I and II and applied Fraser's technique[17] in calculating the size at the completion of each annulus. These values are presented in Table 9 for ocean and stream type individuals.

Inspection of the values given in Table 9 shows Lee's phenomenon apparent in these data.

An exception is the calculation for Area I, ocean type fish in their fifth year. The values obtained exceed those for fish in their third and fourth years. Fraser (ibid.) explained the phenomena of older fish having lower average increments throughout their life than younger fish in that the largest fish of each year class matured and spawned while the smaller individuals remained at sea and spawned a year or more later. This explanation does not clearly explain why the phenomena should manifest itself in calculations based upon a collection of scales from fish shown (by tagging) to be largely immature as is the case of the samples drawn in Area I. Whatever the correct interpretation may be, the relationship between age and size is better explained by restricting the data to the use of the calculated size at the completion of the last annulus. These statistics may be determined by reading the last of the columned figures diagonally in Table 9.

An apparent difference between the size of the fish of the same age found in Areas I and II is shown to exist by data in Table 9. In the ocean type fish this difference occurs in the second growth year as the increments for the other years of life are similar in both areas. This can best be shown by the use of annual increments as calculated from the values of Table 9 and presented in Table 10. For the stream type fish the early years are not comparable due to the absence of fish

(17) Fraser (ibid.) made detailed studies on the growth of the king salmon (chos pinnatis) in the waters of Georgia. He accepted the theory advanced by Lea, and others, which proposed a linear relationship between the growth of the scale and the growth of the fish. Lee's formula was objected to by many investigators, but principally on the basis of Lee's phenomenon which refers to an apparent discrepancy between the growth as calculated from the scales of older fish and growth as calculated from the scales of younger specimens. Fraser used the length of the fish at the time (con't.)

(17 — con't.) when the scales are formed (1.5 inches) to a corrected formula which with our notation is $L_1 = \frac{S_1(L-1.5)}{S} + 1.5$ where,

L_1 denotes the desired length of the fish at some previous date,
L denotes the length of the fish at capture,
S_1 denotes the length of the scale as measured along a radius from the edge of the original platelet to the length at the desired date, and
S denotes the length of the scale as measured along the same radius from the edge of the original platelet to the margin.

For a detailed account of scale-body relationships the reader is referred to Van Oosten (1929).

Table 9. A comparison of average fork lengths in inches at the completion of each annulus as calculated from king salmon of each age group by means of Fraser's formula.

Type of Scale	Area	Completed annulus number	Number of completed annuli				
			1	2	3	4	5
Ocean type	Area I	1	11.0	9.1	8.3	9.5	
		2		18.9	18.3	19.1	
		3			24.9	26.0	
		4				32.0	
		Size of sample	13	40	89	24	
	Area II	1	11.3	10.2	9.1	8.7	7.8
		2		21.9	19.7	18.2	17.0
		3			27.8	25.7	23.4
		4				32.8	29.7
		5					36.1
		Size of sample	4	22	195	75	7
Stream type	Area I	1	4.3	5.2	5.1	4.8	6.4
		2		16.7	16.0	15.0	15.2
		3			23.8	22.2	21.8
		4				29.3	28.2
		5					32.6
		Size of sample	1	17	76	8	2
	Area II	1		5.2	5.1	5.2	4.9
		2		18.8	17.2	17.0	15.0
		3			25.9	24.8	22.8
		4				32.7	30.8
		5					39.7
		Size of sample		1	10	19	4

in their second and third years in Area II. Where comparison can be made the rate of growth is quite comparable, however, the number of samples do not lend any degree of confidence to the results.

Table 10. Annual increment of king salmon as calculated from the growth year prior to the last annulus.

Growth year	Average annual increments in inches			
	Ocean type		Stream type	
	Area I	Area II	Area I	Area II
1	11.0	11.3	4.3(b)	
2	9.8	11.7	11.5	13.3(b)
3	6.6	8.1	7.8	8.7
4	6.0	7.1	7.1	7.9
5		6.4(c)	4.4(c)	8.9

(a) Based on 3 specimens.
(b) Based on 1 specimen.
(c) Based on 2 specimens.

ANNUAL INCREMENT

Compared with Fraser's growth tables[11] these specimens show faster early growth but a lesser annual increment in later years. For sizes or ages of kings normally encountered by the commercial troller as immatures (not in the final year) annual increment is estimated as the calculated growth between the end of the penultimate and the end of the ultimate annuli. These averages are: for Area I, ocean type, 6.5 inches, stream type 7.6 inches; for Area II, ocean type 7.8 inches, stream type 8.2 inches. As an estimate for both types, weighted by the occurrence in the samples, the average expected annual increment is for Area I 6.7 inches and for Area II 7.9 inches. These estimates are based on calculated growths for the 1949 and 1950 growth years; certainly growth different years will not be precisely the same.

SIZE-WEIGHT RELATIONSHIP The relationship between size and weight is a useful statistic for estimating the weight of a measured sample. Market measurements were obtained throughout the season at Ketchikan, Sitka and Juneau. The data were first inspected for evidence of significant differences between the areas or during different periods of time. While small differences do exist, the most useful statistic will be one which describes the whole of the fishery and this may be done without serious error. The original measurements were obtained in units of one half inches and one half pounds. Samples from the empirical data were selected to suppress the emphasis placed in a study of this type by the modes of the sample and to equalize the influence of the extremes of the size range. The total sample was held to 1,000 individual sets of measurements. The relationship between length and weight is best expressed by the parabolic equation $W = \frac{L^{3.151}}{3542}$ ..... (1)

where W denotes estimated dressed weight in pounds and L denotes the fork length in inches.

Table 11 presents the calculated values at two and one half inch intervals and compares them with the average weights and their standard deviations derived from the empirical data at the same length intervals. The calculated values are an extrapolation of equation (1) below 25.0 inches and above 42.5 inches of fork length for only 38 measurements were obtained below and 6 above the aforementioned levels in the 1,000 total sample selected.

OCEAN MORTALITY If the following major assumptions be granted:

1. Fishing mortality on the stocks of kings herein considered is uniform over the size range and between the years contained within the tagging experiment.

2. Tag loss is not progressive, i.e., tag loss is complete in the initial year of tagging. We have refer to the tag loss

Table 11. Computed values of the length weight relationship of king salmon compared with empirical data and their standard deviations.

Fork length inches	Computed weight pounds	Empirical average weight, lbs.	Standard deviation	No. in sample
12.5	0.8			
15.0	1.4			
17.5	2.3			
20.0	3.6			
22.5	5.1			
25.0	7.2	7.2	.78	22
27.5	9.7	9.3	.94	19
30.0	12.7	11.8	1.41	19
32.5	16.4	16.1	1.92	36
35.0	20.7	21.3	3.07	35
37.5	25.7	26.6	2.04	21
40.0	31.6	30.9	2.68	15
42.5	38.2	38.6	2.88	5
45.0	45.7			
47.5	54.1			
50.0	63.7			

not accountable for by failure of the tag in fishing gear or failure of the fishermen to return the tag, but to failure of the tag to remain on the fish under natural conditions.

3. Tagging mortality is complete during the year of tagging, after that date a natural mortality rate applies to tagged and untagged specimens alike.

Then the difference between expected recovery and actual recovery for the second, third, etc., years of freedom may be accounted for only by natural mortality.

To put this relationship in algebraic form, let P denote the population of tagged fish,

n denote the annual rate of natural mortality,

s denote the annual survival rate (1 − s = n),

r denote the expected recovery rate of tagged fish, without natural mortality, over all years,

R denote the recovery of tags in actual numbers, and subnumbers, 0, 1, 2, 3 indicate the year of tagging and the year of tagging plus one, etc. The relationship between the tagged population, recovered tags and annual survival is shown by the formula:

$$Pr = \sum_{i=0}^{m} \frac{R_i}{s^i} \quad \cdots\cdots (2)$$

m denoting the largest number of years that a tagged specimen survives.

Rearranging, the general equation for the relationship becomes:

$$(Pr - R_0)s^m - R_1 s^{(m-1)} - R_2 s^{(m-2)} - \ldots - R_m = 0 \cdots\cdots (3)$$

Any estimate of r must be made from tagged fish running the gauntlet of Pacific Coast fishing gear during year 0. If estimated r is restricted to fish in their fifth and sixth years it will be close to the actual value of r as nearly all of such fish will be mature and subject to a wide fishery during their migration to natal streams. Such an estimate of r will also include correction for such disturbing factors as failure to

report tags, tag selectivity of the fishing gear and tagging mortality under assumption 3, previously presented.

Inspection of equation (3) will show further that the estimate of survival rests primarily upon the correct approximation of the expected recovery rate and a small error in the estimation of r will result in a substantial error in s. For the estimation of the survival rate, tagging data from all three areas have been combined. r, estimated from the recovery of 44 of 215 five and six year old fish tagged, is .205. Two five year old fish were recovered after a year of freedom, necessitating a further consideration of r. Empirical values of the notations are:

P	=	918
R_0	=	110
R_1	=	35
R_2	=	11
R_3	=	1

Substituting in (3), we obtain the cubic equation,

$$78 s^3 - 35 s^2 - 11 s - 1 = 0 \cdots\cdots (4)$$

The approximate solution for s is .681. To correct r, it can be shown that

$$r = \frac{42}{215 - \frac{2}{sr}} \quad \cdots\cdots (5)$$

$$r = .209$$

Substituting corrected r in equation (3) we obtain

$$81.9 s^3 - 35 s^2 - 11 s - 1 = 0 \cdots (6)$$

The approximate solution of equation (6) s .659. Further substitution of corrected values does not change either r or s in three significant places, r is accepted as .209 and s is accepted as .659. The annual rate of natural mortality is estimated as .341 for the stock as a whole, as it occured in the outside waters of Southeastern Alaska.

RELATIVE MATURITY

Having a usable estimation of natural mortality it is possible to estimate the relative maturity of the stocks of kings as found in each area of tagging. The terms of the right half of equation (2) will correct the tags recovered in the years 1, 2, and 3 to the numbers of expected recoveries had they been mature in the year of tagging. While fish recovered during the year of tagging in a stream were definitely mature and those recovered a year or more after tagging were definitely immature, there remains a rather large portion of recovered fish whose precise condition as to maturity at tagging remains doubtful.

As mature kings leave the coast of Alaska and proceed toward their natal streams they are subjected to a troll fishery over the entire distance. It may also be true that some immature king salmon leave the coast of Alaska and feed in areas farther to the south. This condition necessitates an arbitrary decision that all fish recaptured during the year of tagging along the direct migration route are mature. This assumption may well be in error. Tagged fish recaptured in the area of tagging during the year of tagging have received an indefinite status regarding the state of maturity.

The calculation for estimating the percentage of mature kings within age classes is presented in Table 12. The data are grouped according to years of salt water residence to enlarge the individual samples and to make the resulting estimate apply to a group of similar size. Apparent irregularities are noted in the data for Areas II and III which have been attributed to the error inherent with small samples, viz., the lack of immaturity of the $3_1 \cdot 4_2$ group. To the authors, the conclusion that all fish in the population that fall in the age group $3_1 \cdot 4_2$ are mature is absurd, rather the conclusion is that the sampling was insufficient and repeated sampling would show immature fish of that classification to be present.

The data clearly indicate a large portion of the fish in Area I with four years or less of ocean residence are immature, probably at a level greater than 80 percent. The opposite relationship is true of stocks found in Areas II and III.

Table 12. Calculation of the percentage mature kings grouped by number of years of salt water residence.

Area I	R_0			Immature				
Age groups	Mature	Indefinite	Total	$R_{1/o}$	$R_{2/o}{}^2$	$R_{3/o}{}^3$	Total	Percent mature
$3_1 \cdot 4_2$	2		2	11	16		27	6.9
$4_1 \cdot 5_2$	11	1	12	30	7	3	40	21.2-23.1
$5_1 \cdot 6_2$	5		5				0	100.0
Total	18	1	19	41	23	3	67	20.9-22.1

Area II	R_0			Immature				
Age groups	Mature	Indefinite	Total	$R_{1/o}$	$R_{2/o}{}^2$	$R_{3/o}{}^3$	Total	Percent mature
$3_1 \cdot 4_2$	7		7				0	100.0
$4_1 \cdot 5_2$	43	3	46	8	2		10	76.8-82.1
$5_1 \cdot 6_2$	11	1	12	2			2	78.6-85.7
6_1	2		2				0	100.0
Total	63	4	67	10	2		12	79.7-84.7

Area III	R_0			Immature				
Age groups	Mature	Indefinite	Total	$R_{1/o}$	$R_{2/o}{}^2$	$R_{3/o}{}^3$	Total	Percent mature
$3_1 \cdot 4_2$	4		4				0	100.0
$4_1 \cdot 5_2$	10	3	13	5			5	62.5-81.3
$5_1 \cdot 6_2$	7		7				0	100.0
Total	21	3	24	5			5	77.8-88.9

Table 13. Relative maturity by size groups for Areas I, II and III

Area I

Size group inches	R_0 Mat.	R_0 Indef.	R_0 Total	Immature $R_{1/e}$	Immature $R_{2/e}^2$	Immature $R_{3/e}^3$	Immature Total	Total	Percent mature
20.0			0	2			2	2	0
22.5	1		1		7		7	8	12.5
25.0	2		2	3	11		14	16	12.5
27.5	3		3	15	5	3	23	26	11.6
30.0	4		4	18			18	22	18.2
32.5	4	1	5	3			3	8	50.0-62.5
35.0	2		2					2	100.0
37.5	1		1					1	100.0
40.0	1		1					1	100.0
Total	18	1	19	41	23	3	67	86	20.9-22.1

Areas II and III combined

Size group inches	R_0 Mat.	R_0 Indef.	R_0 Total	Immature $R_{1/e}$	Immature $R_{2/e}^2$	Immature $R_{3/e}^3$	Immature Total	Total	Percent mature
22.5									
25.0	8		8				0	8	100.0
27.5	6	1	7	2			2	9	66.7-77.8
30.0	21	1	22	6	2		8	30	70.0-73.4
32.5	25	2	27	3			3	30	83.4-90.0
35.0	14	2	16				0	16	87.5-100.0
37.5	6	1	7	2			2	9	55.6-77.8
40.0	4		4				0	4	100.0
Total	84	7	91	13	2		15	106	81.5-88.3

Similar calculations were used for estimating the relationship between size and maturity and these estimates are presented in Table 13. Areas II and III were combined as these stocks have been shown consistently to have similar characteristics. Remarks made previously on sample size apply equally as well to this study. Discrepancies from expected results appear which have been attributed to sampling error inherent in such small samples. The data do give the indication that a large percentage of the stock in Area I contained in or smaller than the 30.0 inch group are immature, probably greater than 80 percent. The data for Areas II and III indicate the opposite relationship; fish of all the size groups commonly encountered are largely mature.

REGULATIONS

The king salmon fisheries of the Pacific Coast have been subjected to a variety of restrictions, ranging from a total closure during certain seasons of the year, or a total closure of certain areas, to a size restriction. In Southeastern Alaska fishing for kings in outside waters is prohibited from November 1 to March 15 and the taking of fish less than six pounds dressed weight or 26 inches fork length is prohibited. The closed season restriction is of little consequence as there is little or no desire to fish in outside waters during the winter months. The size restriction is of consequence and may be examined in the light of the data and its interpretation presented.

Any size restriction is presumably invoked under the hypothesis that if the little fish are allowed to remain in the sea, the net size of the stock will be materially greater at some later date, or that the net value will be greater. If, in the case of king salmon, the maximum production in pounds is desired, losses to the stock because of maturity and natural mortality must be offset by growth. This relationship has been studied for Area I and the calculations are presented in Table 14.

Considering the figures in Column 10, Table 14, it is shown that a gain of pounds of stock is possible through restricting the size of the fish landed. The 27.5 inch size group will get a nineteen percent increase in weight if allowed to grow an additional year. Greater net increases accrue from smaller size groups, up to a maximum of 264 percent increase for the smallest size group found in the samples. These figures do not contain the effects of being hooked and released, however, and it will be seen that if a combination of hooking mortality and natural mortality exceeds the values of column 11, Table 14, a net loss will occur.

Table 14. Calculation of effects of maturity and natural mortality upon Area I stock.

1	2	3	4	5	6	7	8	9	10	11
F.L., mid-inches	No. of fish	Wt. conv. lbs.	Stock wt. lbs.	No. immat.	Survive nat. mort.	F.L., rev. ann. incr. inches	Wt. conv. lbs.	Stock wt. lbs.	Col. 9/ col. 4	Total survivity rate for col. 10=1.0
12.5	100	0.8	80	100	66	19.2	3.2	211	2.64	.750
15.0	100	1.4	140	100	66	21.7	4.8	317	2.26	.708
17.5	100	2.3	230	100	66	24.2	6.6	436	1.89	.652
20.0	100	3.6	360	100	66	26.7	9.1	671	1.67	.604
22.5	100	5.1	510	88	58	29.2	12.1	702	1.38	.521
25.0	100	7.2	720	88	58	31.7	15.7	911	1.26	.479
27.5	100	9.7	970	88	58	34.2	19.9	1154	1.19	.446
30.0	100	12.7	1270	82	54	36.7	24.9	1345	1.06	.398
32.5	100	16.4	1640	44(a)	29	39.2	30.6	887	0.54	<0
35.0	100	20.7	2070	0						
37.5	100	25.7	2570	0						
40.0	100	31.6	3160	0						

(a) midrange point of percent mature = 56 percent used (Table 13)

No data are available to the authors with which to directly estimate the effects of hooking and subsequent release.[19] A minimum estimate of such mortality may be taken as the percentage of fish not tagged or graded "C" during the tagging operation. This category includes fish that came aboard dead or severely injured with excessive bleeding, and it is the opinion of the authors that only a small fraction would survive if released. It is also the opinion of the authors that the treatment of the fish brought aboard the vessel was above par if compared to the fleet of trollers as a whole. The percentage of fish landed that were tagged is presented in Table 15, Column 6 of Table 15 is repetition of Column 11, Table 14 and is referred to as the "peril point" mortality as it is at that point where a loss of pounds of fish will occur if they are released. Comparison of column 5 and 6 of Table 15 will show that a size limit is not a valid means to increasing the production of pounds of fish in the stocks found in Area I. Only in the 20.0, 22.5 and 25.0 inch size groups does the expected minimum mortality rate fall below the peril point. A much worse case can be presented for Areas II and III where the stocks are largely mature regardless of size. The conclusion reached is that a size limit is not a feasible means of increasing production and some other method of restriction must be arrived at to maximize the poundage produced.

Area I is uniquely situated at the beginning of a coastwise fishery. Fish that are not caught in Area I are subjected to fishing pressure along their entire migration route and in their natal streams. It could be argued then that Area I should be closed to trolling and advantage be taken of the growth profits outlined in Table 14. Such a restriction would seem to be premature at the present. The fishery is rapidly expanding

(19) Dr. H. J. Milne of the Pacific Research Station of the Biological Board of Canada writes (private communication): "In our pound experiments last year (1954) the hooking and releasing mortality on small coho salmon (about 20 inches) was 30 percent initially and about 40 percent at the end of a month. The spring (king) salmon) mortality appears to be higher but the sample was smaller. This excessive mortality rate would destroy any confidence in a size-limit restriction devised to increase the production of the stock through growth.

SUMMARY

Production of king salmon by trolling in Southeastern Alaska began early in the 1900's. Methods of fishing have steadily improved, new grounds have been explored, yet from a peak production of nearly 17 millions of pounds of dressed fish in 1937, production has steadily declined to a level of about 9 millions of pounds. This decline in abundance is directly related to the destruction of the spawning and fresh water rearing areas, principally, by Federal built dams on the Columbia River.

Tagging in outside waters during the years 1952-1952 has shown the importance of Columbia River contributions to this fishery and especially those fall run races that spawn above Bonneville Dam. The second most important contributor is the Fraser River and all major river systems north of the California-Oregon boundary are shown to contribute, but to a lesser degree. Alaska rivers are relatively unimportant to this fishery.

The outside waters are divided into three areas by the characteristics of the stocks of kings found. The stocks found in the area bounded by Cross Sound and Cape Fairweather were composed of relatively small fish with the principal mode of fork length at 27.5 inches. The principal age group found was the 4_1 with the 3_1 group next in importance. The stock as a whole was quite immature, probably in excess of 80 percent.

The stocks found on the west coast of Chichagof Island were comparatively larger fish with the principal mode of fork length at the 30.0 and 32.5 inch groups. The principal age group was 4_1 and the 5_1 second in importance. The stock as a whole was quite mature, probably in excess of 80 percent.

The stocks found on the west coast of Prince of Wales Island were composed of the largest fish of the three areas. The principal mode of fork length falls almost evenly on the

Table 15. Calculation of minimum hooking mortality and the total mortality compared with the Petil Point mortality.

1 Fork length cell inches	2 Total sample	3 No. Tagged	4 Percent not tagged	5 Minimum total mortality (a)	6 Petil Point mortality rate
12.5	1	1	0.0	?	.750
15.0	10	4	60.0	.791	.708
17.5	9	4	55.5	.707	.652
20.0	19	15	21.0	.479	.604
22.5	35	28	20.0	.473	.521
25.0	56	46	17.8	.458	.479
27.5	147	115	21.2	.480	.446
30.0	114	95	16.8	.452	.378
32.5	42	34	19.0	.466	<0
35.0	21	16	23.8		
37.5	6	6	0.0		
40.0	1	1	0.0		
Total	461	365	20.8		

(a) Where h denotes hooking mortality and a denotes annual mortality, the expression:

a = h - ah = total mortality

into and beyond the area and developing fishing grounds both north of Cape Fairweather and offshore on the Fairweather Bank where no tagging or study has taken place. It is the recommendation of the authors that further study be conducted in the offshore and Yakutat areas to complete the picture of the stocks of king salmon found to the north-west of Cape Spencer.

Benefits to the fishery to be derived from only additional spawning escapement are questionable, for it appears that the crux of the problem of depleted runs lies with the destruction or removal of spawning and rearing areas of the species. A result of these conditions has been a lowering of potential, and a diminution of the populations available to the industry. Only by combining habitat improvement with adequate escapement will the potential of the North Pacific king salmon be realized.

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35.0 and 37.5 inch groups. The age groups 4_1 and 5_1 were of equal importance. The stock as a whole was quite mature, probably in excess of 80 percent.

The annual expectation of death from natural causes (other than fishing) is estimated as .341 for the combined areas covered. The question of size limits is examined with the tentative conclusion that regulation of this type will show no profit margin where maximum pounds of fish produced is desired. The combined effect of mortality, caused by hooking and releasing and natural mortality, may even show a loss of profit in pounds of stock.

ACKNOWLEDGMENT

There are many contributors to the present study on the ocean phase of the king salmon. We are especially grateful to Dr. W. F. Thompson for his advice on planning the tagging program. The tagging could not have been accomplished without the help of many interested fishermen, particularly Nels Nelson and W. O. Smith of Ketchikan, Gordon Whitcomb of Sitka, and John Clauson and Toivo Anderson of Pelican. The tagging would have been meaningless without the wholehearted cooperation of Canadian, Washington, Oregon and California scientists, inspectors, and administrators and fish processors, who channeled information on tagged fish and received the tags with accompanying information from fishermen in their districts. The manuscript received rather wide distribution in its rough form and we are grateful to Drs. R. E. Forrester, D. J. Milne and W. E. Ricker of the Biological Board of Canada at Nanaimo, B.C.; Messrs. D. E. Kauffman and Don Johnson of Washington and Fred C. Cleaver of Oregon for their constructive criticism of the text. Mr. C. O. Junge, Washington, and Mr. R. A. Fredin, U. S. Fish and Wildlife Service, criticized the mathematical treatment of the data. To all the individuals mentioned we express our appreciation for their efforts. In many cases agreement was not reached in the interpretation of the data, but all have agreed it should be published to enlarge the circle of thought on so serious a problem. Finally, to Mr. C. L. Anderson, Director of the Alaska Department of Fisheries, the authors express their appreciation for fighting the battle of financing the project, and contributing many thought-provoking ideas during the course of the research.

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Appendix II: Recovery data of king salmon tagged in the area Cape Spencer to Cape Fl...mmther.

Recovery Area	Tag No.	Date Tagged	Fish Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Oregon Coast Streams	None						
Columbia River	3019	5/21/52	29.0	4$_1$	8/10/52	Dip Net	Cellilo Falls
	790	7/26/50	32.5	4$_1$	9/2/50	Sport ?	Across from Astoria
	724	7/29/50	26.0	3$_1$	9/10/50	Gill Net	Clifton Drift
	615	7/19/50	28.5	4$_1$	9/10 or 11/50	Gill Net	Astoria Cannery, caught Ellsworth or St. Helens
	3091	5/26/52	30.5	5$_1$	9/13/52	Gill Net	Hawks drift, 7 mi. below Vancouver
	686	7/28/50	21.5	3$_1$	9/15/50	Gill Net	Point Ellice
	3995	6/29/52	29.0	4$_2$	4/25/53	Gill Net	Cross Isl. Willamette Slough
	719	7/25/50	30.5	5$_2$	5/7/51	G. N. ?	Astoria cannery
	787	7/26/50	25.5	4$_2$	5/11/51	Gill Net	Skamokawa .
	3029	5/21/52	27.0	4$_1$	7/5/53	Sport	Sauvies Rave.
	1968	8/...1/51	29.5	4$_1$	7/30/52	Gill Net	Deer Island
	710	7/29/50	29.0	4$_1$	8/10/51	Troll	Mouth of Columbia
	709	7/26/50	29.0	4$_1$	8/15/51	Gill Net	Chinook

Appendix I – Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Columbia River – Con't.	750	7/25/50	28.5	4_1	8/20/51	Gill Net	14 miles above mouth Columbia
	773	7/26/50	31.5	4_1	8/21/51	Gill Net	Megler
	3998	6/29/52	27.5	4_1	9/10/53	Gill Net	St. Helens
	3966	6/27/52	31.0	4_1	9/11/53	Dip Net	Celilio Falls
	743	7/25/50	25.0	4_1	9/3/52	Gill Net	Browns Port
	3986	6/13/51	25.5	3_1	8/4/53	Gill Net	Point Ellice
	709	7/26/50	21.5	3_1	9/5/52	Dip Net	Celilio Falls
	778	7/26/50	28.5	4_1	9/11/52	Dip Net	Celilio Falls
Washington Coast Streams	705	7/28/50	30.0	4_1	10/23/50	Gill Net	Willapa River
British Columbia Streams	3017	5/21/52	35.5	5_1	8/26/52	Gill Net	Fraser River at Cottonwood
	3096	5/26/52	28.0	4_1	9/1/52	Gill Net	Fraser River at Surveyors
	3046	5/23/52	30.0	4_1	1952	Gill Net	Fraser River at Surveyors
S.E. Alaska Streams	3072	5/25/52	37.0	5_1	8/12/52	Gaff	Taku River spawning ground
	3089	5/26/52	40.0	5_1	8/11/52	Gaff	Taku River spawning ground
Inside Fisheries	3078	5/25/52	31.5	4_1	7/5/53	Gill Net	Knight Inlet, B. C.
	636	7/21/50	32.5	5_1	8/18/50	Troll	North Indian Pass, AAA

Appendix I – Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Ocean Fishery	660	7/21/50	26.0	4_2	5/27/51	Troll	Off Grays Harbor, Wash.
	4205	6/29/52	29.0	4_1	8/17/52	Sport	Entrance, Grays Harbor, Wash.
	3981	5/25/52	28.5	4_1	8/3/53	Troll	Amphitrite Point, B. C.
	3917	6/12/52	31.0	4_2	9/3/53	Troll	Lennard Isl., B. C.
	643	7/25/50	22.5	3_1	7/29/52	Troll	Lennard Isl., B. C.
	3870	8/13/51	25.5	3_1	7/15/53	Troll	West Coast Vancouver Isl., B. C.
	3-67	8/13/51	29.0	4_1	7/24/52	Troll	Esperanza, B. C.
	4205	6/29/52	35.5	6_2	8/21/52	Troll	Esperanza, B. C.
	4016	5/24/52	31.5	4_1	7/24/52	Troll	Kyuquot, B. C.
	3970	6/29/52	31.0	4_1	6/15/53	Troll	Kyuquot, B. C.
	3915	5/20/52	29.5	4_1	6/27/53	Troll	Quatsino Sound, B. C.
	3916	5/27/52	32.0	4_1	8/22/52	Troll	Hecate Str., "Tooth Picks", B. C.
	762	7/26/50	28.0	4_1	5/17/51	Troll	Hecate Str., Porcher Island, B. C.
	3941	5/23/52	27.0	4_1	6/25/53	Troll	Hecate Str., Rose Spit, B. C.
	818	7/27/50	27.0	4_1	6/1/53	Troll	Ketchikan fish house, from Hecate St.
	3931	6/8/52	26.0	4_2	5/17/54	Troll	Baker Isl., AAA
	3854	6/4/51	23.5	3_1	7/10/53	Troll	Cape Addington, AAA

Appendix I – Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Ocean Fishery Con't.	732	7/25/50	25.5	4_1	6/18/52	Troll	Noyes Island, AAA.
	3929	6/18/52	28.5	4_1	7/23/52	Troll	Cape Edgecumbe, Sitka Pt., AAA
	38[illegible]	[illegible]/52	28.0	4_1	7/23/52	Troll	Krumt Island, AAA
	9[illegible]	[illegible]/50	27.0	4_1	5/28/52	Troll	Salisbury Sound, AAA
	3914	5/26/52	30.5	4_1	6/15/53	Troll	Salisbury Sound, AAA
	3926	5/23/52	31.0	4_1	7/27/52	Troll	Porcupine Rocks, AAA
	3882	6/23/51	29.0	[illegible]	8/18/52	Troll	Porcupine Rocks, AAA
	734	7/25/50	28.5	4_1	8/23/51	Troll	Cape Cross, AAA
	3852	8/6/51	25.5	3_1	1952	Troll	Pelican Cold Storage, AAA
Taggeg Area	3887	8/15/51	28.0	3_1	6/21/52	Troll	Cape Spencer, AAA
	3895	5/26/52	30.0	4_1	7/15-16/53	Troll	Lituya Bay, AAA

Appendix II: Recovery data of king salmon tagged in the area Sitka to Cross Sound

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Oregon Coast Sonoma	1106	8/31/50	24.0	3_1	12/22/50	Sport	Floras Creek
	1028	7/12/51	29.5	4_1	12/17/51	Sport	Alsea River
	1056	5/1/50	31.0	4_1	10/15/50	Gill Net	Yaquina River
	118	5/30/50	36.5	6_1	9/?/50	Gill Net	Siletz River
	3827	7/12/51	29.5	5_2	8/19/51	Gill Net	Tillamook Bay
	132	6/1/50	30.5	4_1	10/21/50	Gill Net	Nehalem River
Columbia River	324	6/27/50	26.0	4_1	8/3/50	Gill Net	St. Helens
	575	7/14/50	34.5	5_1	8/15/50	B. Seine	Clatskanie, Oregon
	183	5/29/50	31.0	4_1	8/24/50	Gill Net	Opposite Pt. Ellice
	125	5/29/50	33.0	5_2	8/24/50	?	Lower Columbia
	159	6/2/50	29.0	4_1	'24/50	Gill Net	Puget Island
	995	6/29/5[illegible]	26.5	4_1	8/.5/50	Gill Net	Astoria cannery, butchering table
	3815	6/28/51	34.0	3_1	8/2[illegible]'51	Gill Net	Lower river, near Astoria
	1096	8/8/50	32.5	5_2	9/6/5[illegible]	Sport	Chinook Channel, mouth of Columbia River
	1048	8/1/50	24.0	3_1	9/8/50	Dip Net	Celilio Falls
	93	5/29/50	28.5	4_1	9/9/50	Dip Net	Celilio Falls
	1079	8/3/50	33.0	4_1	9/10/50	Dip Net	Celilio Falls
	176	6/6/50	30.5	4_1	9/12/50	Gill Net	Deadmoon Light

Appendix II, Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Columbia River Con't.	1085	8/3/50	33.0	4_1	9/14/50	Dip Net	Celilio Falls
	82	5/28/50	31.0	4_1	9/16/50	Gill Net	St. Helens
	1130	9/7/50	38.0	5_1	10/19/50	Gill Net	Lower Columbia
	339	6/27/50	33.0	5_2	10/20/50	Gill Net	Wallace Isl., near Clatskanie, Ore.
	1121	9/6/50	30.5	4_1	9/1/51	Dip Net	Celilio Falls
	196	6/2/50	30.0	4_1	4/23/52	Sport	Willamette Slough
[illegible]	175	6/6/50	34.0	5_2	10/12/50	Gill Net	Palix River
Coast Streams	1072	8/3/50	32.0	5_1	1950	Gill Net	Chehalis River
	167	6/3/50	32.5	5_1	9/29/50	Gill Net	Queets River
	348	6/28/50	37.0	5_1	10/27/50	Gill Net	Queets River
British Columbia Streams	198	6/22/50	34.0	4_1	7/7/50	Gill Net	Fraser River
	120	5/31/50	30.0	4_1	8/9/50	Gill Net	Fraser River, mouth
	572	7/14/50	35.0	5_2	8/14/50	Gill Net	Fraser River, Steveston
	122	5/31/50	29.0	4_1	8/22/50	Gill Net	Fraser River, mouth
	481	7/1/50	29.5	4_1	8/24/50	Gill Net	Fraser River, mouth
	335	6/27/50	37.0	5_2	8/28/[illegible]	Gill Net	Fraser River, North Arm
	3820	7/1/51	35.0	5_2	8/30/51	Gill Net	Fraser River, at Steveston
	249	6/23/50	30.5	4_1	9/2/50	Gill Net	Fraser River, at Albion

Appendix II, Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
British Columbia Streams Con't.	1075	8/3/50	26.0	4_1	9/5/50	Gill Net	Fraser River, at Steveston
	3808	6/28/51	35.5	4_1	9/18/51	Gill Net	Fraser River, at Steveston
	147	6/1/50	29.0	4_1	10/16/50	Gill Net	Fraser River, Lightship
	1078	8/3/50	36.0	5_1	1950	Dead	Fraser R., N. Thompson Spawning ground
	145	6/1/50	35.5	4_1	6/27/50	Gill Net	Skeena River
	218	6/24/50	32.0	4_1	7/12/50	Gill Net	Skeena River
	220	6/24/50	2[illegible].5	5_1	8/1/50	Gill Net	Skeena River, Point Lambert
	109	5/30/50	29.5	4_1	6/20/50	Gill Net	Nass River
S. E. Alaska Streams	None						
Inside Fisheries	1055	8/1/50	39.0	6_1	9/20/50	Gill Net	Willapa Harbor, Washington
	65	5/26/50	32.0	4_1	6/19/50	Trap	Sooke, B. C.
	285	6/26/50	30.5	4_1	8/7/50	Trap	Sooke, B. C.
	124	5/31/50	28.5	4_1	1950	P. S.	Fishermans Pack Co., Anacortes, Washington
	358	6/28/50	27.0	4_1	8/15/50	P. S.	Point Roberts, Wash.
	1111	9/30/50	25.5	3_1	10/27/50	Gill Net	Barkley Sound, B. C.
	67	5/26/50	33.5	4_1	7/15/50	Gill Net	Knight Inlet, B. C.
	138	6/1/50	33.0	5_1	9/1-15/50	Troll	Blinkhorn Light, Johnstone Strait, B. C.
	1015	7/6/50	37.0	5_1	5/26/51	Troll	Everett Sound, AAA

Appendix II, Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Ocean Fishery	69	5/27/50	29.5	4_2	8/30/50	Troll	Cape Lookout, Oregon
	62	5/26/50	32.5	4_1	8/29/50	Troll	Raphel Point, B. C.
	587	7/15/50	36.0	5_1	8/17/50	Troll	Esperanza, B. C.
	129	5/31/50	29.0	4_1	7/29/51	Troll	Lookout Isl., Kyuquot, B. C.
	329	6/27/50	29.5	4_2	8/26/50	Troll	Lookout Isl., Kyuquot, B. C.
	1006	6/22/50	33.0	5_1	8/18/50	Troll	Cape Scott, B. C.
	290	6/24/50	32.0	4_1	8/12/50	Troll	Nahwitti Bar, B. C.
	188	6/18/50	37.0	5_1	7/22/50	Troll	Shag Rock, Graham Isl., B. C.
	78	5/28/50	34.0	5_2	8/5/50	Troll	Langara Isl., B. C.
	205	6/24/50	32.5	5_2	8/5/50	Troll	St. Joseph Isl., AAA
	64	5/26/50	29.5	4_1	6/27/50	Troll	St. Joseph Isl., AAA
	241	6/25/50	30.0	4_1	7/31/50	Troll	Snipe Bay, AAA
	192	5/29/50	30.5	5_2	7/11/50	Troll	Snipe Bay, AAA
	295	6/26/50	31.5	5_1	8/3/50	Troll	Whale Bay, AAA
	75	5/28/50	38.0	5_2	7/16/50	Troll	Cape Edgecumbe, AAA
Tagging Area	327	6/27/50	29.5	4_1	8/12/50	Troll	Cape Edgecumbe, AAA
	3810	6/28/51	32.5	5_1	7/25/51	Troll	Pt. Amelia, Krusof Isl., AAA
	1129	9/6/50	30.5	4_1	7/14/51	Troll	Salisbury Sound, AAA
	1113	9/3/50	32.0	4_1	1951	Troll	Serge Bay, AAA
	546	7/2/50	28.5	4_1	8/3/50	Troll	Yakobi Rock, AAA
	228	6/24/50	27.0	4_1	6/15/51	Troll	Icy Pt., AAA

Appendix III: Recovery data of king salmon tagged in the area Warren Island to Cape Fulla

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Oregon Coast Streams	None						
Columbia River	1616	5/31/50	27.5	4_1	9/8/50	Dip Net	Celilio Falls
	1586	5/29/50	27.5	4_1	9/12/50	Gill Net	The Dalles
	1622	6/10/50	36.0	4_1	9/12/50	Gill Net	Below Celilio Falls, 1 mile
	1638	6/12/50	31.5	4_2	9/12/50	?	Taken off port docks of Astoria
	1543	5/25/50	29.5	4_1	7/31/51	Gill Net	Near mouth of Columbia
	1768	7/15/50	33.0	4_1	8/6/51	Gill Net	Lower Columbia
Washington Coast Streams	1691	6/20/50	32.0	5_2	7/8/50	Gill Net	Willapa River, South [illegible]
British Columbia Streams	1566	5/28/50	39.0	5_1	8/10/50	Gill Net	Fraser River, mouth
	1626	6/10/50	32.0	4_1	8/18/50	Gill Net	Fraser River, mouth a
	1533	5/22/50	31.0	4_1	8/29/50	Gill Net	Fraser River, at Whonnock
	1629	6/11/50	36.0	5_1	9/25/50	Gill Net	Fraser River, at Port Hammond
	1696	6/20/50	39.5	5_1	7/25/50	Gill Net	Bella Coola River
	1606	5/30/50	31.5	4_1	6/20/50	Gill Net	Skeena River, Mouth

Appendix III: – Con't.

Recovery Area	Tag No.	Date Tagged	Fork Length	Age	Date Recovered	Recovery Gear	Specific Location of Recovery
Alaska Seasons	None						
Inside Fisheries	1519	5/17/50	35.5	3_1	1950	Gill Net	Grays Harbor, Washington
	1660	6/15/50	36.0	4_1	8/24/50	Trap	Snake, B. C.
	1578	5/29/50	38.0	3_1	9/4/50	Gill Net	Alberni Canal, B. C.
	1600	5/30/50	25.0	3_1	8/27/50	Gill Net	Concrete Island, B. C.
Ocean Fishery	1555	5/25/50	31.5	4_2	8/26/50	Troll	S. of Columbia Entrance
	1593	5/29/50	34.5	3_2	8/9/50	Troll	Esperanza, B. C.
	1612	5/30/50	33.5	3_1	8/12/50	Troll	Esperanza, B. C.
	1556	5/24/50	31.0	3_1	8/6/50	Troll	Kyuquot, B. C.
	1592	5/29/50	31.5	4_2	7/22/50	Troll	Cape Scott, B. C.
	1632	6/11/50	41.0	4_1	6/25/50	Troll	Langara Island, B. C.
Tagging Area	1507	5/15/50	33.0	3_2	7/7/50	Troll	Baker Island, AAA
	1664	6/16/50	35.0	4_1	7/12/50	Troll	St. Joseph Island, AAA
	1643	6/15/50	36.0	4_1	7/31/50	Troll	Snipe Bay, AAA

2/18/82

Leo G Land

STATE TELECONFERENCES

The State Teleconference Satellite System was designed and intended to get to Alaskans in the bush plus the other larger cities, to get the viewpoints of individuals who have spent days, weeks, months and I 6-1/2 years of research auditing this State's Fisheries all aspects and am reduced to less than five minutes of time.

The time is used up by State officials giving lengthy reports which I know by heart, and others in the State do too, as we attend Fisheries Boards' meetings in our communities plus our own research.

I talked to Senator Bettye Fahrenkamp yesterday and she said any future teleconferences she holds will be held in other communities first, all State officials can listen, then if there is time left they can answer the concerns given. Let the State officials be last.

Do we have Limited Entry on time all d for the communities outside Juneau.

"How was that point system set-up?" by how much money each earns?

Last year I asked KTOO to cover the Longevity Bonus Program, which was the first time it was done. "They did" It was news.

They are not permitted to this year. A legislator has to request it which was done on Fisheries for the evening of February 17, 1982.

They figured it was not news worthy evidently listening to State officials for most of the time which they've heard at least twice this year.) It looks like we might as well do away with the State Satellite Teleconference system.

I'm giving each legislator a copy of this today and expect the courtesy in writing to give it to Senator Bill Ray. "our opinions which he can give to me.

Last Wednesday February 10, I waited to testify for nearly two hours in Haines due to the time left the areas outside Juneau were given five or six minutes for each testimony, shortened to two minutes each.

Hells Fire! I could in two minutes said this only. Greetings legislators, Dept. of Fish & Game Officials, Limited Entry Commissioners, Board of Fisheries. "I'm very happy to say I'm glad you appeared, am happy you're well.

My time is up. I hope you will authorize me to hire a secretary in town to type up my concerns as I don't have the several hundred dollars to do it and send to you.

Fishing Days Icy Straits 1981

April

May

June

July

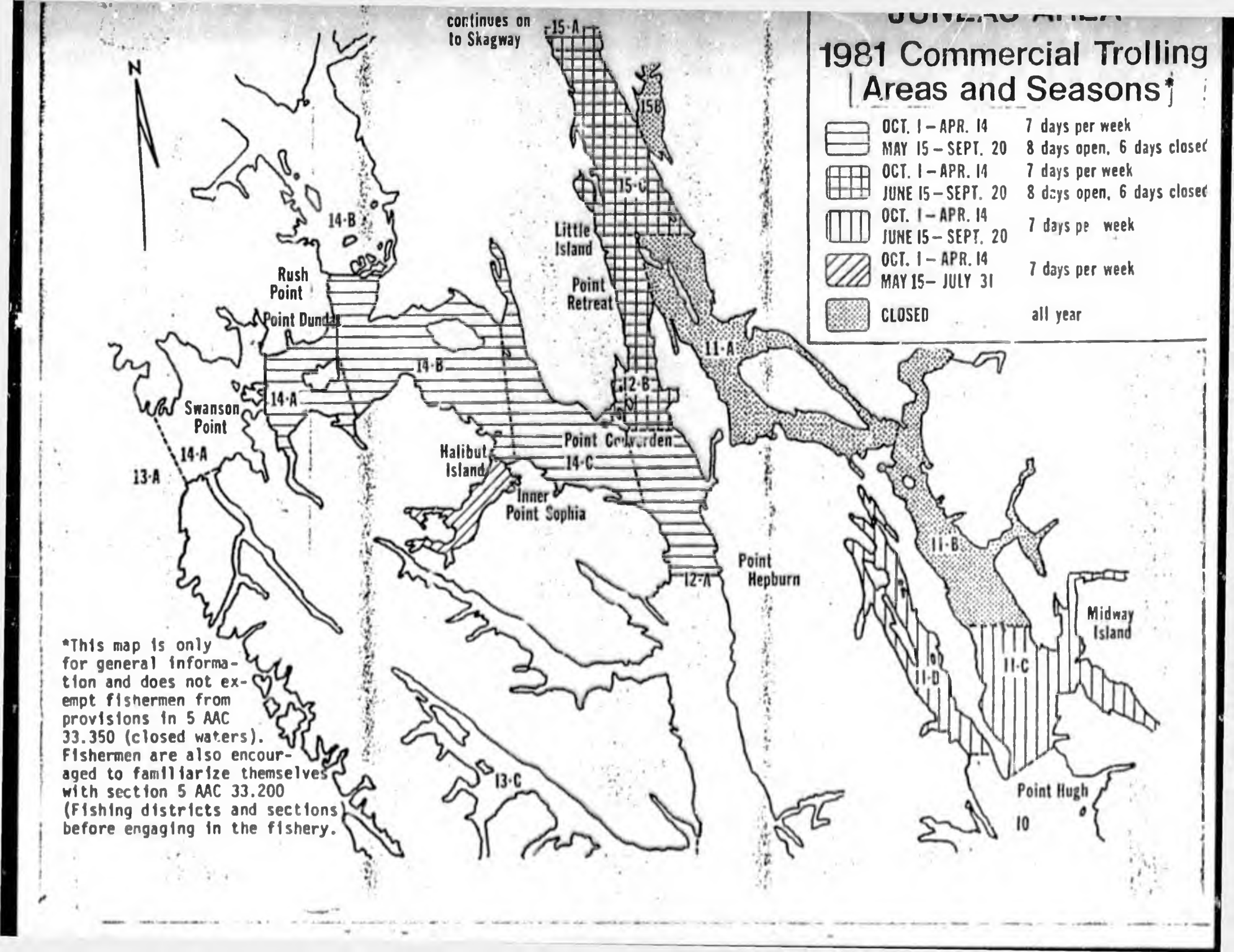
Aug.

Sept.

[redacted]													
[redacted]													
[redacted]				16	17	18	19	20	21	22	23	24	25	26
27	28	29	30	31	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25	[redacted]										5	6	7
8	9	10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31	1	2	3	4
5	6	7	8	9	[redacted]								
[redacted]			21	22	23	24	25	26	27	28	29	30	1	2
(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	11	12	13	14	15	16
17	18	19	20										

Fishing Days In Icy Straits

1978	1979	1980	1981
158	129	96	62


1981 Commercial Trolling Areas and Seasons*
OCT. 1 – APR. 14 7 days per week
MAY 15 – SEPT. 20 8 days open, 6 days closed
OCT. 1 – APR. 14 7 days per week
JUNE 15 – SEPT. 20 8 days open, 6 days closed
OCT. 1 – APR. 14 JUNE 15 – SEPT. 20 7 days pe week
OCT. 1 – APR. 14 MAY 15 – JULY 31 7 days per week
CLOSED all year
continues on to Skagway
N
15-A
15-B
15-C
14-B
Little Island
Point Retreat
Rush Point
Point Dundas
14-B
11-A
12-B
14-A
Swanson Point
14-A
13-A
Halibut Island
Point Colwerden
14-C
Inner Point Sophia
12-A
Point Hepburn
11-B
Midway Island
11-D
11-C
13-C
Point Hugh
10
*This map is only for general information and does not exempt fishermen from provisions in 5 AAC 33.350 (closed waters). Fishermen are also encouraged to familiarize themselves with section 5 AAC 33.200 (Fishing districts and sections before engaging in the fishery.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

Susan M. Knowles separate statement:

I fully concur with this Order with the exception of its waiver of a refund requirement on the interim rates charged pending the conclusion of the investigation of the proposed tariff revisions. The standard refund condition should be maintained in this case given the policy issues on rate development worksheet pricing and tariff organization which were raised by Staff in its preliminary analysis. Thus, further investigation could determine that the utility has complied with a costing procedure which is deficient or otherwise flawed in its results and that the proposed rates require modification. In addition, no showing has been made that a refund prescription will impose an unreasonable expense on the utility at the customer levels projected in its tariff advice letters.

Commissioner Susan M. Knowles

Pending

JAY S. HAMMOND, Governor

ALASKA PUBLIC UTILITIES COMMISSION
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

1100 MacKay Building
338 Denali Street
Anchorage, Alaska 99501

Phone (907) 276-6222

June 16, 1981

Ted Burns, Esq.
Municipal Attorney
Municipality of Anchorage
632 West 6th Avenue
Anchorage, Alaska 99501

COPY

Dear Mr. Burns:

Re: Certification of Garbage and Refuse Public Utilities

The enactment of Ch. 136, SLA 1980 (FCCS SB 577) repealed the language of AS 42.05.221(f) and portions of AS 42.05.711(b) which exempted garbage and refuse collection and disposal public utilities operating within municipal boundaries (as they existed on January 1, 1973) from having to obtain a certificat of public convenience and necessity for the service area within these boundaries.

The repeal of this language means that all municipal garbage and refuse utilities must possess a certificate of public convenience and necessity for the area served. AS 42.05.221(a), 42.05.701(2)(F), (5)(A). This is required even though, as a municipal utility, under the remaining language in 42.05.711(b) or under the new 42.05.711(j) (annual gross revenues of $200,000 or less) they may not be subject to economic regulation by the Commission.

Notwithstanding the requirement mentioned above, a municipality may still be exempted from all or any portion of these statutes if, on a Commission finding, no legitimate public interest will be served by requiring compliance. AS 42.051711(d).

Accordingly, we are enclosing with this letter the following documents:

1. Alaska Public Utilities Commission Act (AS 42.05);

2. Commission Rules of Practice and Procedure;

3. Two copies of the suggested form of application for a certificate of public convenience and necessity;

4. Suggested form of historical financial statements;

Item 9

5. Suggested form of pro forma financial statements;

6. Sample of an approved tariff form.

The duplicate application form is furnished for your convenience to be used primarily as a working draft. The instructional footnotes are included to assist you in completing your application. Although the Commission's regulations in 3 AAC 48.090 specify an original and two copies of each pleading, the Commission has found that additional copies are needed to facilitate the processing of an application. The Commission requests that the final typed application be submitted in an original and seven conformed copies and should not include the instructional footnotes.

The form itself may be used as the application if you prefer to do so. In that event, any blanks not otherwise filled in should be marked "Not Applicable" or "None" as appropriate.

The Commission is of the opinion that it would not be unreasonable to allow a period of 60 days from the date of this notification in which to file the referenced application. If we can be of assistance in the matter, please do not hesitate to contact us.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

T. S. Mumlei II

for John B. Farleigh
Executive Director

Enclosures

Note: This is a second routing of this draft - 1st draft has apparently been lost.

May 15, 1981

Ted Burns, Esq.
Municipal Attorney
Municipality of Anchorage
632 West 6th Avenue
Anchorage, Alaska 99501

Dear Mr. Burns:

Re: Certification of Garbage and Refuse Public Utilities

The enactment of Ch. 136, SLA 1980 (FCCS SB 577) repealed the language of AS 42.05.221(f) and AS 42.05.711(b) which exempted garbage and refuse collection and disposal public utilities operating within municipal boundaries (as they existed on January 1, 1973) from having to obtain a certificate of public convenience and necessity for the service area within these boundaries.

The repeal of this language means that all municipal garbage and refuse utilities must possess a certificate of public convenience and necessity for the area ~~it serves~~ served AS 42.05.221(a), 42.05.701(2)(F), (5)(A). This is required even though, as a municipal utility, under the remaining language in 42.05.711(b) or under the new 42.05.711(j) (annual gross revenues of $200,000 or less) they may not be subject to economic regulation by the Commission.

Doff

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA139-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Conditions and Rates for Coin Telephone Service	U-81-33 ORDER NO. 1

ORDER SUSPENDING OPERATION OF TARIFF REVISION, INSTITUTING INVESTIGATION, AND ESTABLISHING DATES FOR PUBLIC HEARING AND SUBMISSION OF PRE-FILED TESTIMONY

On April 17, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed a tariff revision, designated as TA139-120, which proposed changes to the conditions and rates for coin telephone service. The utility proposed to

(1) increase the per message rate charges for public and semi-public coin telephone service from 10¢ to 20¢ per call;

(2) increase the minimum monthly revenue required as a basis for continuing service at each location;

(3) increase installation charges for semi-public telephone enclosure/supports;

(4) institute a monthly rate to recover semi-public coin telephone equipment costs; and

(5) delete present monthly rates for semi-public telephone enclosure/support equipment costs.

ALASKA PUBLIC UTILITIES COMMISSION
1100 McKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

LXII
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ATU currently compensates the premise holder of public telephone service for furnishing janitorial or other services required, such as power for lighting, at the rate of $2 per month or 12 percent of the local revenue collected, whichever is greater. The utility is requesting that the compensation be changed to reflect a flat rate of $9 per month per instrument; this represents the approximate average commission paid in previous years.

Other charges include a monthly subscriber rate for semi-public telephone service equal to 50 percent of the monthly zone rate for regular one-party business line service. In addition to the monthly rate, the subscriber would guarantee total revenue from the instrument equal to 2.5 times the regular one-party business line zone rate. The monthly rates which are currently effective for shelfettes, boothettes, and booths would be discontinued.

According to the utility, the annual revenue from the currently effective tariff, based on year end 1978 records, was approximately $361,500. Based on the same level of activity, the new rates and charges will produce revenue of approximately $767,000 (revenue requirement), an estimated increase of $405,500. The change in the subscriber rate for semi-public telephone service would affect approximately 390 customers.

The filing was noticed to the public on April 24, 1981, with a closing date of May 25, 1981, for filing a statement of views. Two statements were received during that period, one favoring and one opposing the increase in per message rate charges. On May 26, 1981, the Alaska

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Phone 276-6222

Consumer Advocacy Program (ACAP) filed comments requesting the Commission to reject the proposed permanent tariff filing for failure to comply with the filing requirements of 3 AAC 48.275 and for failure to meet the interim rate tests set forth in Alaska Public Utilities Commission v. Greater Anchorage Area Borough, 534 p. 2d 549, 554, 557-559 (Alaska 1975). ACAP also requested the Commission to investigate various coin telephone practices of ATU and requested additional information filings from ATU, including an updated test year. Also included with ACAP's comments was the result of a consumer call-in survey which showed 51 percent of its 116 respondents opposed to the proposed increase.

The Commission Staff (Staff) recommended to the Commission that the operation of TA139-120 be suspended to allow Staff investigation of the utility's proposals. Staff also expressed its intention to review the rate development information in view of the most currently available operations and separations data to determine as accurately as possible the current costs of coin telephone services. The Staff also expressed its belief that the extensive filing requirements of 3 AAC 48.275(a) were burdensome and unnecessary for satisfactory resolution of this case.

The Commission concurs with Staff and believes the operation of TA139-120 should be suspended for an initial six-month period to allow a full Staff investigation of the proposed tariff revisions. The Commission also believes the rate development review performed by Staff should be in light of the most currently available financial data so as

ALASKA PUBLIC UTILITIES COMMISSION
1100 MacKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

to determine as accurately as possible the costs of coin telephone service, which can then be considered in evaluating ATU's rate increase request.

The Commission is of the opinion that it would be in the public interest to schedule a formal hearing to consider the utility's request. The Commission also believes it would be conducive to a fair and expeditious disposition of the proceedings to require the parties to submit a list of witnesses in the order of their appearance and to pre-file written prepared, instead of oral direct, testimony for each witness so identified. 3 AAC 48.150(f). The parties will be specifically precluded from calling witnesses who have not submitted prepared written testimony. Exceptions may be granted by the Commission based on an offer of proof that a witness's testimony is necessary for a complete evidentiary record. Justification for the omission of the witness from the original witness list must be provided.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. ATU is a public utility as defined by AS 42.05.701 and is subject to the jurisdiction of this Commission.

2. The operation of the tariff revision, designated as TA139-120, should be suspended for an initial six-month period, not to extend beyond December 1, 1981.

3. Staff should be made a party to this proceeding and should conduct an investigation to determine the accuracy and reasonableness of the utility's

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Phone 276-6222

requested tariff revision, including a review of the supporting cost study and the revenue impact of the revision on new subscribers in light of the most current operations and separations data available.

4. A public hearing should be scheduled in Anchorage, Alaska, to consider the proposed tariff revisions to conditions and rates for coin telephone service requested by ATU.

5. ATU and Staff should be required to pre-file testimony in accordance with 3 AAC 48.150(f). The parties should also file a list of witnesses in their order of appearance.

ORDER

THE COMMISSION FURTHER ORDERS:

1. The operation of the tariff revision, designated as TA139-120, filed by the Municipality of Anchorage d/b/a Anchorage Telephone Utility, is suspended for an initial six-month period, not to extend beyond December 1, 1981.

2. The Commission Staff is designated as a party to this proceeding and directed to conduct an investigation into the reasonableness and propriety of TA139-120 as outlined in the body of this Order.

3. A public hearing to consider the proposed tariff revisions to conditions and rates for coin telephone service requested by the Municipality of Anchorage d/b/a Anchorage Telephone Utility is scheduled to convene at 9:00 a.m., August 11, 1981, in the Commission's hearing room, 1100 MacKay Building, 338 Denali Street, Anchorage, Alaska.

ALASKA PUBLIC UTILITIES COMMISSION
1100 MacKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

4. The Municipality of Anchorage d/b/a Anchorage Telephone Utility shall file by 4:00 p.m., July 10, 1981, a list of witnesses, in the order of their appearance, and written prepared testimony for each witness.

5. Commission Staff shall file by 4:00 p.m., July 24, 1981, a list of witnesses, in the order of their appearance, and written prepared testimony for each witness.

DATED AND EFFECTIVE at Anchorage, Alaska, this 1st day of June, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Marvin R. Weatherly, not participating)

(S E A L)

ALASKA PUBLIC UTILITIES COMMISSION
1100 MacKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Application by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY To Amend Its Certificate of Public Convenience and Necessity No. 122 To Extend Its Service Area South Along Lake Otis Parkway to O'Malley Road To Include Independence Park and Adjacent Lots	U-80-97 ORDER NO. 2

ORDER CLOSING DOCKET

Ordering Paragraph No. 2 in Order No. 1 of this proceeding required the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY (AWU) to file, within 60 days, tariff sheets describing the amendments to its authorized service area granted by the Commission. On May 20, 1981, AWU complied with this requirement.

The Commission finds that all outstanding procedural and substantive matters have been disposed of in the above-captioned proceeding and that there are no costs to be allocated to the utility. Accordingly, this Docket should be closed.

ORDER

THE COMMISSION FURTHER ORDERS, That, Docket U-80-97 is closed.

DATED AND EFFECTIVE at Anchorage, Alaska, this 17th day of June, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Marvin R. Weatherly, not participating)

(S E A L)

U-80-97, 6/17/81
Page 1 of 1

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Item 6

JAY S. HAMMOND, Governor

ALASKA PUBLIC UTILITIES COMMISSION
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

1100 MacKay Building
338 Denali Street
Anchorage, Alaska 99501

Phone (907) 276-6222

June 22, 1981

In reply refer to: Tariffs
TA34-121

Thomas R. Stahr, General Manager
Municipal Light & Power
1200 East First Avenue
Anchorage, Alaska 99501

Dear Mr. Stahr:

Enclosed are validated copies of tariff sheets filed on June 10, 1981, by Municipal Light and Power (ML&P). This filing, designated as TA34-121, has an effective date of June 1, 1981.

Although the Commission has approved this filing, it is concerned about the continuing lack of generation by the waste heat unit. ML&P is directed to include in its next gas cost rate adjustment filing an explanation of the lack of reported steam generation and ML&P's plans for use of the waste heat unit.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

Item 7

NP

6-19-81

JMW 6/19/81
SKM 6/19/81
6/19/81
6/19/81

45 days end 7/24; utility must have advance approval to bill 7/1/81

June 19, 1981

In reply refer to: Tariffs
TA34-121

Thomas R. Stahr, General Manager
Municipal Light & Power ~~Department~~
~~Municipality of Anchorage d/b/a/~~
1200 East First Avenue
Anchorage, Alaska 99501

Dear Mr. Stahr:

Enclosed are validated copies of tariff sheets filed on June 19, 1981, by Municipal Light and Power (ML&P). This filing, designated as TA34-121, has an effective date of June 1, 1981.

Although the Commission has approved this filing, it is concerned about the continuing lack of generation by the waste heat unit. ML&P is directed to include in its next gas cost rate adjustment filing an explanation of the lack of reported steam generation and ML&P's plans for use of the waste heat unit.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

08 H6LH

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

ALASKA PUBLIC UTILITIES COMMISSION

1100 MACKAY BUILDING
338 DENALI STREET
ANCHORAGE, ALASKA 99501

June 24, 1981

In reply refer to: Tariffs
TA146-120

A. C. Pistorius, General Manager
600 East 38th Avenue
Anchorage, Alaska 99503

Dear Mr. Pistorius:

Enclosed is a validated copy of the tariff sheet filed on May 1[illegible], 1981, by Anchorage Telephone Utility (ATU). This filing, designated as TA146-120, has an effective date of July 2, 1981.

In its study of this filing, the Commission reviewed a number of previous filings affecting the Secretarial Answering Service Schedule and noted that the large TASCOM answering system, which was the subject of TA98-120, TA111-120, and TA115-120, is not presently tariffed. The Commission urges ATU to review its offerings in the Secretarial Answering Service Schedule to assure that all offerings are properly tariffed.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh

John B. Farleigh
Executive Director

Item 8

Referral

NP

STAFF ACTION

AC		DATE
Drafted by	SMW	6/19/81
Typed by	SKM	6/19/81
Checked by	SMW	6/19/81
Approved by	JBF	6/19/81

45 days
end
7/2/81

June 19, 1981

In reply refer to: Tariffs
TA146-120

A. C. Pistorius, General Manager
600 East 38th Avenue
Anchorage, Alaska 99503

Dear Mr. Pistorius:

Enclosed is a validated copy of the tariff sheet filed on May 18, 1981, by Anchorage Telephone Utility (ATU). This filing, designated as TA146-120, has an effective date of July 2, 1981.

In its study of this filing, the Commission reviewed a number of previous filings affecting the Secretarial Answering Service Schedule and noted that the large TASCOM answering system, which was the subject of TAs 98-120, TA111-120, and TA115-120, is not presently tariffed. The Commission urges ATU to review its offerings in the Secretarial Answering Service Schedule to assure that all offerings are properly tariffed.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Exective Director

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA110-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY for Rates and Conditions for Exchange System Used by Interexchange Services	U-80-42 ORDER NO. 3

ORDER GRANTING TARIFF REVISION

On April 4, 1980, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed TA110-120 proposing rates and conditions for use of the utility's exchange system by interexchange services (ESIS).

The ESIS tariff offering provides unlimited local exchange service to users not located in the utility's service area. ESIS will apply to all services that have the capacity to utilize the local exchange system including, but not limited to, Foreign Exchange (FX), Common Control Switching Arrangements (CCSA), Off-Premise Extensions (OPX), Tie Lines (TL), and authorized MTS/WATS equivalent services provided by Other Common Carriers (OCC). ESIS will not apply to services, such as Message Telephone Service, that contribute, through the settlements process between the long lines carrier and the local exchange utility, to the financing of the cost of exchange facilities.

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900 MacKay Building - 338 Denali Street
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Phone 276-6222

Item 10
Item 12

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On May 8, 1980, ATU filed Supplement "A" to TA110-120 which deaveraged the originally filed ESIS monthly rate of $160 per exchange system access connection into two categories to reflect different usage characteristics. The utility proposed the following monthly charges per exchange system access connection:

MTS/WATS Equivalent Services (OCC)	$350.00
Other Services (FX, CCSA, OPX, TL)	90.00

The higher monthly rate for MTS/WATS equivalent services provided by OCC's reflect the higher usage per access connection projected by ATU. The access charges were developed based on the same cost allocation methodology used in ATU's annual cost separations studies approved under 3 AAC - 48.430. The annual revenue to be realized for the provision of ESIS is anticipated to be $417,000.

A notice of the utility tariff filing was issued April 16, 1980; a notice of amended utility tariff filing, reflecting the rates proposed in Supplement "A", was issued May 14, 1980. Statements objecting to TA110-120 were filed with the Commission by Atlantic Richfield Company (ARCO), Alyeska Pipeline Service Company (Alyeska), Exxon Company U.S.A. (Exxon), and the General Services Administration (GSA).

On May 19, 1980, the General Services Administration (GSA), representing the interests of the Executive Agencies of the United States in their capacity as customers of ATU, submitted comments on the proposed tariff.

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GSA raises two specific issues. First is the question of tariff administration or application. GSA believes that there is the possibility of ambiguity in the application of the proposed ESIS tariff and ATU's current Alaska Telephone Switching System (ATSS) tariff. Second, GSA questions the jurisdiction of this Commission relative to the application of tariffs of an interstate interexchange nature. It cites a recent conflict between the New York Telephone Company and the Federal Communications Commission (FCC) and agrees with what they conclude to be the FCC position in the dispute.

On June 12, 1981, Alascom, Inc. (Alascom), the long lines carrier for Alaska, filed comments supporting the principle advanced in the ESIS filing but expressing specific concerns. They are:

1. The 3,000 minutes of use per line per month may be understated.

2. Exception is taken to the use of a composite CSR because it is not standard to the Cost Separations Manual.

3. TL and OPX services should not be included.

4. The use of 1977 data is questioned and use of the most current cost information advocated.

Due to the complexities of the ESIS filing, Order No. 1 suspended the permanent operation of TA110-120 and denied interim approval. The Commission Staff (Staff) was designated as a party to the proceeding.

Order No. 2 in the instant proceeding scheduled a public hearing to be convened at 9:00 a.m., on March 3,

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1981, in the Commission's hearing room, 1100 MacKay Building, 338 Denali Street, Anchorage, Alaska. The Order further extended the suspension period for a period ending 45 days after completion of the public hearing. Upon stipulation of the parties Commissioner Marvin R. Weatherly acted as the hearing officer with the provision that two Commissioners would read the record. The record was received by the Commission on April 30, 1981, and was read by Commissioners Carolyn S. Guess, Chairman, and Stuart C. Hall by May 15, 1981. This date is designated as the completion of the public hearing. A certification that the record has been read by Commissioners Guess and Hall is filed in the Docket.

On January 22, 1981, Alyeska Pipeline Company petitioned the Commission to intervene in the instant proceeding. That petition noted that its representation included Amerada Hess Pipeline Company, ARCO Pipeline Company, BP Pipeline Company, MOBIL Alaska Pipeline Company, Phillips Alaska Pipeline Company, SOHIO Pipeline Company, and Union Alaska Pipeline Company.

The hearing was convened on March 3, 1981. Finding no opposition to the Petition for Intervention (Tr., p. 6) the Commission granted intervor status to Alyeska Pipeline Service Company (Alyeska), ARCO Alaska, Inc. (ARCO), and SOHIO Alaska Petroleum Company (SOHIO). Intervention was granted on a consolidated basis (Tr., p. 11), and for the purpose of this Order the parties granted intervention will be designated Intervenors.

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Background - Telephone Industry Cost Separations Procedures

Telephone systems today are used interchangeably in providing local exchange,[1] intrastate and interstate message toll service.[2] Jurisdiction of intrastate communications rests with the state regulatory commissions, while interstate authority resides with the FCC. The jurisdictional separation of the telephone plant may be defined as a series of methods and principles for dividing the investment, expenses, revenues, taxes, and reserves, and assigning them to their respective operations. It should be noted that while jurisdiction has been the driving force in developing these procedures, the same procedures have been used in separating intra-jurisdictional plant.

In the early years of telephone industry development, the local companies were not compensated for message toll service. The local exchange rates were based solely on all the costs associated with the use of local exchange service. Long distance carrier rates were based only on their costs of transmission between exchanges. This was known as the board-to-board method of setting rates. In 1930 (prior to the enactment of the Communications Act of 1934) for purposes of fixing just and reasonable rates for interstate and intrastate servies, the U. S. Supreme Court held in a

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[1] Telephone Exchange Service means service within a telephone exchange or within a connected system of telephone exchanges within the exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange and which is covered by the exchange service charge.

[2] Toll Service means any call to a point outside the local service area, the income from which is credited to toll revenue, as distinguished from local and inter-zone calls whose income is credited to exchange revenue.

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landmark decision[3] that the rate base and expenses must be allocated between interstate and intrastate uses. Even with this high ruling, it took more than a decade of negotiations and discussion before the FCC was prompted to implement the high Court's mandate.

In 1945 the FCC initiated a formal investigation[4] review of jurisdictional separations procedures. This caused American Telephone & Telegraph Co. (ATT) to file interstate tariffs based on the station-to-station principle of costing and ratemaking. The station-to-station approach includes all plant from the originating to the terminating telephone station, including the intermediary loops and local switching facilities; i.e., all facilities necessary for the completion of a toll call. This was followed in 1950 by similar tariffs being filed for intrastate toll service, also on a station-to-station basis. Throughout the 1940's to the present time, jurisdictional separations methodology has been under constant review and change - change that for the most part has allocated more costs to toll service.

The first Separations Manual which established specific allocation methodology was negotiated by the National Association of Regulatory Utility Commissioners (NARUC), the FCC and ATT in 1947. Its implementation by ATT, however, was delayed until 1952, some 22 years after the Smith decision.

Since 1947 the Separations Manual has changed due to social as well as economic pressures and has assumed such colorful and informal titles (based on location where agreement was reached) as Charleston (1952), Modified Phoenix

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[3] Smith v. Illinois Bell Telephone Co., 282 U.S. 133, 149-51 (1930).

[4] FCC Docket 6328.

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(1956), and Denver (1965); the current Separations Manual, which is called "Ozark," was adopted in 1971.

The FCC in 1967[5] pointed to the inexact nature of the proposed separations process:

> However, we recognize that allocation of costs is not simply "a matter for the slide rule. It involves judgement on a myriad of facts. It has no claim to an exact science." Colorado Interstate Gas Company v. Federal Power Commission [FPC], 324 U.S. 581, 589. Thus, although a jurisdictional separation must take into account of and measure the uses to which common property is put by several services, it clearly affects the reasonableness or equitableness of the results produced by such measurements.

This point was earlier addressed by Justice Brandeis in speaking for the court in Groesbeck v. Duluth[6]:

> It is much easier to reject formulas presented as being misleading than to find one apparently adequate.

The court also noted in Colorado Interstate Gas v. FPC, supra:

> Under this act the appropriateness of the formula employed by the Commission in a given case raises questions of fact not law.

The appropriateness of the Separations Manual to the State of Alaska was also addressed in the 1967 decision:

> They do not include Alaska and Hawaii by virtue of their geographic location and the nature of the facilities required to serve them, cannot properly be governed by the separations procedures which are appropriate for the other States.[7]

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[5] FCC Dockets 15011 and 16258; 9 FCC 2d, 244

[6] Groesbeck v. Duluth, S.S. & A.R. Co., 250 U.S. 607, 614, 615, 63 L. Fed. 1167, 1172, PUR 1920A 177, 40 S. Ct. 38 (1919).

[7] FCC Dockets 15011 and 16258, supra.

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In a Recommended Report and Order of the FCC-NARUC Joint Board on Jurisdictional Separations[8] adopted October 27, 1970, Alaska was again excluded from consideration in the separations process:

> In accordance with the Commission's past decisions regarding jurisdictional separations, these procedures are not necessarily designed to apply to Alaska and Hawaii in view of the substantially different conditions existing in the case of these states.

The above language was adopted and noted in the Ozark Manual adopted by the FCC and approved for nationwide use in 1971.

By August, 1975, the FCC moved to remove this restriction. In a letter to the Alaska Public Utilities Commission then FCC Chairman Richard E. Wiley stated:

> Accordingly, we approve the use of the February 1971 edition of the FCC-NARUC Separations Manual for jurisdictional separations of the operation of RCA Alascom in Alaska.

On July 18, 1975, the APUC, through regulation[9], adopted the use of the February 1971 edition of the Separations Manual for intrastate separations.

The FCC in May, 1977, initiated Docket 21263 to deal with rate integration for the states of Alaska and Hawaii. The docket's prime focus is the formal adoption of a separations process for Alaska and Hawaii. A final Joint Board Order and Recommendation is in the process of being

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[8] FCC DOCKET 18866, 26 FCC 2d.

[9] 3 AAC 48.430.

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drafted at this time. There is no indication that the nationwide Ozark formula will be modified for application to Alaska.

The 1971 Separations Manual (Ozark) nas, thus, dictated the telephone cost separations methodology for the State of Alaska since mid-1975.

Since the adoption of Ozark, the allocation process has developed minor confrontations but has for the most part served the telephone industry and regulators well. ATT, Alascom and the other large independent telephone companies in providing services such as MTS and WATS[10] have been able to apply the manual in designating that portion of local exchange service expenses to be borne by MTS and WATS services.

Until recent years toll service has been provided solely by the telephone common carriers. The Execunet[11] decision has created a new entity in the field known as the Other Common Carrier (OCC). These are basically telecommunications entities created to provide a form of substitution to the traditional toll network. The Separations Manual, so exhaustively developed since the Smith decision, has no provision to compensate local exchange companies for the use of their exchange facilities by the OCC's in the origination and termination of the OCC toll substitution traffic -- the Execunet decision mandates that interconnection be made but

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10 WATS (Wide Area Telephone Service) - A special direct distance dialing service which allows a subscriber to make interstate calls at fixed volume rates.

11 MCI Telecommunications Corp. v. FCC, 561 F.2d 365 (D.C. Cir. 1977), cert. denied, 434 U.S. 1040 (1978); MCI Telecommunications Corp. v. FCC, 580 F.2d 590 (D.C. Cir.), cert. denied, 439 U.S. 980 (1978).

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it is also clear that such interconnection deprives the connecting exchange company of toll revenues and allows the use of the exchange facilities without proper compensation.

In April, 1979, at the prompting of the FCC, ATT and other telephone companies, together with the major OCC's, established a temporary plan to compensate local exchange companies for the use of their facilities. The agreement was accomplished under the auspices of the FCC and has become known as ENFIA (Exchange Network Facilities Agreement). The FCC has termed the agreement a form of "rough justice" in that it has met the immediate need for a formula for compensation. It must be noted, however, that the ENFIA formula is applicable only to the OCC interconnection problem.

With the advent of competition and the mandate of Execunet, telephone exchange companies became more acutely aware of toll revenue diversion and quickly identified FX and CCSA[12] as suspect. FX and CCSA are private line services that have been treated differently from other service offerings. The costs associated with these private line services are assigned wholly to the interstate revenue requirement. The

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[12] FX service provides a subscriber with a private line connecting his phone with a telephone exchange not located in his area. Example: A FX subscriber in Anchorage is connected by private line to the Juneau exchange. The subscriber would receive two bills, one for his private line and the other for the charge assessed for local exchange service in Juneau. CCSA (Common Control Switching Arrangement) is a private line system that links the various offices of a company to each other through switches on the subscribers premises. These private line circuits are for the exclusive use of the CCSA subscriber.

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costs, however, associated with the local exchange accessed by such services are assigned wholly to the intrastate revenue requirement. The FCC in regards to FX and CCSA has stated:

> ... it appears that the Separations Manual might require either change or interpretation to effectuate any such [separations change for FX/CCSA]. Since the Manual is part of our rules, some form of rulemaking or interpretive proceeding would appear necessary. We intend to study the existing compensation mechanism for local telephone companies whose facilities are used in connection with the 'other services' discussed in the agreement [including FX/CCSA]...in the future we will be able to determine whether [the ENFIA approach should be applied], and under what procedures, any changes should be made.[13] (Emphasis added.)

The FCC has ventured forth with a tentative plan[14] but no firm time frame for implementation has been proposed. The plan was summarized as follows:

> Basically, the plan prescribes access charges for four categories of interstate service (MTS/WATS, FX/CCSA access, private line and OCC-ENFIA) that will determine the amounts interchange carriers will pay for the use of exchange plant to originate and terminate interstate traffic.

The FCC further stated that the present separations procedures would be used on an interim basis.

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[13] MCI Telecommunications v. FCC, supra, as cited on p. 6 of Brief for Respondents New York Tel. Co. v. F.C.C., 631 F.2d 1059 (1980).

[14] MTS and WATS Market Structure, Second Supplemental Notice of Inquiry and Proposed Rulemaking, FCC 80-198 (April 16, 1980).

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ATU

ATU pre-filed testimony and presented the following witnesses:

A. J. Moreland (T-1) - ATU, Manager of Engineering and Construction

Ms. Nancy Heller (T-2) - Ernst and Whinney

M. D. Campbell (T-3) - Ernst and Whinney

A. C. Pistorius (T-4) - ATU, General Manager

Witness Moreland set forth the range of services that would fall under the ESIS tariff and the reason for the filing at this time.

Witness Heller presented the general approach used in developing the ESIS rates and the basic assumptions that were made in the rate development.

Witness Campbell explained the 1977 Cost Separations Study and its use in developing the ESIS rates and the modifications to the study that were necessary in order to develop the ESIS rate.

Witness Pistorius covered the factors that caused the utility to develop the ESIS tariff and further explained the recovery of costs associated with providing access from interexchange services that use the exchange facilities of ATU.

The case in chief of the utility argues that historically certain services that have gained access to ATU's local exchange facilities have caused costs to be incurred and that these costs have not been recovered through the cost separations procedures applied to MTS/WATS services. Additionally, by the nature of the access arrangements, such toll revenues have been diverted. The utility stated that costs associated with these access services have been insignificant in the past, but in recent years they have created

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a more significant cost to the utility which has been absorbed through ATU's general revenue requirement. With the advent of OCC operations, such as Southern Pacific Communications Company and its request before the FCC to provide service to Alaska, ATU was prompted to reevaluate its tariffs and define the costs associated with access by interexchange services.

The utility costing approach is to apply the methodology accepted by this Commission and the FCC as set forth in the Separations Manual of 1971, making certain assumptions in the application of that methodology. The utility used its last Alascom accepted separations study of 1977 and its private line inventory of 1978 in developing the basis of its study (T-2, p. 3). The original ESIS tariff filing provided a single monthly rate of $160 for all access arrangements. Upon further consideration by the utility, it became apparent that such services should be costed on a usage basis; i.e., those who use the local exchange facility more should pay a higher rate. Due to an inability to obtain ESIS usage data, the utility had to make certain assumptions. In the case of the OCC's, the utility used the figure of 3,000 minutes of use supplied by the OCC's and accepted during ENFIA negotiations by ATT, the OCC's and the FCC. For the other ESIS offerings, ATU used the figure of 1,096 minutes of use. This is the average usage per main station in the Anchorage area, the utility believes this is a valid and representative usage amount. Using these assumptions the utility applied the data to the number of channels gathered from its inventory and established an assumed usage for the ESIS service (T-2, p. 3).

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The utility developed two revenue requirements in the rate development process for ESIS. The first revenue requirement is for all ESIS services and the second is a revenue for all MTS/WATS equivalent services (OCC). The OCC revenue requirement was then subtracted from the total ESIS revenue requirement, resulting in a residual revenue requirement that is spread to the other ESIS offerings; i.e., FX, OPX and TI. (Exhibits NH-2, 3, 4).

Further, in developing the ESIS rates the utility treated ESIS, because of comparability, in a manner similar to the costing methodology used for interexchange services (T-3, p. 4). The primary factors used in the allocation process are: Subscriber line usage (SLU); weighted dial equipment minutes (weighted DEM); subscriber plant factor (SPF); and traffic unit apportionment (TUA). (Exhibit MC-3) Certain modifications were made to the factors after discussion with the Staff consultants.

In developing the ESIS rates, the utility used the ATU cost study for 1977. Witness Campbell stated that the ESIS rates should not be adjusted as more current cost studies become available but should be treated the same as other tariff offerings and reviewed at the time ATU files a general rate increase request or when other conditions relative to these services change (T-3, p. 6).

STAFF

The Staff pre-filed testimony and presented the following witnesses:

William J. Warinner (T-5)-Troupe, Kehoe, Whiteaker & Kent

Clint Frederick (T-6)-Troupe, Kehoe, Whiteaker & Kent

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Witness Warriner reviewed the cost development methodology provided by the utility in support of the ESIS filing. Witness Frederick presented rates which he believed the Commission should use in granting approval of the ESIS filing. He also presented certain policy questions which he believed the Commission should address. He further recommended that the ESIS rates be on an inception basis and suggested that they also be interim.

The Staff position and analysis is supportive of the ESIS development concept but differs with the utility as to the basis for the rates. The Staff recommends that the ESIS rates be separated into intrastate and interstate jurisdictional rates. This approach calls for the allocation of access charges using a 1.84 interstate and 1.13 intrastate composite station rate (CSR) ratios as a part of the subscriber plant factor (SPF). This approach, according to the Staff, will reflect the relative distribution of expenses and investment attributable to ESIS relative to MTS/WATS. The Staff does, however, present a composite rate approach (WJW-A1) and a summary of the ESIS revenue requirement under this composite method (WJW-C1). The difference in the utility composite rates and those of the Staff is in the application of a different CSR for OCC and FX, OPX, TL with a resultant difference in the factors used in developing an ESIS revenue requirement.

Due to uncertainty regarding usage factors and the aged costing information provided by ATU, Staff advocated interim refundable rates for the ESIS services.

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INTERVENORS

The Intervenors pre-filed testimony and presented the following witnesses:

Richard Barton (T-7) - ARCO (adopted testimony pre-filed by Paul Odor)

Dennis O'Day (T-8) - SOHIO

William J. Benton (T-9) - Alyeska

Witness Barton summarized the communications activities of ARCO and found that it is inappropriate for ATU to apply an ESIS tariff to OPX and Tie Line facilities that terminate only at the premises of the customer and not the exchange facilities of ATU. He also stated that the application of the ESIS tariff would result in discrimination between interstate and local customers of ATU. Barton took exception to the utility's representation that the ESIS rates are based on conservative estimates and termed such estimates as nothing more than "unsubstantiated assumptions."

Witness O'Day diagrammed the SOHIO system as it relates to ATU. He took exception to some of ATU's assumptions relative to usage and testified that the utility is being adequately compensated by virtue of SOHIO's trunking requirement that maintains a P.01 availability on the ATU provided trunks. O'Day further stated that they could not determine to their satisfaction where the "alleged" $417,000 revenue requirement came from or how it was established.

Witness Benton described the private telephone system of Alyeska and noted that the area that transverses the Trans-Alaska Pipeline is not served by a public telephone system. Benton's testimony presents the view that the proposed tariff is merely a rate increase as a result of existing facilities and is not a new service offering.

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Alyeska, in considering the ESIS tariff nothing more than a rate increase, finds no justification for the increase and the tariff discriminatory.

The basic theme of the Intervenors' presentation is that the ESIS filing is not a new tariff offering, except possibly as it relates to of the OCC's, but merely a rate increase to services that the intervening companies have enjoyed for many years; i.e., FX, OPX, and TL. The Intervenors believe the revenue requirements to serve their facilities have been met through rate development which is manifested in current tariffs and the approval of the ESIS tariff would in effect amount to double-dipping by double tariffing the same service. They further contend that OPX and TL services are in-house communications and do not use ATU equipment.

Discussion

A fundamental question that must be addressed is whether the ESIS tariff covers services that are in some manner substituting for or diverting toll revenues from the utility and whether this toll diversion creates a revenue requirement for the utility that is not being met through its current tariff.

In the instance of the OCC systems of interconnection with local exchanges, there is no question that toll diversion exists. There is nationwide recognition of this fact as evidenced by the FCC action in the ENFIA proceedings. There is no evidence in this proceeding that would lead this Commission to the conclusion that an interconnection with an OCC in Anchorage would deviate from the experience and history of such interconnections in other jurisdictions in

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our nation. To the contrary, the record before the Commission clearly demonstrates that the utility can expect a revenue impact from OCC interconnection and that it is prudent for ATU to anticipate this occurrence by filing a tariff that will cover the revenue requirement associated with the birth of OCC interconnection in Anchorage, Alaska.

In the minds of some, the question of toll diversion and a revenue requirement associated with that diversion is not as clear or pronounced in the case of FX, OPX and TL services. The Staff and ATU agree that the application of the ESIS tariff is appropriate for these services, while the Intervenors reject this concept.

Again, the basic question is whether these services are or can be used as a toll substitute, thus denying revenues to the utility. Counsel for the Intervenors admits that this is possible (Tr., p. 21). Witness Barton admits that OPX lines serving Kenai and Fairbanks can gain access to the ATU exchange (Tr., p. 318) and also admits that tie-line services to the Prudhoe Bay area are being used for personal telephone calls and by-passing the toll network (Tr., p. 320). Witness O'Day granted that possibly 10 percent of the people in his company have access to the Tie Lines for personal use (Tr., p. 332) and that it is a matter of economic trade-off of whether a caller would use a tie line or the exchange facility at Deadhorse. O'Day also acknowledged the question of toll diversion (Tr., p. 338).

The record in this proceeding clearly supports the conclusion that toll diversion exists for FX, OPX, and TL. There is also support for an additional revenue requirement for these services and that the utility is not being compensated

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for costs incurred in providing services outside and beyond the normal trunking tariffed rate. The Intervenors have provided no evidence that the assumptions or costing methodology of utility or Staff are erroneously based. In fact, Intervenor witness Benton in Exhibit WJB-2 indicates a measured 1,188 off-net calls which results (using a holding time of 4.3 minutes per call) of an average of 1,009 minutes of use per channel. This compares favorably with the 1,096 minutes of use assumed by ATU in its ESIS rate development for FX, OPX, and TL. The fact that a service does not schematically directly interface with an ATU exchange does not eliminate the indirect use of such services to by-pass MTS circuits. The Commission must conclude that the ESIS tariff properly identifies and establishes costs associated with the use of FX, OPX, and TL services. The Intervenors have failed to discredit or raise substantial questions as to the validity of the ESIS tariff. The fact that the Intervenors make use of substantial private line telecommunications does not abrogate their responsibility to assume their fair share of costs associated with their access to the ATU exchange facility. As evidenced by the record in this proceeding, this utility and all local exchange utilities within the State of Alaska must be mindful of the changing times of the telephone industry and the pressures that are coming to bear on their local exchange rates. The Commission is very much aware of the national scenario which is causing enormous economic pressures on local exchange utilities. These pressures may be vented through tariffs, such as ESIS, that gives identity to latent areas of cost.

The question of jurisdiction of this Commission to deal with the ESIS tariff has been raised by GSA and the

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Intervenors. New York Telephone v. FCC[15] has been cited as the leading case on the issue of the jurisdiction of this Commission to grant approval of the ESIS tariff.

The only parallel between the New York case and the instant proceeding is the services of FX/CCSA. The U.S. Court of Appeals ruled that through the action of the New York Public Service Commission, a discriminatory rate involving interstate services was established and the court upheld the FCC order that prevented the New York PSC from requiring discriminatory tariffs by New York Telephone Company. The court stated:

> In the final analysis, as at first blush, this case is really an administrative jurisdictional dispute, with NYT and interstate FX and CCSA users to some extent caught in the middle. Upholding the FCC order, we force NYT to go back to the state for a new tariff that is consistent with the FCC's March .2 order, as the telephone companies have done in California and Missouri cases. Of course, NYT may instead file a new tariff with the FCC, but the future Joint Board proceedings on all separations procedures may delay approval for at least a year. To hold otherwise in this case would permit the PSC to export intrastate telephone costs to interstate users until separations procedures have been revised and all interests accommodated. In the words of a dissenting PSC member, "[u]niformity in procedures used to allocate costs among the many jurisdictions involved is vital," in fairness to telephone company and ratepayer alike. NYPSC 27469, at 6 (Larkin, Comm'r dissenting). The FCC appears to be seeking such "separations" uniformity in an orderly way, used successfully for more than thirty years, which saves state and private parties alike considerable litigation expense. The PSC order abrogated by the FCC order which we affirm would do just about the opposite.

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[15] New York Tel. Co. v. F.C.C., 631 F.2d 1059 (1980)

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In the instant case the substantial evidence on the record supports the conclusion that ATU's ESIS filing is consistent with the separations procedures approved by this Commission and the FCC. The single pointed variation, which will be discussed below, is the use of a composite CSR in developing the SPF.

No challenge has been made to the methodology employed by the utility or the Staff. Based on this evidence the Commission finds that there is no undue discrimination and the procedures employed by the utility and Staff are consistent with the findings of the court in the New York Telephone Company case.

Having established that ATU's ESIS tariff is properly before the Commission and the methodology used to establish rates for the proposed services is nondiscriminatory, the question is which rate development approach is more appropriate and on target with the decision in the New York Telephone Company case. The utility states the composite CSR approach is the only viable method at this time while Staff argues for a separated interstate and intrastate rate approach.

In the ideal world where the universe would include total usage information availability to the utility, the Staff approach would merit serious consideration. Unfortunately, the utility is giving birth to a concept in an imperfect environment. While the Intervenors acknowledge the availability of some traffic information, the scope and applicability of the information available leads the Commission to the conclusion that this approach would be speculative at best, with the high potential of being subjective;

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i.e., being supplied by the consumer of the service in question. Clearly, the utility and the Commission would require some form of verification; however, there is no evidence that such verification is possible. The Commission is aware that with changing technology the entire question of usage sensitive pricing will be a future consideration of this body as well as the utility.

Even if the Commission could accept the separated approach at this time, this would mandate the filing of an interstate tariff with the FCC, and as noted by the court in the New York Telephone Company decision, this would result in a considerable delay. Such a delay is not required through the adoption of the composite CSR approach. If at some point in time the FCC mandates the separated approach to the ESIS type services offered by a local exchange utility, and there is a Federal/State procedure that protects the intrastate jurisdiction, this Commission would of course reexamine the issue. The Staff has presented no compelling reason for separation at this time. Such an approach would be counterproductive and not in the public interest today.

On April 9, 1981, the Intervenors filed a Motion for Filing of an Otherwise Unauthorized Document. The document filed is the FCC News Release of March 13, 1981, dealing with the action of the FCC in CC Docket No. 81-161. Docket 81-161 deals with the tariff filing of the Hawaiian Telephone Company (HTC) relating to local exchange involving interstate access. The Commission will accept this document as part of the record in this proceeding but will note that the full order noted in the News Release is available to the Commission in its FCC file. The Commission can find no

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substance to the HTC tariff filing that would lead to a different conclusion in the instant proceeding. The fact that HTC selected the FCC as its regulatory forum does not negate the approach selected by ATU. In addition, this Commission is not privy to the possible intrastate regulatory or statutory constraints that may have led HTC to file with the FCC.

As previously stated, the main difference in the rate development approach advocated by the Staff and the Utility is the CSR. The utility used a composite CSR for FX, OPX, and TL and the interstate CSR for OCC. The Staff uses the same CSR for all ESIS services in developing its modified composite rate. The Staff maintains that the ATU method gives a preferential rate to the non-ESIS customers. The Commission agrees with the Staff position at this stage of developing the ESIS rates. Until such time as the utility has developed an operating history under the ESIS tariff and a national regulatory master scheme is established, it would be in the public interest to establish rates that carry no stigma of rate preference. The Commission will accept the Staff-modified composite rate as noted in schedule WJW A-1. The Commission believes the Staff rate development accurately represents the ESIS revenue requirement. The Staff total ESIS revenue requirement of $3,2,854 results in the following rates:

Foreign Exchange	$ 99
Off Premise Extension	$ 99
Tie Lines	$ 99
Other Common Carrier	$265

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While the utility cost study and Staff review give the Commission confidence in the proposed rates, there is the lingering question of the rates being based on aged data. It is somewhat ironic that Alascom would raise this point as there are indications that Alascom may be a part of the problem or at least a contributor to the delay in gaining current cost information. In consideration of this problem, the Commission will consider the ESIS rates to be inception rates. The utility will be required to file annually, beginning July 1, 1982, cost information in support of its ESIS rates. No adjustment in tariff rates will be required if the cost studies show a variation of less than ±5 percent. Alascom is being requested, informally at this time, to review its procedures for cost studies and settlements with local exchange utilities with the goal of shortening the time period for approval. This problem extends beyond the instant proceeding and may call for more direct action by the Commission in a separate proceeding.

The Staff and Intervenors have argued that the ESIS tariff be granted on a refundable basis. The unique nature of the tariff and the aged data, it is argued, support their position. The Commission cannot concur with this position. There is no evidence that would lead the Commission to the conclusion that the costs associated with ESIS will be reduced by virtue of new cost data. To the contrary, the evidence on the record shows a most conservative approach which could lead to the conclusion that new data could result in higher rates. Interim rates are designed to protect the consumer and not the utility from possible

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overcharge. There is no evidence to imply that this possibility exists in the instant proceeding. The Commission mandate that the rates are inception rates will adequately protect the utility and the consumer by forcing an annual review of them.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. ATU is a public utility as defined in AS 42.05.701 and subject to the regulatory jurisdiction of the Commission.

2. The cost separations study in support of tariff revision designated TA110-120 is consistent with the Separations Manual, February 1971 edition, and adopted by the Commission under 3 AAC 48.430.

3. The Commission has authority to grant approval of exchange access rates proposed in tariff revision designated TA110-120.

4. Toll diversion is being experienced by ATU through access of the ATU exchange facilities by subscribers to FX, OPX, and TL services.

5. ATU will experience toll revenue diversion with the interconnection of OCC companies.

6. Toll revenue diversion constitutes an additional cost to the utility and an unfair burden to the general rate payer of the utility.

7. The rate development methodology, with the exception of the CSR ratio used, is reasonable and results in rates that are nondiscriminatory.

8. ATU should use the composite CSR ratio advocated by Staff.

9. The ESIS tariff rates should be inception rates with provision for annual review.

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10. The ESIS tariff rates should be nonrefundable.

ORDER

THE COMMISSION FURTHER ORDERS:

1. The tariff revision designated as TA110-120 by the Municipality of Anchorage d/b/a Anchorage Telephone Utility is approved subject to the conditions set out in the body of this Order.

2. The rates established under TA110-120 are approved as follows:

Foreign Exchange	$ 99
Off Premise Extension	$ 99
Tie Line	$ 99
Other Common Carrier	$265

3. The rates established under TA110-120 are inception rates.

4. The Municipality of Anchorage d/b/a Anchorage Telephone Utility shall file annually cost information in support of the rates approved under TA110-120. No tariff revision will be required if as a result of the cost information the rate variation is less than 15 percent.

5. The Municipality of Anchorage d/b/a Anchorage Telephone Utility shall file revised tariff sheets consistent with this Order within 30 days of the date of this Order. Each tariff sheet effected shall clearly note that the rates are "INCEPTION RATES SUBJECT TO ANNUAL REVIEW."

DATED AND EFFECTIVE at Anchorage, Alaska, this 26th day of June, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Susan M. Knowles, not participating)

(S E A L)

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA110-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY for Rates and Conditions for Exchange System Use by Interexchange Services	)	U-80-42

ERRATA NOTICE

ORDER NO. 3

ORDER GRANTING TARIFF REVISION
(Issued June 26, 1981)

Page 10, line 10-1/2: Delete "Agreement" and Insert "for Interstate Access".

Page 23, line 30: Add "CCSA $ 99".

Page 26, line 13 Add "Common Control Switching Arrangements $ 99".

DATED AND EFFECTIVE at Anchorage, Alaska this 8th day of July, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Susan M. Knowles, not participating.)

(S E A L)

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA26-121, by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for an Interim and Permanent Rate Increase	U-80-100 ORDER NO. 5

ORDER EXTENDING SUSPENSION PERIOD

On May 18, 1981, the Commission issued a Bench Order in this proceeding granting the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT (ML&P) an across-the-board increase of 28.06 percent to its existing recurring permanent rates for billings on or after June 1, 1981. The Commission indicated that that action was taken prior to issuance of its formal order setting forth its findings of fact and conclusions of law in order to accommodate the then pending $14 million bond sale by ML&P. In view of the workload of the Commission at this time and the varied issues involved in this proceeding, the Commission finds that the suspension period for TA26-121 must be extended in order for all the issues to be adequately addressed. The interests of the utility and of the consumer are protected by virtue of the 28.06 percent increase granted in the May 18, 1981, Bench Order.

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Item 11

ORDER

THE COMMISSION FURTHER ORDERS, That, the operation of the tariff revision, designated as TA26-121, filed by the Municipality of Anchorage d/b/a Municipal Light & Power Department is further suspended until September 1, 1981, with the exception of that portion of the tariff addressing permanent rates for recurring charges which were increased by 28.06 percent effective June 1, 1981.

DATED AND EFFECTIVE at Anchorage, Alaska, this 30th day of June, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Susan M. Knowles, not participating)

(S E A L)

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Special Contract Between the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT and the UNITED STATES OF AMERICA d/b/a FEDERAL AVIATION ADMINISTRATION	U-78-85 ORDER NO. 6

ORDER CLOSING DOCKET

The Commission finds that all outstanding procedural and substantive matters have been disposed of in the above-captioned proceeding and there are no allocable costs under AS 42.05.651 and 3AAC 48.150(n)-(1). Accordingly, this Docket should be closed.

ORDER

THE COMMISSION FURTHER ORDERS, That, Docket U-78-85 is closed.

DATED AND EFFECTIVE at Anchorage, Alaska, this 21st day of July, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Stuart C. Hall, not participating)

(S E A L)

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Item 13. 275

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA26-121, by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for an Interim and Permanent Rate Increase	U-80-100
	ORDER NO. 6

ORDER AFFIRMING BENCH ORDER GRANTING RATE INCREASE; ESTABLISHING REVENUE REQUIREMENT AND REQUIRING COST-OF-SERVICE STUDY

On October 24, 1980, the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT (ML&P) filed a tariff revision, designated as TA26-121, requesting across-the-board interim and permanent rate increases of 23.31 percent ($3,887,225 in additional revenues). Further, the filing requested that the utility be allowed to:

1. use a 1.406 proforma debt service coverage ratio which is based on maximum future debt service coverage;
2. implement a $15 connection charge when permanent rate relief is granted. The connection charge reflects changes in the currently effective schedule of fees and charges and Tariff Rule 7.13. (ML&P Tariff Sheets 29, 42, 43 and 100); and
3. delete Rule 7.4 Primary Metering Discount. (ML&P Tariff Sheet No. 43).

The filing was noticed to the public on October 31, 1980, with a closing date of November 28, 1980, for the filing of statements in support of, or in opposition to, the

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proposed tariff revision. The Commission received letters from Messrs. Carmen Smith and J. P. Burrell opposing the increase and expressing general dissatisfaction with the utility's operations. A third response was filed by the Coalition for Economic Justice requesting that the increase be denied unless a lifeline rate was incorporated into the overall rate structure.

Order No. 1, issued December 30, 1980, suspended the operation of TA26-121 for an initial six-month period ending June 30, 1981, to allow the Commission Staff (Staff) an opportunity to adequately investigate the tariff revision request. That Order also granted ML&P an interim refundable rate increase of 23.07 percent and required the utility to file by February 15, 1981, a permanent revenue requirement based on a 1980 test year, in accordance with the filing requirements of 3 AAC 48.275. This requirement was based on the fact that an across-the-board increase of only 3.46 percent was supportable by the utility's initial filing. However, Staff had access to operating results for the ten-month period ending October 31, 1980, and determined that the 1979 test year filing was not representative of ML&P's actual financial position. Staff's observation was that an increase of substantially more than 3.46 percent would be needed in order for the utility to avoid default on its bond covenants. Order No. 1 also designated the Staff as a party to this proceeding.

The supplemental filing, received on February 17, 1981, requested a permanent rate increase of 29.56 percent plus a roll-in of an 11.27¢/MCF increase in the base price of natural gas. The filing also requested the addition of a

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Fuel Oil Cost Rate Adjustment (FOCRA) to its tariff and the revision of its gas cost rate adjustment clause (GCRA) to reflect a base cost of gas at 88.31¢/MCF.

The supplemental filing was noticed to the public on March 5, 1981. Although no letters of protest were received regarding the filing supplement, on March 31, 1981, the Alaska Consumer Advocacy Program (ACAP) filed a Petition To Intervene in this proceeding. In its petition ACAP stated, among other things, that it was a State-funded project designed to represent consumer interests before State regulatory commissions and that ACAP's interests could only be protected by being allowed intervention in this proceeding since none of the existing parties "strictly advocate the consumer interest." ACAP Petition, p. 1.

Order No. 2, dated March 20, 1981, scheduled a public hearing in this proceeding on April 28, 1981, in the Commission's hearing room. Order No. 2 also established the schedule for the submission of witness lists and written testimony by the utility and Staff. That schedule was subsequently modified by Order No. 4 to allow ML&P to late file the testimony of Mr. Walter Filkin, an expert on the tax-free municipal revenue bond market, and to concurrently grant an extension of time to Staff to prepare testimony with respect to Filkin's testimony.

With regard to ACAP's Petition To Intervene, the Commission in Order No. 3, issued April 1, 1981, stated that:

> The ACAP Petition To Intervene lacks the specificity that is demanded by 3 AAC 48.110(c) and fails to meet the standard set out in U-77-16(2). Order No. 3, p. 4.

Therefore, the Commission rejected the petition without prejudice.

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On April 21, 1981, ACAP filed Formal Written Comments regarding the proposed tariff revision. ACAP cited eight areas of concern with regard to TA26-121. It was ACAP's contention that:

1. Residential consumers pay a disproportionately higher share of increased consumption costs than do industrial and commercial users, and this would be exacerbated by the proposed rate increase. Therefore, the Commission should institute a rate redesign proceeding addressing ML&P's electric rates;

2. ML&P's equity pay out under Municipal Ordinance AO-94-76-A is unfair and unreasonable because it places an unreasonable and excessive burden on ML&P's capital structure. Therefore, the Commission should eliminate or substantially reduce the equity pay out;

3. ML&P should not be allowed to modify to 60/40 the hypothetical debt/equity ratio of 70/30 established in U-76-11. ACAP asserted that the 70/30 ratio is more realistic and does not place an undue burden on ratepayers;

4. The cost of diesel fuel to ML&P is relatively small, and the FOCRA should not be implemented at this time;

5. Tariff Rule 7.12, Change of Occupancy, is vague and should be modified to define "reasonable notice" to the utility. ACAP recommended use of a 24-hour notice requirement as reasonable notice;

6. ML&P's revenue calculations do not include tax savings as contemplated by Senate Bill 125. ACAP asserted that these savings should result in a lower revenue requirement;

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7. ML&P's "Other Interest Expense" has increased substantially and should be carefully examined; and

8. The amount of ML&P's uncollectible accounts has also increased, and the reasons therefor should be examined.

The Commission convened in public hearing at 9:00 a.m., April 28, 1981, in the Commission's office for the purpose of taking testimony regarding ML&P's proposed tariff revision, TA26-121. The hearing also continued on April 30 and May 1, 1981. The hearing was conducted before Commissioner Marvin R. Weatherly, serving as Presiding Officer; Commissioners Carolyn S. Guess, Chairman; and Stuart C. Hall.

ML&P was represented by its attorney Roger M. Kemppel and presented the following company witnesses: Richard O. Fry, Financial Services Manager, ML&P; Thomas R. Stahr, General Manager, ML&P; Max Foster, Revenue Requirements Supervisor, ML&P; John Parisena, Audit Manager, Arthur Young & Company; and Walter W. Filkin of Van Kampen, Filkin & Merrit, Inc., investment bankers.

Staff was represented by its counsel, C. Barclay Jones, Assistant Attorney General, and presented as witnesses: Carolyn L. Evans, Utility Financial Analyst III; and Robert J. Barber, Utilities Engineer III.

Also attending the hearing were several of the utility's consumers, members of the media, and ACAP, represented by its attorney and director, Deborah Lee Williams.

On May 6, 1981, ACAP filed Post-Hearing Written Comments which requested, among other things, that the Commission grant ML&P an increase of not more than 24.24 percent.

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On May 18, 1981, the Commission issued a Bench Order in this proceeding acknowledging the necessity for priority action in establishing permanent rates for ML&P before June 1, 1981, in order for the utility to be able to sell a $14 million bond issue. The Bench Order granted the utility an across-the-board 28.06 percent increase to its existing recurring permanent rates, effective for billings rendered on or after June 1, 1981. The Bench Order also notified the parties that the Commission would subsequently issue a formal order setting forth its findings of fact and conclusions of law regarding the 28.06 percent permanent rate increase.

Because of the pressing workload of the Commission, Order No. 5 extended the suspension period in this proceeding until September 1, 1981.

REVENUE REQUIREMENT

During the hearing ML&P amended its request for a permanent rate increase to reflect a decrease in operating expenses as a result of HCSSB 125, sec. 2 Ch 6 SLA 1981. The revised revenue requirement, $24,013,357 for the test year ended December 31, 1980, was supported by Staff. In its post hearing comments ACAP proposed a reduction in the utility's revenue requirement to decrease depreciation expense and the return on rate base.

Operating Expenses

Under cross-examination, Staff witness Evans responded to questions raised by ACAP in its Formal Written Comments. The categories of operating expenses targeted by ACAP as questionable because of their percentage increase over 1979 costs were examined by Evans during the Staff's audit. The Commission is satisfied by Staff response that

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the increases in transmission, administrative and general and uncollectible account expenses are substantiated and reasonable. In addition, the Commission agrees that the request of ML&P to reflect a base price of gas at 88.31¢/MCF for the 1980 test year conforms to Commission policy.

Depreciation

In the utility's filing, the asset lives of the Steam Production Plant and Account 392, General Plant, were not in compliance with Commission Order No. 10 in U-76-11. In his pre-filed testimony, Staff witness Barber recommended that the Commission affirm its decision in that Docket which provided for the use of the mid-point of the IRS depreciation guidelines for all plant categories except Account 343, gas turbines, absent a depreciation study. Because Staff believed the amount of its proposed adjustment to depreciation expense would not have a material effect on the utility's revenue requirement, Staff recommended that future proceedings should reflect the depreciation lives established by U-76-11(10).

The utility defended its proposed asset life of the Steam Production Plant through testimony of General Manager Stahr. He testified that because the steam plant and gas turbine are operated together, i.e., absent the gas turbine the steam plant does not function, a uniform life for both is reasonable. Stahr did acknowledge that the steam plant has a longer life than the gas turbine. When questioned about replacing the gas turbine and thereby continuing the usefulness of the steam plant, he stated that in consideration of the Fuel Use Act and the uncertainty of available natural gas supplies in 15-16 years, there is no guarantee that a replacement gas-fired unit would be purchased. In Stahr's judgment, when the gas turbine is retired, the steam plant will not be useful.

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During cross-examination Staff did agree that the operation of the steam plant depends on the existence of the gas turbine. The steam plant was not included on the depreciation schedule in U-76-11; and there has been no depreciation study performed on either of these units. Therefore, Staff, in compliance with the previous Commission decision, recommended a useful life of 28 years as opposed to 16 2/3 years proposed by ML&P.

The effect of Staff's proposal to adjust the depreciation life of the steam plant represents approximately 1 percent of the revenue requirement. The Commission concurs that for the purpose of this proceeding no adjustment to the revenue requirement is warranted. However, the issue of the appropriate life for the steam plant requires resolution. The Commission is persuaded, at this time, that the utility' argument in support of a uniform life for the steam plant and the gas turbine is reasonable. Since the Commission accepted a shorter life for the gas turbines in U-76-11 because they are used as base load rather than for peaking, it follows that the shorter life for the Steam Production Plant Account is consistent. It may be, considering the testimony of Stahr regarding the dilemma facing the utility in maintaining continuing property records of its generation plant, that a depreciation study should be undertaken. The Commission is hesitant to order a study at this time because of the financial position of the utility. It will reserve the right to do so in the future, however, and to adjust the lives of the gas turbines and steam plant accordingly.

Rate of Return

The utility presented two witnesses, Frye and Foster, to support its request that a hypothetical capital

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structure of 60 percent debt and 40 percent equity be granted in this proceeding. The utility test year capital structure of 7.0446 percent debt and 15 percent equity, allowed in U-79-13, results in a weighted cost of capital of 10.2267 percent. The utility testified that an appropriate rate of return must be determined by ML&P's ability to attract new debt capital. It contended that its requested return would allow ML&P to sell $14 million of revenue bonds which is required to finance the immediate construction needs of the utility. Without revenue from the bond sale the utility testified that the planned construction could not proceed.

General Manager Stahr testified that the proposed improvements are in three areas; transmission, distribution and general plant. The transmission improvements, he stated, are to increase reliability and reduce line loss. The major distribution improvements are needed to gradually retire the distribution voltage in the older area of town, i.e., the downtown business area, in order to serve the larger commercial buildings planned in the area defined as bounded by Third Avenue to the north, Sixth Avenue to the south, Gambell Street to the east, and L Street to the west. In addition, the airport area will also receive distribution improvements. Stahr testified that major expenditures for main generating units were not proposed at this time; however, both generation-related expenditures and monies for the engineering required to determine the utility's next peaking unit would emanate from the proposed bond sale. Stahr stated that the priorities of the ML&P customers he has talked to are reliability of service and undergrounding of the distribution system. He conceded that the consumers want good electric service at the lowest possible cost but paramount in their mind is reliable service; and he testified he believes they are

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willing to pay for it. In his pre-filed testimony, Stahr discussed the past decisions of ML&P to hold rates down at the expense of building equity. Today, however, the utility has found that while attractive in the short run, this philosophy can be financially disastrous and must be changed. His testimony supported that of financial witnesses Foster and Frye that the downward equity spiral of ML&P since 1976 must be reversed.

ML&P has suffered equity attrition in every year except 1978 for the last five years. According to witness Foster, ML&P's equity capital was 21.1 percent in 1976 and during the test year it was 10.6 percent. Foster recalled that in Docket U-79-13, the last permanent rate request of ML&P, the return requested and granted was derived after determining the debt service coverage required to sell additional revenue bonds and noted the similarity to the instant proceeding. Foster noted that because the rate base is considerably larger than that in 1978, the utility has requested the same return on equity (15 percent) allowed in U-76-11.

Frye's pre-filed testimony provided historic and future calculations of debt service coverage which supported the utility's contention that in order to market its $14 million bond issue, a permanent rate increase in the magnitude of the utility's request was "badly needed." Frye also indicated his concern about the deterioration of ML&P's equity ratio during the last five years and the need for ML&P to increase its DSC in order to keep its Baa bond rating. Foster as well as Filkin discussed the relationship between the interest rate to be paid on a bond issue and the bond rating of the utility. Both argued that a higher bond rating is more beneficial to the consumer because the resultant interest rate is generally lower.

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In her pre-filed testimony, Staff witness Evans testified that the application of any return on equity to a municipal entity is a misconstruction of the theory behind fair and reasonable rates. Therefore, the Staff supported ML&P's revenue requirement based on the necessary debt service coverage required to improve and stabilize the debt/equity ratio of ML&P. Under cross-examination, as well as in her pre-filed testimony, Evans presented a very thoughtful, articulate analysis to support Staff's position. Since ML&P's financing is primarily dependent on its ability to attract debt at the lowest possible interest rate, its rate of return should be based on the demands of debt financing. As a municipal utility the equity of ML&P is provided through retained earnings. Therefore, in the traditional sense, ML&P does not have to attract equity capital nor be concerned with withdrawal of present equity by stockholders. Thus, Evans stated, "any argument based on a return on equity to ML&P is academic--it is not relevent to the actual situation." Staff believes its method of determining a reasonable return to be more appropriate to ML&P's situation.

In discussing its proposed alternative to the traditional rate of return calculation, Staff testified that ML&P must be able to meet all the requirements of its current bond covenants and maintain financial stability in order to sell additional revenue bonds. This does, according to Staff, present two problems that should be addressed. One, in order to provide revenue sufficient for DSC in advance of a bond sale, rates must be raised before ML&P becomes liable for the debt service. Thus, a 1.25 DSC on proforma debt must be used to establish the revenue requirement. Two, this results in the current ratepayers providing monies for not only plant under construction but also before construction

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of new plant has begun. Staff observed that the general policy of the Commission, in the traditional rate of return scenario, has been to disallow a return on construction work in progress. In spite of these problems, Staff believes that debt service coverage is the appropriate basis for determining ML&P's revenue requirement.

If its approach to the appropriate return for ML&P is accepted, Staff believes there should be a control mechanism to ensure that the debt incurred by the utility is reasonable and required. Staff recommended that a review of ML&P's construction practices be performed by a Staff consultant to determine that the construction planning procedures and decisions of the utility do not allow for unnecessary or cost ineffective expenditures of monies.

Because Staff believes it is necessary to rebuild ML&P's equity, it recommended a DSC of 1.48 which supports the utility's revenue requirement. In addition, Staff recommended that ML&P be required to capitalize interest on its current and future construction because it would positively affect the equity position of the utility and because it reduces the amount of interest expensed, which in turn reduces the revenue requirement; this practice would benefit current ratepayers without affecting future ratepayers. However, Staff noted this recommendation and its support assumes rates based strictly on DSC. A reversion to traditional ratemaking standards, i.e., return on rate base, would mean that capitalization of interest would seriously affect rates. In addition, Staff testified that in October, 1979, the Financial Accounting Standards Board issued its Statement No. 34 which made capitalization of interest a generally accepted accounting principle.

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Staff also recommended that a restriction of dividends paid to the Municipality of Anchorage be placed upon ML&P until it achieves an 80/20 debt/equity ratio. Staff prepared a proforma effect of its recommended rate increase on retained earnings after one year if ML&P's interest was capitalized and no dividend accrued to the old city service area. The result, according to Evans, would be an anticipated debt/equity ratio of 88/12.

Two of Staff's recommendations, a construction practices review and a restriction on dividend pay out, evoked response from the utility under cross-examination and in its closing statement. General Manager Stahr stated that he believed the Staff recommendation for a "limited management audit of construction practices" was unnecessary because it is duplicative of the review and analysis required to receive an independent engineer's certification, a prerequisite before prospective bonds can be sold. A certified professional engineer must attest to the need for, and the costs associated with, the projected facilities. Stahr testified that the utility was willing to provide any available documentation the Staff would require in order to satisfy itself that a prospective bond sale was in the public interest and necessary to provide reliable service to the utility's service area. In addition, testimony was received that a lengthy review process both internal to the utility and within the municipal administration addresses the need for the proposed construction. In addition, the Advisory Committee of the utility as well as the Borough Assembly must approve a prospective bond sale.

Staff Engineer Barber was questioned regarding the need for a review of construction practices of the utility from a technical standpoint. He indicated that, in his

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opinion, neither unnecessary facilities nor unreasonable costs were associated with the proposed bond sale. As an engineer, he stated he would accept the opinion of the independent professional engineer who certified that construction is needed and well-planned. Barber testified he was never denied access to any information of the utility. In conjunction with Docket U-71-16, In the Matter of Eliminating Undesirable Duplication of Facilities and Competition between the Municipality of Anchorage d/b/a Municipal Light and Power Department and Chugach Electric Association, Inc., he has had occasion to review the ML&P system and feels that its records are generally complete. Further, he stated that the Staff consultants in U-71-16 have received cooperation from the utility.

In its formal Written Comments and in its testimony during the proceeding, ACAP supported a return based on a hypothetical capital structure of 70/30 in accordance with U-76-11. It acknowledged the need to have sufficient debt service coverage for the forthcoming bond sale; however, its calculations of that coverage included income which both Staff and the utility disallowed in calculating the DSC required. ACAP did not support the Staff's recommendation for a limited review of the construction practices as it believed it would not accomplish Staff's intent.

By granting the utility's revised revenue requirement, either ratemaking methodology presented in this proceeding would substantiate the results. It can be argued that a hypothetical capital structure of 60/40 with a rate of return on equity at 15 percent will yield the same revenue requirement as a debt service coverage of 1.48 on the anticipated future bond sales of the utility.

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At this point in time the Commission is persuaded, for a number of reasons, that the approach taken by Staff which establishes debt service coverage to attract new debt and improves the utility's equity position is logical and reasonable. The Commission believes that the utility must maintain or improve its current bond rating in order to attract debt at the lowest possible interest rate and that revenues in excess of the 1.25 bond covenant requirements will assist the utility in stabilizing and improving its equity position. The Commission would reiterate today what it stated in U-76-11(10), p. 6:

> The continued financial liability and stability of ML&P is of overriding concern to this Commission.

By accepting the DSC approach in the instant proceeding, the Commission is not foreclosing the more traditional rate of return approach to ratemaking in the future, should circumstances warrant. There could be a point in time when facilities could be financed, in part, through retained earnings, and an examination of the actual capital structure and return on equity at that time might be appropriate. The Commission has the discretion to allow DSC for future bond coverage requirements as established by the Alaska Supreme Court in Alaska Public Utilities Commission v. Municipality of Anchorage, 555 P.2d 262 (Alaska, 1976). The Commission believes the exercise of its discretion in this proceeding is in the public interest. The Commission will not unequivocally, however, bind itself to the DSC approach for future proceedings: what is optimum today could be less than optimal tomorrow depending on the financial marketplace, the capital structure and other circumstances relevant to ML&P. The Commission finds it helpful in approving the DSC approach to use the traditional rate of return methodology as a check and balance.

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In approving the DSC approach in this proceeding and because of subsequent events that have transpired since the issuance of its Bench Order, there is a matter of concern that must be addressed; and that is, when should rates established, in part, on DSC of future bond sales go into effect. In this instance, the rates went into effect on June 1, 1981, the deadline ML&P's management testified was necessary in order for it to market the proposed bonds. On June 6, 1981, the Commission received a letter from Financial Services Manager Frye wnich stated in part:

> Unfortunately right at this time the bond market is so bad (we estimate we would have to pay in excess of 12 percent interest today) that we are proceeding to arrange interim short term financing with the Municipality of Anchorage.
>
> We are preparing for the bond sale and as soon as market conditions improve to a satisfactory interest rate we will be ready to go to sale.
>
> If the Municipal Bond Market should continue to be adverse for several months there are two other alternates which we could look at. One would be to market short term bond anticipation notes and the other would be to split the $14,000,000 bond sale into two sales with hopefully the second sale being made in better market conditions.

The Commission has received no additional communication from the utility indicating whether or not the bonds have been sold and at what interest rate or which of the other alternatives available to ML&P has been pursued, absent a bond sale. In addition the Commission became aware on June 17, 1981, that the Municipality of Anchorage had applied for direct loan assistance under the Coastal Energy Impact Program (CEIP) for transmission, distribution and service plant projects of ML&P. The revenue requirement approved by the Commission in this proceeding assumes a 10 percent interest rate on the prospective $14 million bond

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sale. The Commission must require documentation indicating what interest rate is being paid on what amount of funds from what source in order to determine whether the utility is recovering more through its rates than its expenses. In addition, an explanation of whether the CEIP loan application is in addition to or a replacement for the proposed bond revenues is required. All relevant data including estimated time frame for a decision on the loan application and anticipated interest rate should be provided. This information should be provided to the Commission as soon as possible and not later than two weeks from the date of this Order.

In the next proceeding of this utility involving a request for a general rate increase in order to market prospective bonds, the Staff and the utility should address what mechanism should be established to ensure that rates based on a prospective bond sale are not prematurely put into effect.

The Commission would observe that ML&P's last two requests for permanent rate relief have not been timely filed in light of the requirement of the utility to have in effect permanent rates before proposed revenue bonds can be sold. In both instances, the Commission received and responded to requests for expedited consideration. The Commission is concerned that this practice not become a habit in light of its continuously pressing workload and its responsibility to give equitable consideration to matters concerning all utilities under its jurisdiction. Therefore, it will expect that any future permanent rate requests required prior to a prospective revenue bond sale will take into account the six-month statutory time frame provided for Staff audit, analysis and Commission decision.

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In accepting the DSC approach, the Commission must decide whether the recommendation of the accounting Staff to require a management practices review relative to construction practices should be instituted. From a theoretical perspective one could immediately answer affirmatively because utility consumers are paying rates that include interest on bonds, the proceeds of which are not represented by plant that is used and useful at the time the rates are approved. AS 42.05.441. It can certainly be argued that protection from unnecessary or duplicative expenditures is warranted. The question that arises is, would a review such as that contemplated by the accounting Staff accomplish the contemplated result. If the investigation is focused properly and if the practices and personnel subject to review remain constant subsequent to the investigation, one might agree that this review could accomplish its goal.

From a practical perspective, however, one could argue this type of management review is not necessary, is an unnecessary expenditure of funds and may not accomplish its intended results. A review at one particular point in time will not provide the assurance that the public will be protected from unjustified construction practices, procedures or expenses. To continuously monitor ML&P's construction practices and procedures is impractical from a time and financial standpoint. In this proceeding there is no "red flag" or other indicator that either the bond sale of 1979 or the one scheduled for June, 1981, is unnecessary or ill-conceived. An extensive review process of the utility's future construction plans has been undertaken because of the requirement that it attract capital from the sale of revenue bonds. A professional engineer has certified that the revenues from the proposed bond sale are needed to build

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necessary facilities; from a technical standpoint there has been no question of the integrity of the utility's system.

The Commission is persuaded that it is not necessary at this time to require a review of the utility's construction practices and procedures. The Commission acknowledges and understands the rationale of the accounting Staff because of its advocacy of permanent rates which include pre-construction and construction work in progress. The Commission does believe, however, that the Staff and the utility should explore possible alternatives to a formal review of construction practices to provide the checks and balances, from a practical standpoint, that the DSC approach implies is desirable. This could take the form of involving the Staff in the documentation and planning for future bond sales; it could include the certified professional engineer's report in the utility's filings before the Commission; it could provide to the Commission the minutes of the ML&P advisory committee's deliberation on the necessity for future bond sales and it could provide an independent review of the utility's construction practices and procedures, initiated by the utility and submitted to the Commission prior to the next bond sale. Because the Commission does not accept the Staff recommendation in the instant proceeding does not necessarily mean that this same position will prevail in the future. What triggers confidence today in ML&P can be undone tommorrow, and this Commission will continue to react when the occasion demands in order to protect the ratepayers of a utility and the public interest.

DIVIDEND PAY OUT

Since the Charter of the Municipality of Anchorage was approved in 1975, the Commission and its Staff have become quite familiar with its provisions regarding the

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obligation of the municipal utilities to reimburse the old City of Anchorage service area because of the financial investment made by the former City in the respective municipal utilities. Discussion of the effect of the requirements of the Charter to pay out the net profits from the operation of ML&P for the benefit of the former City of Anchorage service area for a period of five years after ratification of the Charter has been addressed in Dockets U-76-11 and U-79-13. Underlying previous Commission action with respect to the obligation of ML&P to the former City of Anchorage service area was the Commission's concern to improve the financial health of ML&P by increasing its equity position. While a highly desirable goal, in reality, it has not been achieved. As a result of the accumulated pay out of dividends by ML&P over the last five years, the equity position of the utility has deteriorated and its financial health has worsened.

In response to inquiries from the hearing panel ML&P provided Exhibit 3 (appended as Attachment 1 to this Order) which documented the history of the cash dividend pay outs to the old City service area by ML&P since 1976. Under cross-examination and in its closing statement, the utility acknowledged that it and the municipal administration could support a rationale that the dividend obligation of the utility under the Charter has been satisfied. In addition, ACAP urged the Commission to rule that the dividend obligation of the utility to the old City service area had been satisfied thereby giving the utility the opportunity to improve its equity position.

The Commission believes that the intent of the Charter has been satisfied with respect to the dividend obligation of ML&P as substantiated by the record of dividend payments to the former City service area by the utility

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over the past five years. This determination together with the revenue requirement affirmed in this Order, should assist the utility, barring any unforeseen circumstances, to reverse its attrition of earnings and to begin to improve its equity position immediately. The Commission will require that ML&P report its actual capital structure and percentage of change from the previous year to the Commission at the time it files its annual report.

OTHER TARIFF CHANGES

The Staff concurred with the utility's request to delete Rule 7.4 Primary Metering Discount. This is a housekeeping item, and the Commission will approve the utility's request.

In its review of the utility's request to implement a $15 connection charge, the Staff concurred that the proposed charge is reasonable in light of current labor rates and practices of other utilities. Staff and ML&P agreed that a further revision to Rule 7.13 should be made to clarify the utility's actual intent regarding agreements between it and the owners of rental property. The Commission will accept the revision that is stated on Staff witness Barber's prefiled testimony, pages 5 and 6.

FUEL OIL COST RATE ADJUSTMENT

In its supplemental filing of February, 1981, ML&P requested the Commission to approve a fuel oil cost rate adjustment (FOCRA) to its tariff. The Commission in Docket U-75-21(6) denied the request of ML&P to allow a fuel cost adjustment clause in its tariff which included diesel fuel. The Commission's reasoning was that the cost of fuel should be a significant portion of a utility's operating expenses before a fuel cost adjustment clause is approved, and it was not a significant portion of ML&P's operating expenses at that time.

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The utility, in the instant filing, argues that the situation facing ML&P today has changed dramatically since the issuance of Order No. 6 in U-75-21. ML&P alleges that the cost of diesel has substantially increased; that the delivery of natural gas to ML&P was curtailed in December of 1980; that curtailment could happen in the future; and because these conditions have a significant effect on the operating expenses of the utility, the establishment of an FOCRA is warranted. The utility also testified that diesel fuel was used during the year to test its backup generation. However, ML&P could not quantify the expense associated with this procedure or how often its diesel-fired generators were tested. Utility witness Foster in his pre-filed testimony indicated that the methodology proposed by ML&P to establish an FOCRA would have to be modified if the Commission accepted the request of Alaska Gas and Service Company (AGAS) to revise its gas flow through clause. The Commission, subsequent to the hearing in the instant proceeding, has accepted the AGAS request.

Both the Staff and ACAP opposed the inclusion of an FOCRA in ML&P's tariff. Staff gave the following reasons for its opposition:

1. There is no indication that ML&P's source of gas supply is not as adequate as it has been in prior years;

2. ML&P and AGAS have signed a new contract which provides that the military customers will be curtailed before ML&P;

3. In the event of curtailment of significant duration to effect the utility's revenues, ML&P could request that it be allowed to amortize the extraordinary diesel fuel expense; and

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4. Staff did not believe the diesel expense during the test year was significant because it was .00098 percent of the revenue requirement.

In its closing statement, ML&P argued that the use of an FOCRA should be allowed by the Commission. However, in the event the Commission denied this request, the utility proposed that, in conjunction with Staff, an acceptable FOCRA clause be developed with a provision that in the event of curtailment, the clause would go into effect within twenty-four hours after the Commission was apprised that the utility had been forced to burn diesel fuel.

The Commission acknowledges that the price of diesel fuel has increased substantially since 1976. However, the evidence in this proceeding does not indicate that the use of diesel fuel is a substantial expense to the utility or that the probability of curtailment is any greater today than five years ago. Therefore, the Commission will deny without prejudice the utility's request to institute an FOCRA.

INTERCONNECTION

The issue of reserve capacity was discussed by the utility's manager. In response to concerns expressed by public witness Carmen Smith, Stahr indicated that at this time ML&P has more reserve margin than would be absolutely required and originally planned for because of the price of generating units. In response to questions from the hearing panel, Stahr testified that, in his opinion, if Chugach Electric Association, Inc. (CEA), and ML&P were "fully interconnected" and all the appropriate agreements existed, there would be 70 megawatts of additional capacity available to the consumers of these utilities. Stahr testified that "...by interconnecting the utilities, having...proper operating

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agreements for the buying and selling...[of] power, for sharing of reserves, [it] will free up or make available, a lot of additional generating capacity so you could postpone investments--these major investments in large units" (Tr., p. 26). An integrated system, according to Stahr, could get by with 20 to 30 percent reserve margin. At the present time, each utility operating independently must provide enough reserve capacity to maintain service in the event its largest unit is down. In response to the question regarding estimated savings to both CEA and ML&P, Stahr responded that he believed savings could be at least $1,000,000 annually to each utility and could approach $2,000,000 a year depending on the price paid for natural gas. When asked if he believed the interconnection of CEA and ML&P was in the public interest and should be ordered by the Commission Stahr responded that if "it is not now, we are rapidly approaching the time that it will be in the public interest." (Tr., p. 46)

Stahr also noted that a study currently underway by the Alaska Power Authority (APA) indicated that a Fairbanks/Anchorage transmission tie, in addition to the interconnection of both Anchorage based electric utilities, would provide enough reserve capacity in the railbelt area that no additional generation units would be required until 1990. Although Stahr did not endorse the APA study, he testified that it supported the principle that interconnection would defer major investments by CEA and ML&P.

In responding to questions by the hearing panel regarding interconnection, Staff witness Barber indicated that Staff believed interconnection would be in the public interest and that the work being done by the Commission's consultants in U-71-16 did form the basis for Commission investigation and subsequent action in this matter.

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Based on the evidence in this proceeding the Commission believes there is prima facia evidence that the full interconnection of CEA and ML&P would be in the public interest. Therefore, it will open a docket of investigation in a subsequent order to examine what procedures should be established by both utilities and the Commission in order to effect full interconnection as soon as possible.

CONTINUING PROPERTY RECORDS

In his pre-filed testimony, Staff witness Barber discussed the progress of ML&P in maintaining continuing property records (CPR's) in compliance with AS 42.05.461. While acknowledging that a computerized property record system for ML&P's transmission and distribution line equipment is close to being operational, Barber noted that the utility is obligated to have CPR's for its generation and general plant. Staff recommended that the Commission require ML&P to develop complete property records, permitting the utility to determine its own schedule with the provision that complete property records be placed in effect prior to the utility's request for another general rate increase.

General Manager Stahr testified "it was anticipated that the computerized CPR system will be operational by July 1, 1981, and that the other records will probably take a month or two to complete after the distribution and transmission CPR system is operational. Stahr testified that the utility was concerned about the type of system to be used for its generation records indicating that the various parts of gas turbines have different lives. These components are not a minor part of the generation plant, according to Stahr, who indicated that a set of blades for one of the turbines may be $200,000-$300,000.

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The Commission will continue to articulate its requirement that ML&P develop complete continuing property records. It recognizes the dilemma of the utility regarding the appropriate system to be used for its generating plant. The Commission would recommend that the utility seek assistance and advice from Staff, if necessary, in order to fully comply with AS 42.05.461. The Commission concurs that ML&P's CPR system should be completely operational prior to another request for a general rate increase.

RATE DESIGN

In Staff's pre-filed testimony, Evans recommended that ML&P be required to file by October 31, 1981, a cost-of-service study based on its 1980 test year revenue requirement. Staff also agreed to an extension of that deadline should similar filings be required under the Public Utility Regulatory Policies Act (PURPA).

During cross-examination utility witness Foster indicated that the earliest a cost-of-service study could be completed was three months from the date of this Order. Acknowledging that ML&P was subject to the jurisdictional requirement of PURPA, Foster stated that the utility wished to avoid providing two cost-of-service studies and could comply with the PURPA ratemaking requirements within a six-month time frame.

ACAP, in its written formal comments and during its testimony, expressed concern about ML&P's existing rate design. ACAP provided consumption and revenue documentation for the last five years. This historical information indicated that residential customers have paid proportionately far more for increased consumption than commercial-industrial customers. ACAP, therefore, requested a rate redesign proceeding to assure just, reasonable and non-discriminatory

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rates for all ML&P customers. ACAP testified that it would support the utility's request for a longer time frame in order to comply with the PURPA ratemaking requirements and to have the Commission consider marginal cost pricing.

The Commission agrees that the issue of whether or not the residential consumer of ML&P is bearing more than the costs to provide its service should be thoroughly examined in the forthcoming cost-of-service study. An additional concern is what effect construction underway in ML&P's service area and that contemplated in 1982 to provide service to large commercial power customers will have on a cost-of-service study based on a 1980 test year. The dilemma is that the approved revenue requirement in this proceeding includes debt service coverage for 1981 and 1982 plant construction. Yet, there is no actual consumption or demand data for those customers. Therefore, how accurately will the traditional cost-of-service allocation methodologies reflect ML&P's current customer composition.

In addition, the Commission is required to consider the appropriateness of six ratemaking standards and lifeline rates under Title I of PURPA, more fully described in U-80-20(1).

The Commission agrees that the public interest would best be served by the timely filing of one cost-of-service study which addresses the concerns articulated above and the considerations mandated by PURPA. To that end, the Commission believes that in order to evaluate the options available to it, ML&P should be required to file within 45 days from the date of this Order response to the following:

1. Would proforma adjustments to ML&P's rate base, which reflects the use of the $14 million revenue bonds for plant under construction, provide a method to reflect the change in composition of customer consumption and demand in the imminent cost-of-service study.

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2. The methodology that ML&P would propose to be the most appropriate for the resulting cost-of-service study in light of:

a. The assumption that there may be significant change in customer distribution as a result of the substantial commercial construction in 1981 and 1982; and

b. the Title 1 requirements of PURPA as they relate to cost of service.

3. The costs associated with and the earliest dates of completion for (2) above; and the costs associated with full compliance of consideration of Title 1 ratemaking standards and lifeline, including both a marginal cost and embedded cost approach to rate design.

4. The load information readily available or retrievable (within 30 days) which could assist the Commission in its assessment of the data base available for cost-of-service studies.

5. The availability and validity of the historical data gathered from customers of Schedule 14, Experimental Time-of-Day; and the utility's plan to expand or modify this service offering.

The Commission will require Staff to file comments and recommendations on the above information within 30 days after its receipt by the Commission.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. The Bench Order granted on May 18, 1981, establishing an across-the-board 28.06 percent increase to the utility's existing recurring permanent rates should be affirmed. See Attachment 2.

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2. The operating expenses, including depreciation, and specifically those questioned in the comments of ACAP are found to be reasonable.

3. The base price of gas should be 88.31¢/MCF for the test year 1980.

4. The Commission will allow a uniform life for both the steam plant and the gas turbine, reserving the right to adjust the lives of those plants at the time a depreciation study is filed and approved by the Commission.

5. The Commission will accept the debt service coverage approach recommended by Staff to establish the revenue requirement in this proceeding and will approve a 1.18 DSC on the anticipated $14 million bond sale of the utility.

6. ML&P should provide to the Commission no later than two weeks from the date of this Order, documentation indicating whether or not the prospective bond sale has taken place; the amount of interest being paid and the effective date of the sale. In the event the sale has not taken place, the utility should provide documentation indicating what interest rate is being paid on what amount of funds being used to finance the construction projects that were to be financed from the prospective bond sale. An explanation of the CEIP loan application, as articulated in the body of this Order, should also be provided.

7. At the time the utility files its next permanent rate request, the utility and the Staff should address what mechanism, if any, should be established to ensure that rates based on a prospective bond sale are not prematurely put into effect.

8. The dividend obligation of ML&P to the former City service area has been satisfied. No further obligation

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of ML&P to the former City service area is required under Section 19.14(a) of the Charter of the Municipality of Anchorage.

9. ML&P should report its actual capital structure and the percentage of change from the previous year to the Commission at the time it files its annual report.

10. ML&P should be allowed to delete Rule 7.4 Primary Metering Discount.

11. ML&P should revise its Rule 7.13 in accordance with the pre-filed testimony of Staff witness Barber, pages 5 and 6.

12. The Commission will deny ML&P's request to institute an FOCRA without prejudice to the refiling of an adjustment clause similar to the one proposed by its counsel during the utility's closing argument.

13. There is evidence in this proceeding that the full interconnection of ML&P and CEA would be in the public interest. Therefore, the Commission, in a subsequent order, will open a docket of investigation to examine what procedure should be established by both utilities and the Commission in order to accomplish this desirable goal.

14. ML&P should be required to develop complete continuing property records prior to its request for another general rate increase. Staff should be available in order to assist the utility to fully comply with AS 42.05.461.

15. ML&P should be required to file one cost-of-service study to comply with the mandate of Title I of PURPA and the possible significant change in customer composition in ML&P's service area.

16. In order for the Commission to determine the optimum approach to the forthcoming cost-of-service study,

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ML&P should provide the information delineated in the body of this Order within 45 days of the date of this Order.

17. The Staff should provide comments and recommendations on the information required in Finding 17 within 30 days after receipt by the Commission.

ORDER

THE COMMISSION FURTHER ORDERS:

1. The Bench Order issued on May 18, 1981, is affirmed.

2. The tariff revision, designated as TA26-121, filed by the Municipality of Anchorage d/b/a Municipal Light and Power Department, as supplemented on February 17, 1981, is approved subject to the modifications and ratemaking methodology set forth in this Order.

3. The Municipality of Anchorage d/b/a Municipal Light and Power Department shall file with the Commission on or before October 1, 1981, amended tariff sheets which reflect a 35.06 percent across-the-board increase to its recurring rates which includes a roll-in of the utility's purchased gas flow through of 11.27¢/MCF which was in effect at the time of the utility's filing.

4. The base price of gas for the test year 1980 shall be 88.31¢/MCF.

5. A revenue requirement of $24,294,089 as more fully articulated in the body of this Order is approved.

6. A uniform life for the steam plant and the gas turbine shall be approved subject to possible change when a depreciation study is filed and approved by the Commission.

7. The Municipality of Anchorage d/b/a Municipal Light and Power Department shall provide to the Commission

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within two weeks from the date of this Order documentation regarding its proposed bond sale which had been scheduled for June 1, 1981, and its Coastal Energy Impact Program loan application as more fully discussed in the body of this Order.

8. The dividend pay out by the Municipality of Anchorage d/b/a Municipal Light and Power Department is satisfied.

9. At the time it files its annual report with the Commission, Municipality of Anchorage d/b/a Municipal Light and Power Department shall report its actual capital structure and the percent of change from the previous year.

10. The Municipality of Anchorage d/b/a Municipal Light and Power Department shall delete Rule 7.4 Primary Metering Discount.

11. The Municipality of Anchorage d/b/a Municipal Light and Power Department is granted a revision to its Rule 7.13 as articulated in the body of this Order.

12. The request of the Municipality of Anchorage d/b/a Municipal Light and Power Department to institute a fuel oil cost rate adjustment is denied without prejudice.

13. The Municipality of Anchorage d/b/a Municipal Light and Power Department shall develop complete continuing property records prior to its request for another general rate increase.

14. The Municipality of Anchorage d/b/a Municipal Light and Power Department shall provide within 45 days of the date of this Order the required cost-of-service study information detailed in the body of this Order.

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15. Within 30 days after receipt by the Commission, the Commission Staff shall provide comments and recommendations on the information provided under Ordering Paragraph 14.

DATED AND EFFECTIVE at Anchorage, Alaska this 1st day of September, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Stuart C. Hall, concurring in part and dissenting in part; Commissioner Susan M. Knowles, not participating)

(S E A L)

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Exh. # 3 5/18/ Tabled?
MLP 5/9? Pass 4-1
U-80-100

MUNICIPAL LIGHT & POWER

	Net Profits	Cash Dividend Payouts
1976	$1,271,458	$ 600,000
1977	1,330,888	506,006
1978	1,005,697	548,456
1979	947,875	588,755
Sub Total	$4,555,918	$2,043,217
1980	(2,311,034)	330,982
Total	$2,244,884	$2,374,199

ATTACHMENT 1
Order No. 6, U-80-100

SCHEDULE 1

MUNICIPALITY OF ANCHORAGE
MUNICIPAL LIGHT AND POWER
SCHEDULE OF REVENUE DEFICIENCY
FOR THE TEST YEAR ENDED DECEMBER 31, 1980

Revenue Requirement (Schedule 2) (2)	$24,294,089
Actual Operating Revenues	18,045,678
Add:	
Fuel Surcharge Revenue Adjustment (1)	596,632
Pro Forma Connection Charge Revenue	108,795
Adjusted Operating Revenues	18,751,105
Revenue Deficiency	$ 5,542,984
Required Percent Revenue Increase	29.56%

(1) Adjustment to Annualize Fuel Surcharge Revenue

Base fuel cost increased from 77.04¢ to 88.31¢ during the year. The normalizing adjustment (Schedule 3) to cost of gas reflects these increases. This filing anticipates the roll in of the new base gas cost rate, therefore, a revenue annualizing adjustment is required to reflect it.

11.27¢ Increase x 7,849,600 mcf	$ 884,650
Less the calculated recovery of base cost increases collected through GCRA and included in operating revenues	288,018
Fuel Surcharge Revenue Adjustment	$ 596,632

Subsequent Change for 1981 State Legislation Affecting MUSA

(2) Revenue Requirement	$24,294,089
Decrease Operating Expense	277,238
Decrease Return on Rate Base	3,494
Revised Revenue Requirement	24,013,357
Adjusted Operating Revenues	18,751,105
Revenue Deficiency	$ 5,262,252
Required Percent Revenue Increase	28.06%

ATTACHMENT 9

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA26-121, by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for an Interim and Permanent Rate Increase	U-80-100 BENCH ORDER

The Commission, having considered the need for immediate response in the above referenced docket issues this Bench Order to document the Commission's action prior to issuance of a formal order setting forth the Commission's findings of fact and conclusions of law.

THE COMMISSION ORDERS THAT:

The MUNICIPALITY of ANCHORAGE d/b/a/ MUNICIPAL LIGHT AND POWER DEPARTMENT is granted an across-the-board increase of 28.06% to its existing recurring permanent rates for billings on or after June 1, 1981.

DATED at Anchorage, Alaska, this 18th day of May, 1981.

Commissioner

Commissioner

Commissioner

ALASKA PUBLIC UTILITIES COMMISSION
1100 Harkey Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

BB

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA129-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Revise Line Extension and Unusual Construction Policies	U-81-19 ORDER NO. 2

ORDER EXTENDING SUSPENSION PERIOD

Order No. 1 in this proceeding dated April 13, 1981, suspended the operation of a tariff revision, designated as TA129-120, filed by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) for an initial six-month period not to extend beyond October 6, 1981, and instituted an investigation into the reasonableness and propriety of the revision.

On October 5, 1981, the Commission received a letter from ATU stating that "Pursuant to discussions between utility and Commission Staff, it is agreed to extend the time period for this particular filing by sixty (60) days."

Because it appears that the Commission Staff and ATU are engaged in meaningful discussion which may lead to a satisfactory resolution of the issues in this proceeding, the Commission believes that the public interest would best be served by extending the suspension of TA129-120 for an additional 60 days.

ORDER

THE COMMISSION FURTHER ORDERS, That, the operation of the tariff revision, designated as TA129-120, filed by the

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1100 McKay Building - 338 Denali Street
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Phone 276-1231

Item 15

Municipality of Anchorage d/b/a Anchorage Telephone Utility is suspended for an additional 60-day period not to extend beyond December 7, 1981.

DATED AND EFFECTIVE at Anchorage, Alaska this 6th day of October, 1981.

BY DIRECTION OF THE COMMISSION

(S E A L)



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1100 Huckby Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA8-12', by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY for a General Rate Increase	U-76-66 ORDER NC. 9
In the Matter of the Filing of a Tariff Revision, Designated as TA22-122, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY for an Interim and Permanent Rate Increase	U-81-78 ORDER NO. 1

ORDER SUSPENDING OPERATION OF TARIFF REVISION; GRANTING I. ERIM RATE INCREASE; CLOSING DOCKET U-76-66 AND ALLOCATING COSTS

On September 2 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY (AWU) filed a tari f revision, designated as TA22-122, requesting interim and pe manent rate increases of 15 percent and 22.95 percent, respectively. The utility proposed that e rate increases be applied across-the-board to all ecurring monthly charg s for water sales. In addition, the rate increases would be applied to all non-recurring charges except deposits and initial fees for connection, permits and inspection. AWU has also requested that the private fire hydrant maintenance fee be deleted, its elimination having been overlooked in TA21-122.

The Commission Staff (Staff) has reviewed the filing and has determined that it meets the requirements of 3 AAC 48.270 and 3 AAC 48.275(a). AWU has reques ed a waiver of 3 AAC 48.275(a)(8) since information relating to income taxes is inapplicable to a municipally owned utility.

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Item 16 37

The filing was noticed on September 9, 1981, with a closing date of October 7, 1981, for the submission of statements in support of, or in opposition to, the proposed tariff revision. No responses have been received by the commission.

Interim Rate Increase

The Commission notes that different standards apply to assessing requests for interim as distinguished from requests for permanent rate relief. Under AS 42.05.421(d), "One who initiates a change in existing tariffs shall bear the burden to prove the reasonableness of the change." Where an interim rate increase is requested, the Alaska Supreme Court has ordered this Commission to grant relief provided the utility demonstrates:

1. That existing rates are confiscatorily low;

2. That those low rates will remain in effect for an unreasonably long period of time;

3. That without an interim rate increase, it will suffer irreparable harm;

4. That the public can be adequately protected in the event the interim increase is ultimately determined to be excessive in amount; and

5. That the magnitude of the utility's request is not "frivolous or obviously without merit."

Alaska Public Utilities Commission v. Greater Anchorage Area Borough, 534 P 2d 549, 554, 557-559 (Alaska 1975); quoted with approval in United States v. RCA Alaska Communications, Inc., 597 P.2d 489 (Alaska 1978).

Under the GAAB decision, a utility does not have to advance the same detailed proof which is required for a permanent rate increase or tariff change in order to secure interim relief. The utility does not even have to demonstrate that it will probably succeed in all aspects of its proof a:

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the time of the permanent rate increase decision. See, A. J. Industries, Inc. v. Alaska Public Service Commission, 470 P.2d 537, 540 (Alaska 1970). The Supreme Court has merely required the utility to show that its existing rates are inadequate and that the "balance of hardships" tips in its favor. A. J. Industries, supra at 540; GAAB, supra at 557.

The Alaska Supreme Court has never defined the precise point at which a utility's rates fall into the prohibited zone of confiscation. However, where the utility is being operated at a loss, the Court has expressly found those rates to be clearly confiscatory and has ordered this Commission to grant interim rate increases. GAAB, supra n. 26, at 558.

In the instant case, the utility's 1980 audited financial statements, as adjusted for known and measurable changes, show a net loss of $487,586 (Net operating income after pro forma adjustments per filing Schedule 3 of $705,826 long-term debt interest expense of $1,193,412). Therefore, the utility has made a prima facie showing that its existing rates are confiscatorily low. Thus, the first element of the five-part GAAB test has been satisfied.

The Staff has indicated that it requires the opportunity to audit AWU's accounts and records, to investigate the reasonableness and propriety of AWU's proposed overall 22.95 percent rate increase, and to examine a detailed analysis of costs allocated to/from other municipal entities, including the sewer utility, before making a recommendation concerning the utility's request for a permanent rate increase. Therefore, the Staff recommended suspension of the permanent rate increase for an initial period not to exceed six months. The GAAB decision has held that even if confiscatorily low rates are in effect for as short an interval as the statutory suspension period, it constitutes an unreasonable length of time and is

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sufficient to justify interim rate relief. The second element of the GAAB test has thus been established.

In Alaska it has been repeatedly held that a utility may not bill its subscribers retroactively either upon receiving approval to increase its rates or to recoup past losses. A. J. Industries, supra at 541; GAAB, supra at 554. Accordingly, every Alaska Supreme Court decision on point unanimously states that the denial of interim relief will cause the utility to suffer irreparable harm as a matter of law when the other four elements have been shown to exist. Thus, the third element has been met.

The courts in Alaska have recognized the refund condition attached to interim rate increases as the cornerstone to adequately protect the public against payment of excessive rates. The Staff recommends that the utility be required to refund any excess revenues collected under the interim rate increase if, after investigation, it is determined that that amount is greater than the permanent increase ultimately granted in this proceeding. Thus, de facto the fourth element of the GAAB test has been satisfied.

Finally, the utility's request must not be "frivolous or obviously without merit." The Commission believes this requirement is satisfied if the magnitude of the interim increase is reasonable and not excessive in light of all the facts and circumstances prevailing at the time of the request. AWU has requested a 15 percent interim rate increase in the amount of $849,798. The Staff calculated a deficiency of $1,058,591 based on rate of return methodology and of $1,124,974 based on the debt service coverage (DSC) methodology (1.25 DSC required on revenue bonds). The utility's requested increase results in a rate of return of 7.53 percent and DSC of 1.14. No adjustments of operating expenses or rate base were made by Staff for purposes of calculating the interim revenue deficiency.

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Staff, after completion of its analysis of TA22-122, recommended that AWU be granted a 15 percent refundable interim rate increase applicable on an across-the-board basis to recurring charges and certain non-recurring charges currently in effect for billings rendered on or after October 16, 1981. Staff concurred with AWU that some nonrecurring service charges are impacted by increased operating expenses, e.g., labor, and, therefore, should be subject to the 15 percent increase.

The Commission agrees with Staff's recommendation and concludes that an interim rate increase of 15 percent is appropriate under the Alaska Supreme Court's decision in GAAB, supra; A. J. Industries, supra; and RCA Alascom, supra. The utility was telephonically notified of the Commission's decision on October 12, 1981.

The Commission may at its discretion require an escrow account or bond to assure the availability of refund monies. AS 42.05.421(c). In exercising its discretionary powers not to require AWU to escrow funds or to post a bond, the Commission, in concurrence with Staff's recommendation, will require the utility to refund any revenue gained from the interim rate increase which exceeds the revenue which would have been derived during the same period at the level of permanent rates ultimately granted in this proceeding.

Closure of Docket U-76-66

In Docket U-76-66, bulk water sale special contracts with Central Alaska Utilities, Inc., and Romig Park Improvement Co., Inc., are outstanding. The bulk water sale contracts will be subsumed under Docket U-81-78. Since there are no further substantive or procedural issues to be resolved in Docket U-76-66 and there are no costs to be allocated, Docket U-76-66 should be closed.

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As a condition of acceptance of TA21 122, a request to eliminate Schedule E - Private Fire Protection, AWU was ordered to file a cost-of-service study by June 1, 1981. In a letter dated May 22, 1981, AWU indicated its intent to file a new revenue requirement study by September 1, 1981. AWU indicated that it would be appropriate for the cost-of-service study to be based on the new revenue requirement study.

The Commission concurs with AWU that the cost-of-service study should be based on the permanent revenue requirement established in this proceeding. Therefore, the cost-of-service study condition attached to approval of TA21-122 will be subsumed under Docket U-81-78.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. AWU is a public utility as defined in AS 42.05.701 and is subject to the regulatory jurisdiction of this Commission.

2. AWU's request for permanent rate relief should be suspended for an initial six-month period, not to extend beyond April 16, 1982, pending full investigation of the proposed rate increase.

3. AWU has demonstrated a revenue deficiency of $849,798 and should be granted a refundable interim rate increase of 15 percent to be coterminous with Commission consideration of the permanent rate request. The increase should be applied across-the-board to the currently effective tariffed rates for recurring charges for water sales and for non-recurring charges excluding deposits and initial fees for connection, permits and inspection.

4. AWU should be allowed to drop the private hydrant maintenance fee.

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5. AWU should not be required to establish an escrow account or post a bond. The public will be protected by requiring the utility to refund any excess revenues collected.

6. Inasmuch as special contract issues of Docket U-76-66 are to be transferred to and subsumed in this Docket; no further substantive or procedural issues remain to be considered or resolved in that proceeding; there are no costs to be allocated under AS 42.05.651, and Docket U-76-66 should be closed.

7. The cost-of-service study condition attached to approval of TA21-122 should be transferred to and subsumed under Docket U-81-78.

8. Staff should be made a party to this proceeding.

ORDER

THE COMMISSION FURTHER ORDERS:

1. The operation of the tariff revision, designated as TA22-122, filed by the Municipality of Anchorage d/b/a Anchorage Water Utility, is suspended for an initial six-month period not to extend beyond April 16, 1982.

2. The Municipality of Anchorage d/b/a Anchorage Water Utility is granted an interim rate increase of 15 percent, fully refundable and coterminous with Commission consideration of the permanent rate request. The increase is applicable on an across-the-board basis to currently tariffed rates for recurring charges for water sales and for non-recurring charges excluding deposits and fees for initial connections, permits and inspection, upon bills rendered on or after October 16, 1981.

3. The private hydrant maintenance fee, Rule 10.10 of Tariff Sheet No. 47 shall be deleted.

4. The Municipality of Anchorage d/b/a Anchorage Water Utility shall maintain records of each customer paying the interim rate increase. The utility shall be required to

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refund any revenues collected under the interim rate increase in excess of revenues which would have been derived during the same period if the permanent rate increase ultimately granted in this proceeding had been in effect. If the rates which the Commission subsequently allows on a permanent basis are greater than rates allowed on an interim basis, the resultant revenue deficiency may not be collected by the Municipality of Anchorage d/b/a Anchorage Water Utility.

5. By November 15, 1981, the Municipality of Anchorage d/b/a Anchorage Water Utility shall file amended tariff sheets reflecting the interim rate increase approved by this Order.

6. An investigation is instituted into the reasonableness and propriety of the subject tariff filing.

7. The outstanding issues in Docket U-76-66 and TA21-122 are subsumed in Docket U-81-78.

8. Docket U-76-66 is closed.

9. The Municipality of Anchorage d/b/a Anchorage Water Utility shall file a cost-of-service study, with the deadline for its submission to be established by a subsequent order of the Commission.

10. The Commission Staff is made a party to this proceeding.

DATED AND EFFECTIVE at Anchorage, Alaska this 29th day of October, 1981.

BY DIRECTION OF THE COMMISSION

(S E A L)

ALASKA PUBLIC UTILITIES COMMISSION
1100 MacKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

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Hearing Off 0-31-90

STATE OF ALASKA

JAY S. HAMMOND, Governor

ALASKA PUBLIC UTILITIES COMMISSION
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

1100 MacKay Building
338 Denali Street
Anchorage, Alaska 99501
Phone (907) 276-6222

November 5, 1981

Mr. John W. Coyne
Assistant Municipal Attorney
Municipality of Anchorage
Pouch 6-650
Anchorage, Alaska 99502

Dear Mr. Coyne:

RE: The Application of the Municipality of Anchorage
For a Certificate of Public Convenience and
Necessity to Operate as a Public Utility
Furnishing Carbage, Refuse and Trash
Collection and Disposal Service

With recognition of the fact that Staff agreed that responses to questions 3, 4 and 10 could be omitted and the request for exemption by the Municipality of Anchorage, a review of the above referenced application discloses that the application is deficient or otherwise incomplete in the following respects:

(1) The $50.00 application fee required by AS 42.05.661 and noted in instructional footnote 2 of the application has not been paid.

(2) The service area description, Exhibit E, is not set forth in township, range and section designations as requested in instructional footnote 3 of the application.

(3) The proposed tariff included with the application is not set forth in the format approved by the Commission, as required by 3 AAC 48.200, 3 AAC 48.430 and as noted in instructional footnote 13 of the application.

In order that noticing of the application can be made and to avoid any further unnecessary delay in the processing of the application, you are requested to immediately remit the statutory $50.00 application fee and not later than November 20, 1981, file a service area description set forth in the township, range and section format for the areas in which the utility services are provided.

Item 17

Pending its initial consideration whether to grant the requested exemption from economic regulation, the Commission will not require that the format of the proposed tariff be corrected or that a response to question 14 of the application be filed. However, the Municipality of Anchorage is placed on notice that correction of the tariff format and the filing of a response to question 14 of the application as well as the filing of other supplemental information may be required prior to any final decision of the Commission regarding the requested exemption or certification application.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh

John B. Farleigh
Executive Director

Tariff
to:
Initials Date
OK MW 10/30/81
OK 10-30-81
OK 11-3-81

STAFF ACTION
Date
Type
Check
Approved

November 4
~~October 27~~, 1981

Mr. John W. Coyne
Assistant Municipal Attorney
Municipality of Anchorage
Pouch 6-650
Anchorage, Alaksa 99502

Dear Mr. Coyne:

RE: The Application of the Municipality of Anchorage
For a Certificate of Public Convenience and
Necessity to Operate as a Public Utility
Furnishing Garbage, Refuse and Trash
Collection and Disposal Service

With recognition of the fact that Staff agreed that responses to questions 3, 4 and 10 could be omitted and the request by the Municipality of Anchorage for exemption, a review of the above referenced application discloses that the application is ~~difficult~~ deficient or otherwise incomplete in the following respects:

(1) The $50.00 application fee required by AS 42.05.661 and noted in instructional footnote 2 of the application has not been paid.

(2) The service area description, Exhibit E, is not set forth in township, range and section designations as requested in instructional footnote 3 of the application.

(3) The proposed tariff included with the application is not set forth in the format approved by the Commission as required by 3AAC 48.200, 3 AAC 48.430 and as noted in instructional footnote 13 of the application.

In order that noticing of the application can be made and to avoid any further unnecessary delay in the processing of the application, you are requested to immediately remit the

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA139-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Conditions and Rates for Coin Telephone Service	U-81-33 ORDER NO. 2

ORDER EXTENDING SUSPENSION PERIOD AND REQUIRING SUPPLEMENTAL INFORMATION

Due to the workload and out-of-state commitments of the hearing panel in this proceeding and the desire by the full Commission to address the social issue raised by the utility's request to increase the rates for public and semi-public telephone service from 10¢ to 20¢ per call, the Commission will extend the suspension period in this Docket until March 1, 1982.

In addition, the Commission requests the utility to respond to the following questions:

1. Is it technically feasible to limit a coin telephone call in the utility's service area to three or five minutes? What would be the cost of imposing that limitation?

2. Do the utility's coin telephones presently operate on a "Dial Tone First" basis? If not, is it technically feasible to convert the utility's coin telephones to operate on that basis so that users can reach the operator or 911 without the requirement of the deposit of coins? What would be the time-table and cost of that conversion?

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Phone 276-6222

Item 18

ORDER

THE COMMISSION FURTHER ORDERS:

1. The operation of the tariff revision, designated as TA139-120, filed by the Municipality of Anchorage d/b/a Anchorage Telephone Utility is suspended for an additional 90-day period not to extend beyond March 1, 1982.

2. By January 15, 1982, the Municipality of Anchorage d/b/a Anchorage Telephone Utility shall file the following information with the Commission:

a. Is it technically feasible to limit a coin telephone call in the utility's service area to three or five minutes? What would be the cost of imposing that limitation?

b. Do the utility's coin telephones presently operate on a "Dial Tone First" basis? If not, is it technically feasible to convert the utility's coin telephones to operate on that basis? What would be the timetable and cost of that conversion?

DATED AND EFFECTIVE at Anchorage, Alaska, this 1st day of December, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioners Stuart C. Hall, concurring in result, and Susan M. Knowles and Diana E. Snowden, not participating)

(S E A L)

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners:	Carolyn S. Guess, Chairman Marvin R. Weatherly Susan M. Knowles Stuart C. Hall Diana E. Snowden
In the Matter of the Filing of an Application for Amendment of Certificate of Public Convenience and Necessity No. 120 by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Include Elmendorf Air Force Base in Its Service Area	U-80-8 ORDER NO. 2
In the Matter of an Amendment to Certificate of Public Convenience and Necessity No. 19 held by MATANUSKA TELEPHONE ASSOCIATION INC., To Delete Elmendorf Air Force Base from Its Service Area	U-80-90 ORDER NO. 2

ORDER ESTABLISHING DATES FOR PUBLIC HEARING AND SUBMISSION OF PRE-FILED TESTIMONY

On February 29, 1980, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed with the Commission an application for an amendment of Certificate of Public Convenience and Necessity No. 120 to include Elmendorf Air Force Base (EAFB) in its authorized service area.

On November 13, 1980, the Commission, after noticing the application and reviewing the filing, issued Orders No. 1 in the above-captioned proceedings which in part: granted an amendment to the certificate of ATU to include that portion of EAFB that was not within the service area of MATANUSKA TELEPHONE ASSOCIATION, INC. (MTA); granted a temporary amendment to the certificate of ATU to include that portion of EAFB that was within the service area of MTA; and indicated a public hearing would be scheduled in

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1100 MacKay Building - 338 Denali Street
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accordance with AS 42.05.271 to determine if the public convenience and necessity requires MTA's certificate No. 19 to be modified to exclude EAFB from its service area, and if so, whether the service area of ATU should be enlarged to include this area. ATU will have the burden of proving that MTA's certificate should be modified to satisfy the requirements of the public convenience and necessity. ATU will also bear the burden of proof that it is fit, willing and able to provide local exchange service to EAFB on a permanent basis. MTA will be required to present testimony relevant to these issues and its intention of providing service in this area of EAFB.

The Commission believes it would be conducive to a fair and expeditious disposition of the proceedings to require ATU and MTA to each submit a list of witnesses in the order of their appearance and to pre-file written prepared, instead of oral direct, testimony in accordance with 3 AAC 48.150(f). ATU and MTA will be specifically precluded from calling witnesses who have not submitted prepared written testimony. Exceptions may be granted by the Commission based on an offer of proof that a witness's testimony is necessary for a complete evidentiary record. Justification for the omission of the witness from the original witness list must be provided.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. A public hearing should be scheduled in these proceedings in Anchorage, Alaska, at which time ATU will be required to show that the public convenience and necessity require that MTA's certificate be modified to exclude EAFB from its service area and that it is fit, willing and able to provide local exchange service to EAFB on a permanent basis.

2. ATU and MTA should be required to pre-file testimony in accordance with 3 AAC 48.150(f), together with lists of witnesses in the order of their appearance.

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Phone 276-6222

ORDER

THE COMMISSION FURTHER ORDERS:

1. A public hearing shall be held at 9:00 a.m. on January 26, 1982, at the Commission's offices, 1100 MacKay Building, 338 Denali Street, Anchorage, Alaska. At the hearing, the Municipality of Anchorage d/b/a Anchorage Telephone Utility shall bear the burden of proving that the Certificate of Public Convenience and Necessity No. 19 of Matanuska Telephone Association, Inc., should be modified to exclude the service area within the boundaries of Elmendorf Air Force Base to meet the requirements of the public convenience and necessity. The Municipality of Anchorage d/b/a Anchorage Telephone Utility shall also bear the burden of proving that it is fit, willing and able to have permanent operating authority within the boundaries of Elmendorf Air Force Base.

2. The Municipality of Anchorage d/b/a Anchorage Telephone Utility shall file by 4:00 p.m., January 19, 1982, a list of witnesses in the order of their appearance and written prepared testimony for each witness.

3. Matanuska Telephone Association, Inc., shall file by 4:00 p.m., January 19, 1982, a list of witnesses in the order of their appearance and written prepared testimony for each witness relevant to the issues contained in Ordering Paragraph 1 and its plans for providing service in this portion of its service area.

DATED and Effective at Anchorage, Alaska, this 14th day of December, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioners Marvin R. Weatherly and Susan M. Knowles, not participating)

(S E A L)

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Anchorage, Alaska 99501
Phone 276-6222

has not yet been completed on the final Staff report. The Staff believes it is in the public interest that such a comprehensive and analytical report be submitted.

DATED this 15th day of December, 1981.

WILSON CONDON
ATTORNEY GENERAL

By Elisabeth H. Ross
Elisabeth H. Ross
Assistant Attorney General
Alaska Public Utilities
Commission Staff

ORDER

The Staff shall have until January 15, 1982 for the filing of its report on the Girdwood-Alyeska first normalized year of operation revenue requirement study.

DATED AND EFFECTIVE this 15 day of December, 1981, at Anchorage, Alaska.

Commissioner

This Order is designated as Order No. 13 in Docket U-80-4 and Order No. 4 in Docket U-81-36.

(SEAL)

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Item 20

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA148-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Rate Structure for the Provision of Basic Telephone Instruments	U-81-46 ORDER NO. 2

ORDER EXTENDING SUSPENSION PERIOD AND INCORPORATING INVESTIGATION OF STRAIGHT LINE FEATURE

On June 16, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed a tariff revision, designated as TA148-120, requesting a change in rates and rate structure to separate billing charges between service access lines and telephone instruments. ATU stated that this was necessitated by recent Federal Communications Commission (FCC) actions.

ATU's present tariff provides for basic local business or residence service which includes the first or main telephone instrument at no additional charge. An additional charge is assessed for each extension connected to the basic local service. In TA148-120, ATU proposed to eliminate the extension charge, but proposed to charge the customer for each instrument (including the main instrument) provided by the utility. ATU asserted that elimination of extension service charges and implementation of charges for instruments would result in virtually no net change in revenue.

The filing was noticed on June 24, 1981, with a closing date of July 23, 1981, for the submission of statements in support

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of, or in opposition to, the proposed tariff revision. No public response was received.

On July 30, 1981, the Commission issued Order No. 1 in this Docket which suspended TA148-120 for an initial six-month period and required ATU to file its permanent revenue requirement in accordance with 3 AAC 48.275(a) and a concurrent unbundling of rates by November 1, 1981. The Commission found that it could not evaluate the reasonableness or fairness of ATU's proposed rates without this required information.

On November 4, 1981, ATU, through its attorney, submitted a letter of response to "various Staff and Commission concerns resulting from ATU's filing in Docket U-81-46 and ATU's attempts to satisfy those concerns." In this letter ATU attempted to provide a number of reasons why the Commission should accept the unbundling proposed in TA148-120, and should set work sessions with ATU to establish appropriate methodology for the performance of a cost-of-service study. ATU averred that due to the multitude of recent developments in the industry relating to FCC rulings, toll settlements, new tariffs, etc., a meaningful cost-of-service study cannot be performed without some guidance from the Commission. As an alternative, ATU suggested scheduling a public hearing at which ATU and Staff could present testimony concerning the filing.

The Commission is of the opinion that such a hearing is not appropriate at this time. The Commission wishes to reaffirm its position as set forth in Order No. 1 that the material filed with TA148-120 is insufficient to determine the reasonableness of the rates proposed. Although implementation of the proposed rates will not result in a net increase in revenues to ATU, it does constitute a rate increase because customers will now be charged for an individual service that has previously been part of the

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total monthly recurring charge - i.e., use of the main instrument. The Commission reiterates the necessity for a filing in accordance with 3 AAC 48.275(a) and a concurrent unbundling of rates prior to implementation of TA148-120. However, the Commission concurs with ATU that it is essential that some guidance be given in order to make that filing as meaningful and cost effective as possible. To this end, the Commission intends to issue at some time in the future a General Order providing guidelines concerning the methodology and information that must be submitted as a part of the tariff revision which requests unbundled rates. Therefore, the Commission believes it appropriate to extend the suspension period of TA148-120 until the Commission is able to provide this guidance to ATU.

Also, on November 5, 1981, the Staff filed a motion requesting the Commission to consolidate the investigation of the straight line feature telephone rates (U-81-29) with this proceeding. ATU stated it did not oppose the motion. The Commission had granted interim approval to rates for straight line feature telephones for the Rolm CBX, Rolm SCBX, and the SC-1 and suspended the filing for further investigation. Comtec, Inc., a company engaged in selling, installing, and maintaining telephone equipment, had filed a protest to the tariff revision request, but had never filed for intervention in the formal investigation proceeding.

The Commission observes that the suspension period in U-81-29 expired November 11, 1981. However, the rate investigation of the instrument group targeted in U-81-29 is one small subset of the investigation required and is incorporated in U-81-46, and it is the Commission's intention to investigate the straight line feature telephone rates into this proceeding.

ORDER

THE COMMISSION FURTHER ORDERS, That, the operation of the tariff revision, designated as TA148-120, filed by the

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Municipality of Anchorage d/b/a Anchorage Telephone Utility is further suspended until August 1, 1982.

DATED AND EFFECTIVE at Anchorage, Alaska, this 28th day of January, 1982.

BY DIRECTION OF THE COMMISSION
(Commissioner Susan M. Knowles, not participating)

(S E A L)

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Investigation into the Availability of Natural Gas to ALASKA GAS AND SERVICE COMPANY and Establishing a Procedure for Interrupting Natural Gas Service Power Plants as May be Required by Capacity or Deliverability Constraints and for Equitable Sharing of the Costs of Alternate Fuels	U-81-82 ORDER NO. 2

ORDER APPROVING PROCEDURES FOR INTERRUPTION OF SERVICE AND ESTABLISHING METHODOLOGY FOR ALLOCATING COSTS RESULTING FROM INTERRUPTIONS OF SERVICE

In response to concerns expressed by ALASKA GAS AND SERVICE COMPANY (AGAS) and its large power, interruptible customers, the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT AND POWER DEPARTMENT (ML&P), CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), and the UNITED STATES OF AMERICA (Military), representing Elmendorf Air Force Base and Fort Richardson Military Reservation, the Commission opened this docket of investigation into the natural gas supply situation in the Anchorage Bowl, procedures for interruption of natural gas service to the power plant customers, and cost-allocation methodologies associated with those service interruptions.

Background

The above-named parties notified the Commission, both orally and in writing, that AGAS was facing a potentially inadequate supply of natural gas during the 1981-82 winter season, a situation arising not only from a higher winter heating demand placed upon the AGAS system but also from a contract dispute

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between AGAS and the State of Alaska, Department of Revenue, regarding the price of royalty gas which AGAS normally purchases to meet cold weather demands.

Order No. 1, issued November 3, 1981, which instituted this proceeding, also scheduled a public hearing on November 9, 1981, during which the following issues were addressed through oral testimony:

1. Should AGAS be required to take royalty gas at any price; and, if so, how should the costs be recovered?

2. How should the costs of interruptions be computed?

3. Once the costs are computed, how should they be passed on?

The Commission also requested the parties to submit briefs of their statements prior to the hearing in order to expedite the proceeding. Briefs were submitted by the parties, with the exception of CEA, on November 6, 1981.

The Commission convened the public hearing at 1:30 p.m., November 9, 1981, in the Commission's hearing room. The hearing was conducted before Commissioners Marvin R. Weatherly, Stuart C. Hall, and Diana E. Snowden, with Commissioner Weatherly serving as Presiding Officer.

The parties were represented as follows: AGAS by Dale Teel, President, and Bill Hickman, Vice President and Treasurer; ML&P by Thomas R. Stahr, General Manager, and Roger R. Kemppel, Attorney; CEA by its counsel William J. Moran, and Thomas S. Kolasinski, Manager of Power Production; and the Military by Lieut. Colonel Harold A. Froehle, Director of Facilities & Engineering, U.S. Army, Ft. Richardson; Lieut. Colonel Theodore R. Kinney, USAF, Chief, Operations Branch, 21st Civil Engineering Squadron, Elmendorf A.F. Base; Capt. Diane E. Savage, U.S. Army, Staff Judge Advocate, Fort Richardson, as Counsel; and David A.

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Slenkamp, Chief of Utilities, Ft. Richardson. Also present were Carolyn Evans, Utility Financial Analyst III on the Staff of the Commission, and Assistant Attorney General, Elisabeth Ross, both of whom served in an advisory capacity to the Commission in this proceeding.

Stipulation By Parties on Order of Interruption

Prior to the hearing, AGAS submitted a Stipulation requesting Commission approval of a proposed sequence of natural gas interruptions among the large power customers, delineated in Exhibit A thereto. The Stipulation also sought Commission development of a cost-allocation methodology for alternate fuel expenses incurred during gas curtailments. While not necessarily opposing the Stipulation, Thomas Stahr of ML&P offered an alternative to the AGAS proposal in his comments submitted prior to the hearing:

> Interruption of industrial customers should also be considered to conserve alternate fuels for residential and commercial use. In addition to reducing fuel use for electric generation, the ensuing shutdown of industrial processes could make considerable amounts of process gas available. Certainly this would have to be done with discretion to avoid interrupting the flow of materials critical to other areas of the state. It is possible that a voluntary curtailment plan with partial redirection of feed stock gas to the utility (gas and electric) sector could be arranged as this would be more rational than total interruption of industrial electric service. (Stahr letter to APUC, dated October 15, 1981, pp. 2-3.)

At the hearing, Commissioner Weatherly requested formal comment regarding any problems inherent in the schedule of interruptions prepared by AGAS in its Stipulation. All parties were in agreement that natural gas interruptions were ineluctable at some point in time during the 1981-82 winter season. (The Commission notes that, subsequent to the November 9, 1981, hearing, but prior to the issuance of this Order, interruptions caused by extreme cold weather and heavy heating demand did, in fact, occur.)

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At no time during the hearing did any of the parties dispute either the need for or the substantive content of AGAS's proposed schedule of interruptions.[1] However, the Military's concurrence was conditioned on the fact that they be reimbursed for expenses incurred during periods of interruption, since without a cost-sharing methodology, the Military would be penalized with "...the entire brunt of the curtailments." (Tr., p. 8.) None of the other parties presented further comment on the Stipulation, nor did ML&P pursue the alternative approaches suggested in its October 15, 1981, letter to the Commission.

The interruptible customers all utilize natural gas in power plants but have varying capabilities to operate utilizing alternate fuels. All parties agree that the short-term use of alternate fuels will entail substantial additional costs over the short-term cost of natural gas. Except for differences in cost-sharing approaches, all parties concur that it is in the public interest that interruptions in the natural gas supplied to these customers occur in a specific order to minimize the inconvenience and cost of alternative fuel usage to the community as a whole. In its review of the proposed Stipulation and its attachments, written comments of the parties, and the oral testimony presented at the hearing, the Commission finds that the urgency of the curtailment problem, the need for prompt agreement by all parties to this proceeding, and the insufficient time available to explore and perhaps implement an alternative curtailment procedure, collectively dictate that the Commission accept the proposed procedure for interruptions as a short-term plan for dealing with

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[1] As a point of clarification, CEA requested that Exhibit A to the Stipulation, Schedule for Planned Interruptions, be modified to assure that Chugach is afforded the flexibility to determine which of its power plants (i.e., Bernice Lake or International Station) should be the first to be interrupted and/or restored.

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natural gas interruptions in 1981-82. The Commission also finds reasonable the request by CEA to clarify the need for flexibility intended in the schedule of interruption. Recognizing that the predetermined sequence of interruption is not precisely mandated in the schedule, it is the intent of the Commission that the schedule incorporate sufficient flexibility to allow AGAS and each interrupted party the option to select the most cost efficient alternative available at the time that each interruption occurs. Therefore, the Commission adopts for use by the parties to this proceeding the schedule of interruptions submitted by AGAS. A copy of the schedule is attached to this Order as Appendix A.

Royalty Gas Purchases: Obligation to Serve

One of three issues outlined in Order No. 1 of this Docket questioned whether AGAS should be required to purchase royalty gas at any price because of the peak supply shortage this winter. While this single subject dominated much of the testimony at the hearing and in the briefs, the issue of mandated royalty gas purchases by AGAS appears moot as of the date of issuance of this Order because of more recent developments.

In a letter dated December 30, 1981, AGAS informed the Commission and other parties to this proceeding that it is now purchasing royalty gas for peaking purposes:

> Concurrently, the management of AGAS made a decision to minimize the take of royalty gas and the financial impact thereof by taking the royalty only when required to meet system demands in excess of other supplies. Of import in this decision was the failure of Phillips to move to force AGAS to take all the royalty (see page 4 of their letter dated July 17, 1981). We believe the State will resist efforts to force AGAS to take all the gas since the State believes it can charge a higher wellhead price to Phillips. We further believe (but cannot be certain) that Phillips will not force such demand since it could result in cancellation of our royalty contract and then Phillips would be obligated to take all the royalty gas. (Hickman letter, dated December 30, 1981, pp. 2-3.)

Although this change in events obviates the immediate need for any action on the part of the Commission, the Commission finds that in

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view of the tenuous nature of the above-described understanding, any shift in position by Phillips Petroleum, the State of Alaska, or AGAS could bring the problem full circle before the Commission. Furthermore, the broader question of a utility's obligation to serve its customers is of such sufficient concern to the public interest that the Commission believes the subject should be reviewed in this Order. For these reasons, the question of the obligation to serve as it relates to the purchase of royalty gas shall be discussed infra.

In his pre-filed testimony, AGAS's President, Dale Teel, forcefully urged that it would not be in the public interest for the Commission to require the purchase of royalty gas at any price for the following reasons:

1. The price exacted by the State will impact all future gas contract negotiations with producers.

2. The pricing policy presently imposed by the State goes far beyond the Section 105 (of the Natural Gas Policy Act) regulated prices they are asking for the royalty today (approximately $2.90/MCF).

3. The price requested by the State is in excess of fair market value, at wellhead, of gas in the Cook Inlet Area. (Direct (Pre-filed) Testimony of Teel, undated, pp. 2-3.)

In response to questioning by the Commission, Teel explained that AGAS had originally purchased royalty gas under the assumption that it would be the lowest priced gas available. Yet as the cost of royalty gas escalated each year by virtue of the State contractual agreement, AGAS decided that royalty gas should be used more for peak demand purposes. AGAS also stated that royalty gas, priced higher than other sources, should be purchased to provide comfortable safety and reliability margins during periods of heavy gas use and to extend the life of the lower-priced Kenai gas reserves and not, in the main, to prevent interruption of the power customers. However, AGAS suggested that since the interruptible or "non-firm" customers have benefitted more from royalty gas purchases than other customers, the

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interruptible customers should bear the costs of interruption. Other reasons for this position were based on what AGAS termed as regulatory principles, legal considerations, and the equitable treatment of all its customers.

The final AGAS argument against mandatory royalty gas purchases was the contractual requirement in existence at the time of the November hearing which apparently obligated AGAS to purchase royalty gas year-round and not just for peaking purposes. Bill Hickman of AGAS estimated the annual cost of year-round royalty gas purchases to be $6 million, yet the cost of relying upon the fuel switching capabilities of the interruptible power customers (based upon an assumed 1981-82 winter interruption scenario) was projected at $465,000. In sum, it was the position of AGAS that an order by this Commission forcing the year-round purchase of royalty gas would result in unnecessary and greater cumulative expenses to all of its customers when contrasted with the option of curtailing its "non-firm" customers who had recourse to alternate fuels.

In its Brief of Issues, ML&P requested that Order No. 1 be modified to delete from page 2, lines 5-6, of Order No. 1 the phrase, "to meet its interruptible customers' cold weather demands." ML&P pointed out that royalty gas purchases are physically commingled with all other AGAS purchases and should not be designated as a product or service destined only for interruptible customers. Contrary to the AGAS position, ML&P argued that royalty gas is used "...to a much greater extent to meet the peaking demands of the nonpower customers." ML&P expanded this position in a letter to the Commission as follows:

> The prime beneficiary of curtailment are [sic] the customers that are not curtailed. The curtailment problem is exacerbated by the extremely high demand of customers using gas for space heating during cold weather. Their paying for the curtailment costs through the gas cost flow through mechanism would be a form of

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> peak load pricing which would tend to properly represent the true cost of providing the firm service they require. (Stahr letter to APUC, dated October 15, 1981, p. 2.)

ML&P further opined that the decision to refuse acquisition of adequate deliverability or capacity to meet reasonably anticipated requirements should not be left to corporate decision makers because the public interest would clearly be impacted by such a decision. ML&P admitted that while royalty gas could be priced so high that using alternative fuels would be the best option, "... price issues do not abrogate the duty to obtain adequate supplies." (ML&P Brief, p. 4.) It was ML&P's contention that any refusal to take royalty gas could be an irrevocable decision, since the State might then commit the royalty gas to other purposes and, as a consequence, the real cost of alternative energy supplies might over time be much higher. ML&P averred that AGAS should be required to take the royalty gas at the $2.90 rate offered by the State with the costs rolled in through the flow through mechanism. Finally, ML&P emphasized that the AGAS rate structure must be redesigned subsequent to a cost-of-service study to properly address the entire interruptible rate class problem.

In its comments, the Military stated that AGAS should not be required to take royalty gas at any price solely to satisfy the seasonal needs of the interruptible customers and urged Commission support for AGAS's attempt to secure State royalty gas as a seasonal supplement. According to the Military, costs incurred by the interruptible customers in converting to alternate fuels during curtailment should be passed on as if the alternate fuels had been purchased from potential suppliers of natural gas.

In addressing the generic issue of the obligation to serve, this Commission finds that the fundamental duty of a public utility to serve the public exists independent of any statute regulating the manner in which a utility conducts its business.

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The obligation is imposed upon a company because it is organized to transact business affected with the public interest and because the company has held itself out to the public as being fit, willing and able to serve all its customers. It should be evident, therefore, that under common law, and by statute in this State, AGAS is obligated to provide adequate, efficient and safe service to the customers in its service area. (Southwest Gas Corp. v. Nevada P.S.C., 474 P.2d 379 (1970) and AS 42.05.291(a).)

The Commission also finds, however, that the obligation to provide adequate service has meaning only in reference to the demands of the public, the cost of the service, and the financial condition of the company offering the service. (Re General Telephone Co. of Ca., 80 PUR 3d 2 (Ca. P.U.C., 1969).) Based on the record in the proceeding and the testimony and evidence of the parties, the Commission finds that as of the date of the hearing, the price of royalty gas offered to AGAS was too high and the terms under which the gas was to be taken were not economical when compared with the short-term alternative energy sources available. Thus, in this instance, AGAS should not have been required to purchase year-round royalty gas when the conversion to alternative fuel supplies would result in a net economic gain to the Anchorage community. Furthermore, it is consistent with the testimony and evidence on the record that the costs of any royalty gas purchases which are actually made by AGAS should be flowed through to all AGAS customers on an even cents-per-Mcf basis as provided by tariff.

In so finding, the Commission agrees that AGAS does indeed, as propounded by ML&P, have "... a contractual and public utility responsibility to acquire gas supplies adequate to serve the needs of all its customers." (Stahr letter to APUC, dated October 15, 1981, p.) While this obligation is not absolute if

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the supply cannot reasonably be obtained, the Commission further orders that AGAS should aggressively continue its efforts to resolve remaining disputes regarding the purchase of royalty gas, diligently seek other long-term sources of supply, and develop a plan encouraging voluntary conservation opposite to periods of peak demand.

In rendering this decision, the Commission emphasizes that its judgment is based solely upon the facts and circumstances surrounding the 1981-82 winter season. Moreover, the Commission intends to fully investigate AGAS's efforts to obtain sufficient long-term commitments of natural gas in the upcoming AGAS permanent rate case (Docket U-81-101), which will be scheduled for public hearing later this year.

Tariffed Rates for Interruptibility: Allocation of Interruption Costs

A central issue in the testimony of AGAS emphasized that, while royalty gas purchases would alleviate a portion of the peak demand problem, interruptions should still be anticipated by the large power customers. According to Hickman, royalty gas purchases could account for only one-third to one-half of the projected 1981-82 natural gas shortage during periods of peak winter demand. With no evidence presented which contradicted AGAS's figures in this instance, the Commission finds the issue of interruptibility and the calculation of associated costs (irrespective of royalty gas purchases) to be of primary importance in determining the allocation of costs to the parties.

AGAS averred that its present tariff and rate design had been addressed in testimony presented by many different experts during its last permanent rate case, and all had recognized that interruptible customers would bear the costs of interruption. Moreover, in authorizing the present rate structure, AGAS

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contended that the Commission had recognized the risks of interruption. According to AGAS, "In subsequent years, each interrupted customer paid his costs of interruption without question or complaint." (Direct (Pre-filed) Testimony of Teel, undated, p. 5.)

AGAS asserted that now, however, these customers are requesting the Commission to require the firm customers to share the costs of interruption--without benefit of a cost-of-service study. AGAS declared that this proceeding is not the forum in which to consider rate redesign or the reallocation of the costs of interruption, but, rather, such issues should be examined in a future AGAS rate design proceeding. AGAS also maintained that construction projects completed since its last rate case had further benefitted interruptible customers more than firm customers.

When questioned as to the number and cause of prior interruptions, AGAS disclosed that the winter of 1980 was the first year AGAS interrupted service because of insufficient gas supply. Although AGAS interrupted service on occasions prior to 1980, these interruptions were a result of mechanical breakdowns.

In summary, AGAS distinguished between what it considered firm customers and its interruptible customers. AGAS purported that it must provide natural gas supplies sufficient to meet the demands of firm customers only. Interruptible customers are subject to curtailment and have enjoyed reduced rates to compensate for this. Accordingly, AGAS proposed that any additional costs incurred during an interruption should be the sole responsibility of the interrupted parties. AGAS did, however, believe that a cost-sharing arrangement among interruptible customers was necessary because the schedule of interruptions provided for in the Stipulation could not logically distribute the hours of interruption evenly.

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The position of ML&P regarding the purpose of the AGAS interruptible tariff rate diverged markedly from AGAS's perception of the tariff's history. According to ML&P, the "... differential between final rates and the results of the cost-of-service study is so minor that the entire difference since the date of the order [U-75-95(16)] was just about eliminated by the short natural gas curtailment experienced by ML&P during last winter's peak season." (Kemppel letter to APUC, dated October 21, 1981, p. 3.) Thus, ML&P reasoned that it should be treated, in effect, as a "quasi-firm" customer.

In addition, ML&P countered that firm customers have received advantageous rates over "non-firm" customers because of the inclusion of interruptible customers in AGAS's load factor. ML&P thus recommended that AGAS in essence "purchase" alternative fuel by reimbursing the interruptible customers for all costs in excess of the price of natural gas. These costs would be flowed through by AGAS to all customers via the purchased gas adjustment. CEA concurred with this recommendation. Finally, the Military also indicated that there was merit to the ML&P proposal, which would require AGAS to flow through all interruption costs to its customers. The Military acknowledged that such a proposal might be less costly to themselves than perhaps their own proposal.

The major point of difference between AGAS's and ML&P's view of the situation appeared to originate from different concepts of AGAS's responsibility to provide service to the interruptible customers. AGAS suggested that these customers can be curtailed at the discretion of AGAS, and concommitantly, any costs the interruptible customers incur while curtailed should be borne by them. Conversely, ML&P countered that AGAS, arguably, has an absolute responsibility to provide sufficient natural gas to serve all its customers. Therefore, if AGAS did not provide the

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service, ML&P reasoned that AGAS should bear the incremental costs that customers incur by utilizing alternate fuel sources.

The traditional resolution to this dispute would involve a review of AGAS's tariff. All customers are currently served under Tariff Sheet No. 30, Rates for Power Plant Service, which states in part: "The power plants named above are subject to varying interruptions of service by terms of the respective contracts or letter agreements." Thus, it is clear that AGAS's tariff allows interruption of these customers but is not explicit with regard to whether the tariff rates were designed to reflect the impact of interruptibility. Moreover, it appears that such interruptions were not intended to be extensive; the discussion surrounding the Commission's approval of AGAS's rate design in the previous rate case clearly indicates that some consideration was given to interruptibility when rates were set.

Although AGAS is correct in its contention that interruptibility was a determination in the establishment of final rates in Docket U-75-95, the record is equally clear that the scope and likelihood of interruptions (and associated costs) contemplated during AGAS's last rate case were not of the magnitude now suggested by AGAS in 1981:[2]

> Perhaps the more important determination relative to designing rates is an assessment of the likely degree rather than the certainty of interruption. The evidence in this proceeding indicates that while capacity interruptions are anticipated, they will be limited in number and duration. First, the power contracts under discussion appear to reflect the perceived outside limits on interruptions, ten hours a month or five days a year. Second, questions can certainly be raised about the preparedness of the power plants for interruptions up to contract limits not to mention beyond. Third, many of the terms and conditions governing interruptions are

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[2] AGAS's current assessment of the problem was described by Teel in his letter of September 15, 1981: "Specifically, we expect that there will be relatively frequent and extended periods this winter (1981-1982) when the total demand on us for natural gas will exceed the supply available...."

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> unclear or unknown. Thus, it would appear that the load duration curve of the utility mandates some flexibility to interrupt but that this sanction will be invoked infrequently at best. The utility has stated that the power plants as a large and steady source of revenues are the basic flywheel of the utility's operations. (Tr. XIX-1244.) The impression that is conveyed is that AGAS will make every reasonable effort to serve the power plants on as continuous a basis as possible. Capacity will be increased to meet demand but there will be intermittent periods where interruptions will probably be necessary. At those points where system demand exceeds system capacity, interruptions could be anticipated.
>
> The question then turns to what consideration is appropriate in rates for transitional periods of interruption....No analysis of cost and cost-benefit tradeoffs were prepared or presented by the parties to quantify the amount. As a result, the Commission has no basis for a precise determination and is left to consider interruptibility as an additional subjective factor in the rate design. (U-75-95(16), pp. 57-58.)

In rendering its decision regarding the appropriate allocation of interruption costs, the Commission believes that the rate design effected in Docket U-75-95 was based upon circumstances which have since changed radically.[3] Consequently, the Commission finds that it would be unfair to the interruptible customers to bear the full burden of extensive curtailments when such were not contemplated in the ratemaking or in the contracts themselves. Therefore, it appears that the question now revolves around the frequency or duration of curtailments to which AGAS may submit interruptible customers without violation of its tariff.

To determine the factual context of this issue, it is necessary to refer to the contracts referenced in the final order

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[3] Perhaps the most significant change in circumstance is the fact that AGAS in 1975 was confronted with a capacity shortage, whereas in 1982 the testimony on the record is that the shortage is one caused by an inadequate supply of natural gas. The Commission recognizes and acknowledges the difference between a capacity and supply shortage but absent a cost-of-service study and a complete record on both the capacity and supply issues, the Commission will treat the terms synonymously for the sole purpose of arriving at an interim short-term solution in this proceeding. The Commission will, however, examine AGAS's system capacity and natural gas supply contracts in Docket U-81-101.

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of Docket U-75-95(16). The contracts in existence with ML&P and CEA at that time specifically referred to interruption periods not in excess of 10 cumulative hours per month, but provided that AGAS might accumulate and implement such periods not to exceed 120 hours during any 12 consecutive months. It is the Commission's opinion that these limits represented the best information available as to the degree of interruption intended by AGAS's tariff and the degree to which rates were subjectively adjusted in the previous rate proceeding.[4]

Regrettably, the Commission finds itself required to allocate costs at this time without benefit of a cost-of-service study or a thorough analysis of the future supply of natural gas in the Anchorage bowl area. This information would provide the most technically accurate basis for a decision. Absent such data, the decision of this Commission will, of necessity, be a less than perfect solution. However, the Commission does believe that a judgment, based on AGAS's tariff and the testimony and evidence submitted during AGAS's last rate case, provides a reasonable starting point for a temporary and short-term resolution to the allocation of interruption costs until such time as AGAS's new rate redesign is approved.

Cognizant of the above but in the absence of recent data, the Commission believes that the most reasonable foundation for the allocation of interruption costs is to begin where the last rate design left off, i.e., to allow AGAS only the outside limit of interruption hours provided for in the then existing

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[4]The Commission recognizes that each of the contracts in existence during the last AGAS rate proceeding contained interruption clauses which varied somewhat on issues such as oil cost reimbursement, base price of natural gas, accumulating periods of interruption, etc. However, the fundamental concept which allowed AGAS to interrupt up to 10 hours per month appeared consistently in each of the contracts.

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contracts. More specifically, the Commission finds that all costs of alternate fuel usage up to those contract limits should be borne by the interruptible customers. The Commission further believes that since interruptions in excess of these limits were not foreseen or agreed to by the interruptible customers, any costs in excess of the cost of natural gas which these customers incur due to curtailment of natural gas supply beyond the maximum limits should be reimbursed by all AGAS customers. Since these costs represent an operating expense to AGAS, the Commission must assume that AGAS considers this the least-cost alternative to the purchase of additional gas supplies. Therefore, such expenses are of benefit to all customers and should be paid by all, including interruptible customers.

Computation of Costs of Interruption

In determining the methodology for computing interruption costs, the Commission reviewed all of the plans submitted by the parties. The AGAS plan recommended that the cost of alternate fuels used during curtailment be borne by only the interruptible customers and their subscribers. The ML&P plan called for the curtailment costs to be flowed through to all AGAS customers via its gas flowthrough clause.[5] ML&P also affirmed its previous statement that curtailment costs should only consider actual extraordinary expenses associated with the interruption and not include costs which would be incurred in any case. According to ML&P's Brief of Issues, p. 5, "normal and accepted cost accounting and regulatory treatment should be used" in computing the costs of royalty gas and curtailment, which then should be passed on to all gas customers on a flat Mcf basis. Pending a cost-of-service

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[5]The Commission notes that AGAS's tariff in its present form does not permit costs, other than those associated with an increase in the price of natural gas, to be flowed through to its customers.

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study and restructuring of AGAS's rates, ML&P believed that the curtailment compensation plan it previously submitted should suffice to prevent any gross inequities arising from interruption of service.

In addressing its version of the allocation plan, the Military's greatest concern was that Military power plant customers should be fully compensated for all expenses, in excess of their fair share, incurred as a result of conversion of their power plants to oil or coal during curtailment periods. The Military proposed an alternative cost formula for consideration at the hearing. It was the Military's contention that since the anticipated increase in curtailment was due to AGAS's decision not to purchase royalty gas, costs associated with the curtailment should be considered equivalent gas costs. To the extent that Military power plants yield their share of gas during curtailment, AGAS should credit Military accounts accordingly. Also, the other power plant customers should be billed at a rate reflective of the costs of the Military's use of alternate fuel, thereby freeing up its share of the natural gas supply.

Finally, as an alternative approach, the Military concurred with ML&P's rationale that curtailment costs should be flowed through to all AGAS customers. The Military also requested that the AGAS formula be modified to reflect replacement costs of alternate fuels as opposed to book value or historical costs and took exception to the ML&P proposal which called for reimbursement of expenses incurred only during curtailment. The Military requested that expenses associated with fire prevention and maintaining coal standby equipment also be reimbursed.

CEA supported ML&P's proposed cost-sharing arrangement but "strongly" urged that replacement costs be used in calculating alternate fuel costs.

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The Commission notes that all parties agree that a certain order of interruption is appropriate in order to minimize the inconvenience and cost of the use of alternate fuel sources to the community as a whole. Furthermore, all parties basically agree that some method for cost sharing is necessary to compensate those most frequently interrupted. While some parties believe that all costs should be borne by AGAS, their proposals would result in a cost flowthrough to all customers, including interruptible, proportional to usage. Therefore, the Commission assumes that there is no objection to the principle of sharing the costs that the Commission has determined must be borne by the interruptible customers, i.e., those costs incurred up to the limit of 10 hours per month or 120 hours per year. It is apparent that such sharing makes the established order of interruption reasonable because it compensates the party that is always the first to be interrupted. Without such compensation, repeated curtailment of a single customer could constitute undue discrimination.

Because costs are to be pooled and allocated on a proportional basis to the interruptible customers, the Commission believes it is also appropriate that periods of interruption during which customers must bear their own cost should also be pooled. Thus, AGAS would begin to bear costs of interruption only when interruptions were so extensive as to match the equivalent of 10 hours per month for all customers, accumulating if unused over a 12-month period, to a maximum of 120 hours for all customers.

It is unlikely, however, that interruptions will occur to all customers at once. Furthermore, AGAS could conceivably decide that it is unnecessary to fully interrupt a particular customer. In such instances, the duration of interruption should be prorated based on the degree of interruption. Therefore,

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interruptions should be translated into equivalent hours of interruption, i.e., the proportion of curtailed fuel in BTU's to the total that could at a maximum be curtailed, multiplied by the period of curtailment.

In order to accomplish this allocation of costs between AGAS and its interruptible customers, the Commission believes that all customers should maintain reports for each curtailment period, detailing the following information:

1. Time and duration of each interruption in gas service;

2. Total BTU's utilized from gas and from alternate fuel sources during the time in which any single customer is interrupted; and

3. Additional costs incurred for each interruption.

At the end of each interruption period, the actual BTU's of alternate fuel used, divided by total BTU's for all customers from all interruptible sources, represents the degree of curtailment experienced. This ratio, multiplied by the length of interruption, gives equivalent hours of interruption. These equivalent hours should then be totalled to determine the point at which AGAS's customers become liable for the costs incurred during curtailment, i.e., when equivalent hours exceed the total of 120 hours less the equivalent hours of interruption in the last 12 months. The Commission believes that this method allows pooling of interruption periods while remaining within the limits intended by the contracts.

Two examples of the computation of equivalent hours are given in Exhibit 1. (The usages and costs given are purely hypothetical and are not intended to represent an actual situation.) If it were assumed that in each case AGAS became liable for a portion of costs after 40 equivalent hours of interruption, as in Example A, AGAS would not share in the costs of interruption. However, in Example B, equivalent hours are in excess of 40.

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Therefore, AGAS would be liable for 3.2 hours of costs, or 3.2/43.2 x $930,000 = $68,889.

The information used to determine equivalent hours should also be used to develop a repayment matrix to determine which parties' costs are reimbursed, by whom, and by how much. It is the Commission's opinion that each customer should assume costs in the same proportion that its consumption (in BTU's) of fuel during the interruption bears to the combined consumption of all interruptible customers. Thus, in Example A illustrated above, ML&P should bear 20/68ths of total costs of $205,000, or $60,294. ML&P would pay the Military 20/68 x $180,000, and would repay CEA for 20/68 x $25,000. (Note: For this illustration, payments to Elmendorf and Fort Richardson are combined.) This same logic would be applied for each customer, and an example of the repayment matrix is shown at Exhibit 2.

The identical logic applies for Example B, except that an additional factor must be included because AGAS also bears a portion of costs. To use ML&P again as an example, ML&P has used 70/250ths of total consumption. However, of the total cost of $930,000, AGAS has assumed 3.2/43.2, so the interruptible customers must assume only 40/43.2 x $930,000. Thus, ML&P must assume 70/250 x 40/43.2 x $930,000, or $241,111. A complete repayment matrix is also shown in Exhibit 3.

As to the question of precisely which additional incremental costs of alternative fuel usage should be included in this computation, the Commission finds that such costs should include all startup or shutdown expenses, including labor. Fuel costs should be factored on a BTU basis, and replacement fuel cost may

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be utilized.[6] The Commission notes, however, that if the replacement cost of fuel is utilized for cost recovery, it must also be utilized in the accounting records of the utility.

The Commission further finds that no party should be permitted to recover more than actual costs. (For this reason, the Military's artful proposal to "split the difference" between the cost of coal and oil was determined inappropriate at best.)

While the parties may discover "additional costs" as interruptions occur, there was insufficient information provided on the record which would allow the Commission to precisely identify each projected expense. For this reason, the parties to this proceeding should individually determine their incremental costs, subject to audit by one another. Should insoluble differences arise, the Commission will review the dispute and render a decision.

Recovery of Interruption Expenses

The Commission anticipates that any interruptions which occur this winter will result in increased costs to ML&P, CEA, and the Military, and possibly to AGAS, which were not contemplated when permanent rates were established. While some of the utilities have a cost flowthrough mechanism in their tariffs, none of the tariffs provide for the flowthrough of interruption costs and, therefore, cannot in their present form be used to recover such costs from customers. For this reason, the Commission finds it reasonable and equitable that each utility's proportionate share of the costs of interruption be flowed through by revised tariff provisions.

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[6] The Commission disagrees with the AGAS proposal to allow only the "actual historical weighted average cost f.o.b." of a plant tankage of oil or a power plant of coal because historical costs are not fully reflective of the true curtailment costs of the interruptible customers.

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While the Commission believes that a tariff flowthrough provision for interruption costs is the most appropriate accounting treatment, the Commission will reserve judgment on any different proposal by the parties to effect recovery of these costs from consumers. However, any request by a regulated utility for modification of base rates, amortization, or flowthrough tariff provisions must be filed, noticed to the public and examined by Staff and Commissioners before the Commission will rule.

THE COMMISSION FURTHER FINDS AND CONCLUDES:

1. For the reasons more fully articulated in the body of this Order, it would be in the public interest for AGAS to follow the schedule of interruptions, attached hereto as Appendix A, which has been approved by the Commission as an interim, short-term plan for addressing natural gas interruptions during the 1981-82 heating season.

2. Given the factual circumstances existing at the inception of this proceeding regarding the royalty gas contractual dispute between AGAS and the State of Alaska, AGAS should not be required to purchase royalty gas at any price.

3. Any royalty gas eventually purchased under the disputed contract should be flowed through to all AGAS customers in accordance with the terms and conditions of the AGAS tariff.

4. AGAS should vigorously pursue resolution of the royalty gas dispute, seek other long-term sources of gas supply, and develop conservation plans for use during peak demand periods. These issues will be considered in greater detail in the AGAS rate relief proceeding currently before the Commission in Docket U-81-101.

5. Given the lack of a cost-of-service study or analysis of the gas supply situation in the Anchorage Bowl, the parameters of the existing AGAS tariff, together with the historical

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testimony and evidence adduced in developing that tariff, provide a reasonable basis for establishing a short-term solution to allocating costs of interruption.

6. For the reasons more fully articulated in the body of this Order, the interruptible customers should bear the costs of interruption up to the time limits set forth in the contracts which existed at the time the interruptible rate was first considered by the Commission; i.e., 10 hours per month or 120 hours per year for each customer, with the periods of interruptions to be pooled and allocated among the interruptible customers in accordance with the guidelines established on pages 16-22 of this Order.

7. Costs of interruption incurred beyond the maximum limits of the power customer contracts should be reimbursed by all AGAS customers, including the interruptible customers.

8. Unless otherwise ordered by the Commission, AGAS and each regulated interruptible customer should flow through costs of interruption by tariff revision.

ORDER

THE COMMISSION FURTHER ORDERS:

1. If Alaska Gas & Service Company is required to interrupt service to its large power, interruptible customers, it shall follow the schedule of interruptions attached to this Order as Appendix A.

2. The periods and costs of interruptions shall be computed and allocated in accordance with the methodologies more fully delineated in the body of this Order and in Exhibits 1-3.

3. Unless otherwise ordered, the decisions rendered in the body of this Order shall apply only to the 1981-82 heating season and represent only a short-term solution to the gas supply and interruption questions raised in this proceeding which will be

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addressed in detail in Docket U-81-101, the request for interim and permanent rate relief and rate redesign filed by Alaska Gas & Service Company.

DATED AND EFFECTIVE at Anchorage, Alaska, this 11th day of February, 1982.

BY DIRECTION OF THE COMMISSION
(Commissioners Carolyn S. Guess, Chairman, and Susan M. Knowles, not participating.)

(S E A L)



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Anchorage, Alaska 99501
Phone 276-6222

SCHEDULE FOR PLANNED INTERRUPTIONS
DOCKET U-81-82

As demand on AGAS system approaches the supply AGAS can deliver, the parties agree to implement "economic dispatch" of the various gas-burning units to minimize their cumulative demand for gas to the limit of good operating practice. Thereafter, when additional reduction of gas demand is necessary, Elmendorf power plant normally will be interrupted first and if prolonged interruption appears to be imminent, Fort Richardson power plant would be interrupted next, with gas being restored to Elmendorf if practical. Thereafter, if more interruption is needed after Fort Richardson is on coal, then Elmendorf and Chugach Bernice (or International) would be next, probably in similar degree. After Elmendorf and Bernice (or International) are on oil, the next would be ML&P Plant 1 and Chugach International, again probably in similar degree.

When more interruptions still are needed, then ML&P Plant 2 would be interrupted. Chugach Knik Arm plant would be the last power plant to be interrupted, because its coal-firing capability is questionable.

Restorations of gas would be made in the reverse order given above.

Generally speaking, Fort Richardson would be interrupted to the greatest extent (but not most frequently) because its standby (coal) is the lowest cost and best supply. Bernice would be next because it is closest to the oil supply (Chevron/Tesoro refineries).

ML&P Plant 1 and Chugach International would be next because of accessibility of oil and ease or difficulty of conversion to oil, and ML&P Plant 2 and Chugach Knik Arm would be last, and least, to be interrupted.

Wherever practical, AGAS would hope to give a reasonable notice to schedule interruptions, possibly a full day. However,

in actual operation decisions may have to be made hour-by-hour, and changes of plans may become necessary as a result of sudden changes or weather, or of the gas supply or because of unexpected experience at any of the power plants.

Exhibit (1)

NATURAL GAS INTERRUPTION COST ALLOCATION FORMULA

DOCKET U-81-82

COMPUTATION OF EQUIVALENT HOURS

EXAMPLE A

	Hours of Interruption	Total BTU Usage During Interruption	BTU Usage of Alternate Fuel	Costs of Interruption
Military:				
Ft. Richardson	24 hours	20,000	20,000	$100,000
Elmendorf AFB	10 hours	20,000	10,000	80,000
Chugach	4 hours	8,000	2,000	25,000
ML&P	0 hours	20,000	-0-	-0-
TOTAL		68,000	32,000	$205,000

Equivalent hours = 32,000/68,000 X 24 hours = 11.3 hours

EXAMPLE B

Military:				
Ft. Richardson	80 hours	70,000	70,000	$350,000
Elmendorf AFB	60 hours	70,000	50,000	400,000
Chugach	20 hours	40,000	15,000	180,000
ML&P	0 hours	70,000	-0-	-0-
TOTAL		250,000	135,000	$930,000

Equivalent hours = 135,000/250,000 X 80 hours = 43.2 hours

Exhibit (2)

NATURAL GAS INTERRUPTION COST ALLOCATION FORMULA

DOCKET U-81-82

REPAYMENT MATRIX

EXAMPLE A

	PAID TO:			
PAYOR	MILITARY	CEA	ML&P	TOTAL
AGAS	$ -	$ -	$ -	$ -
Military	-	(1) 14,706	-	14,706
CEA	(2) 21,176	-	-	21,176
ML&P	(3) 52,941	(4) 7,353	-	60,294
	$74,117	$22,059	$ -	$96,176

TOTAL COST

AGAS		$ -
Military	($180,000 + 14,706 - 74,117)	120,589
CEA	($ 25,000 + 21,176 - 22,059)	24,117
ML&P		60,294
		$205,000

(1) 40/68 x $25,000

(2) 8/68 x $180,000

(3) 20/68 x $180,000

(4) 20/68 x $ 25,000

Exhibit (3)

NATURAL GAS INTERRUPTION COST ALLOCATION FORMULA

DOCKET U-81-82

REPAYMENT MATRIX

EXAMPLE B

		PAID TO:			
PAYOR		MILITARY	CEA	ML&P	TOTAL
AGAS	(1)	$ 55,556	(2) $ 13,333	$ -	$ 68,889
Military		-	(3) 93,333	-	93,333
CEA	(4)	111,111	-	-	111,111
	(5)	$ 194,444	(6) 46,667	-	$ 241,111
		$ 361,111	$ 153,333	$ -	$ 514,444

TOTAL COST

AGAS		$ 68,889
Military	($750,000 + 93,333 - 361,111)	482,222
CEA	($180,000 + 111,111 - 153,333)	137,778
ML&P		241,111
		$930,000

(1) 3.2/43.2 x $750,000

(2) 3.2/43.2 x $180,000

(3) 40/43.2 x 140/250 x $180,000

(4) 40/43.2 x 40/250 x $750,000

(5) 40/43.2 x 70/250 x $750,000

(6) 40/43.2 x 70/250 x $180,000

Speaker of the House of Representatives

Pouch V
State Capitol
Juneau, Alaska 99811
(907) 465-3720

Official Business

TO: Representative Ramona Barnes, Chair
Judiciary Committee

FROM: Speaker Joe Hayes

DATE: February 10, 1982

RE: Confirmation of Governor's Appointments

The following names have been submitted by the Governor for confirmation. Please evaluate the nominees and conduct confirmation hearings as you deem necessary. Please submit your recommendations for action on the nominations by the House of Representatives as soon as possible.

Alaska Public Utilities Commission

*Carolyn Guess, Anchorage, term expiring 10/31/87
*Susan Knowles, Anchorage, term expiring 10/31/87
Diana Snowden, Anchorage, term expiring 10/31/86

ALASKA CONSUMER ADVOCACY PROGRAM
P.O. Box 1093 Anchorage. Alaska 99510 272-6355

82-187

DAN MOTLEY

January 22, 1982

Mr. Brian Rogers
Pouch V
Juneau Alaska 99811

Dear Brian:

As we discussed on January 20, ACAP is quite concerned that three APUC Commissioners (Guess, Knowles and Snowden) have yet to be confirmed by the legislature. Further, we question whether or not Commissioners Guess and Knowles, the consumer representatives, have fulfilled their roles as intended by the legislature.

Because of these concerns we suggest that the following questions be raised during the confirmation hearings of Commissioners Guess and Knowles.

1. For the last five years you have served as the first consumer representatives on the APUC. Please define your role on the Commission; how does it differ, if at all, from the other members of the Commission; what, if any, goals did you set for yourself and how do you evaluate your achievements in the area of consumer representation?

2. What steps have you taken since your appointment to improve consumer involvement in APUC proceedings?

   Follow-up questions:

   a. Do you feel that consumers have an important role in APUC proceedings and in decision-making by the Commissioners? Is this an informed role?

   b. Have you held meetings with any consumer groups or representatives?

   c. Have you initiated and held any public workshops regarding consumer participation before the APUC?

   Answer: To our knowledge neither Knowles or Guess has made any attempt to improve communications with the consumer.

3. Describe the present consumer education or outreach program employed by the APUC?

   Answer: No program is in existence. The consumer division only responds to questions asked by individual consumers.

4. What brochures or plans for consumer publications now exist?

   Answer: No brochures or publications exists.

5. What procedure has been adopted to insure public notification of rate cases and testimony at public hearings?

   Follow-up question.

   a. Are the individuals with letters on file notified that a matter regarding their utility is pending before the APUC?

   b. Have you advertised for public input beyond the formal notice published in newspapers?

   Answer: Notification is advertised under the legal or public notice section of the newspapers only.

6. What is the role of the consumer division of the APUC? How many personnel are presently assigned to the consumer division? What, if any, plans do you have to expand this division?

   Answer: Two people are assigned to this division. Commissioner Guess told us that that division has low priority for expansion and additional funding from the APUC budget.

7. What procedure has been adopted to insure consumer input into Staff's representation of the "public interest?"

   Follow-up questions:

   a. How do you define "public interest?"

   b. Does "public interest" differ from consumer interest? If so, how does Staff determine what the consumer interest is? Do you encourage Staff to work with consumers? Have Staff's recent recommendations on rate design and revenue requirements been based on any consumer input?

   c. What role does the consumer division play in the tariff meetings? What weight is given their recommendations?

   Answer: No organized effort has been made by the APUC to incorporate consumer concerns into the rate-making procedure. Recent Staff proposals have been jeered by consumers.

8. What recommendations do you have for the future of consumer representation and advocacy?

   Follow-up questions.

   a. Would you advocate legislation in this area? If no: Do you really believe that the consumers feel adequately represented by Staff?

   b. Would you encourage increasing the personnel in the APUC consumer division?

   c. Would you work with consumers to design a public education program?

   Answer: Chairman Guess indicated to ACAP that this area has low priority.

We would appreciate the hearings being held prior to February 28, 1982, as this is the date ACAP goes out of existence. If that is not possible please contact the following consumers so they may be present at the hearings.

ANCHORAGE

Kay Paddon, Chairman
P. O. Box 41143
Anchorage, AK 99509
272-4777

Charles Evans
605 West 2nd
Anchorage, AK 99501
278-4691

MAT-VALLEY

Tamie Miller, Chairman
P. O. Box 151
376-5636 (home)/276-8033 (work)

Harvey Bowers
P. O. Box 1069
Wasilla, AK 99687

KENAI

Tom Atkinson, Chairman
P. O. Box 282
Kenai, AK 99611

Patricia Wheller
P. O. Box 3357
Kenai, AK 99611

KODIAK

Lorna Arndt, Chairman
P. O. Box 2069
Kodiak, AK 99615
486-6486

Walter E. Wheeler
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Kodiak, AK 99615
486-4600

FAIRBANKS

Karen Eddy, Chairman
314 Iditarod
Fairbanks, AK 99701
452-6060

Jeff Weltzin
218 Driveway Street
Fairbanks, AK 99701
479-3005

JUNEAU

Daniel J. Motley, Chairman
9951 Sprucewood Ct., #35
Juneau, AK 99801
789-3603 (home)/465-2240 (work)

Kenneth King
P. O. Box 272
Auke Bay, AK 99821
789-2239 (home) 364-2121, Ext. 114 (work)

Thank you for your interest and support in this endeavor.

Sincerely,

ALASKA CONSUMER ADVOCACY PROGRAM

Deborah Lee Williams
Director

DLW/ijm

cc: [illegible]



Superior Court
State of Alaska

THIRD JUDICIAL DISTRICT
303 K STREET
ANCHORAGE, ALASKA
99501

Chambers of
VICTOR D. CARLSON, Judge

April 2, 1982

The Honorable Ramona Barnes
Chairman, Judiciary Committee
Alaska House of Representatives
Pouch V
Juneau, Alaska 99811

Re: Susan Knowles

Dear Madame Chairman:

This letter is written in support of Mrs. Knowles' confirmation to continue as a member of the Alaska Public Utilities Commission.

Having had the opportunity to review the transcript of several hearings in which Commissioner Knowles has participated, I want to share my belief that she is thorough, fair, and patient with all parties and witnesses and that her decisions are carefully reasoned. She, like Mrs. Guess, brings to the commission an understanding of the problems in rural Alaska together with those of the urban centers. From my experience she has fulfilled the duties of a public utilities commissioner in an exemplary manner.

Thanking you for considering this letter, I am

Very truly yours,

Victor D. Carlson

Victor D. Carlson
Superior Court Judge

VDC:rw

STATE OF ALASKA
ALASKA PUBLIC UTILITIES COMMISSION
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

JAY S. HAMMOND, Governor

1100 MacKay Building
338 Denali Street
Anchorage, Alaska 99501

Phone (907) 276-6222

March 25, 1982

Kay Paddon
Chairman
Anchorage Consumer Advocacy
Committee
Box 1093
Anchorage, Alaska 99510

Dear Kay:

Thank you for your letter of February 9, 1982, which recaps the meeting held by teleconference between representatives of ACAP, the Consumer Advocacy Committees throughout the State and members of the Commission. The communication and dialogue between the Commissioners and members of the CAC's over the last four to six weeks has been fruitful and will provide ideas and opportunities for continuing meaningful consumer input into the regulatory process.

As I indicated, the Commission intends to respond to those items that were raised during the teleconference and believes the list of concerns in your February 9, 1982, letter is an appropriate place to begin.

Consumer Communication

The Commission is committed to provide opportunity for consumers throughout Alaska to seek assistance and information from the Commission, and to this end, believes that a toll free Zenith phone number is preferable to accepting collect phone calls. The Commission is, at this time, actively pursuing the acquisition of a Zenith phone line. As I am sure you are aware, budget considerations are a part of the reality with which the Commission must live; therefore, I would not expect the establishment of a Zenith number until the Commission receives favorable approval of its FY 1983 budget requests.

We concur that, if the Commission is successful in acquiring a Zenith phone number, this information should be communicated to all consumers of regulated utilities. It would be our intent to place the Zenith number in the phone directories outside the Anchorage dialing area.

SLH

At the present time, the Commission's two-member Consumer Protection and Information Section spends approximately 70 percent of its time on the phone, either talking with consumers or attempting to informally resolve their problems and complaints with regulated utilities! The addition of a Zenith number will undoubtedly increase the time these two Staff members spend on the phone. You should be aware that, as a result, other important work of the section could be delayed or in some instances, eliminated. Nothwithstanding this possible adverse effect, the Commission shares ACAP's belief that the institution of a Zenith number as a vehicle for consumer input should be a priority.

Community Hearings

ACAP's suggestion that the Commission hold meetings in the affected communities prior to the development of Staff's positions is timely and has been discussed at length by the Commissioners. ACAP makes a valid point that such consumer input may be extremely beneficial in Commission proceedings. The Commissioners believe that this suggestion can be effected in selected cases where consumer interest is intense; the Commission will be discussing possible implementation strategies within the budgetary, personnel and scheduling constraints of the agency. The fact that CAC's will continue to provide a Commission contact in at least five utility service areas certainly will be helpful to this effort.

Consumer Survey

A uniform survey questionnaire to assess quality of service from the consumer prospective is one of our projects for calendar FY 82, as the Commissioners stated at the teleconference. To minimize budget impact, the Commission is exploring the possibility of the development of a questionnaire by graduate students under direction of faculty at the University of Alaska. In line with the discussion in the previous paragraph, this tool also provides a procedure whereby the Commission Staff can receive consumer input prior to the development of its recommendations.

Public Notice of Filings and Hearing Dates

ACAP's concern, that notice of a utility request which is published in a newspaper's legal advertisements, while satisfying the statutory public notice requirement, may not provide consumers with knowledge of the substance of a utility's request, is well founded. This can result, as it did in Juneau, in lack of consumer awareness that together

with a rate increase, a substantive rate redesign was also included in the utility's request. As noted at the teleconference, the regulatory policy standards established by this Commission now provide that electric and gas utilities must inform their consumers within 30 days of a request to increase its rates or substantially changes its rate design. The Commission is aware, however, that this does not address other regulated utilities and will work to rectify this situation by a proposed revision in the Commission's regulations governing notice to the public of utility tariff filings.

Hearing Location

It is established Commission policy to conduct hearings in the utility's service area in a proceeding where substantial consumer interest has been demonstrated. This is evident by the recent hearings in regard to rate increase and design requests by Matanuska Electric Association, Golden Valley Electric Association and Alaska Electric Light & Power Co. If budgetary constraints or the scheduling of other proceedings preclude the Commission from taking the entire hearing panel to a community, the Commission sends a member of the panel, Staff legal counsel and/or a Staff member with substantive responsibility for Staff's case to listen to the views of the public. To announce the time and place of the hearing, the electronic media is notified by Ray Wipperman; press releases are sent to newspapers and in most instances display ads are placed in the local newspapers.

Commission support of ACAP's efforts

On several occasions during recent months, members of ACAP or its various local CAC's throughout the State have asked that individual Commissioners (and, for that matter, the Commission as a whole) publicly advocate and support continued legislative funding of ACAP's efforts. The Commission has been concerned, as you are undoubtedly aware, that public advocacy of ACAP funding by this agency could result in misunderstanding and possible APUC budget cuts by the Legislature. There are many organized groups and individuals who believe that the Commission is already adequately funded to undertake a fully-developed consumer information and education program. Consequently, it is imperative that such individuals understand that our two member "Consumer Protection and Information Section" already handles an average of 6,500 complaints and requests for assistance each year. This does not consider other important Section functions which include participation in Commission proceedings involving utility rules, regulations, quality of service, and formal consumer complaints; press inquiries and releases on scheduled hearings and Commission orders are also responsibilities of this Section.

making is impermissible under our statutes. Our staffing level even further restricts our ability to obtain sufficient consumer input on all issues before this Commission. In spite of these factors, the Commissioners individually and collectively are committed to providing an environment which will assist consumers in presenting their views in the most constructive manner and to the maximum extent possible. ACAP's efforts during the past year have been one exemplary means by which this objective has been furthered. As a result, the Commission acknowledges and sincerely appreciates ACAP's efforts during the past year to provide a vehicle for organized consumer education and input in our proceedings that heretofore has frequently been absent. Consumers have been educated by ACAP regarding the procedures peculiar to the complexities of the quasi-judicial regulatory and rate-making process, not only through meetings in various communities, but also through the extensive consumer information pamphlet recently published entitled, "What You Can Do About Your Utility's Rates and Services." Thus, in the majority of instances, consumers have been able to provide more meaningful and constructive suggestions, opinions and facts on matters before the Commission. It is certainly acknowledged that with our existing backlog of over 225 open docket cases, other workload, and shortage of personnel, the Commission by itself could not have accomplished this highly desirable goal. As several witnesses in recent proceedings have told the Commission, ACAP has provided both a forum and a mechanism whereby customers can organize their views for effective presentation to the Commission.

The Commission also recognizes that one of the most significant, but perhaps least recognized contributions of a funded versus volunteer program, is that it provides the financial resources necessary for formal intervention in a proceeding. Few individual consumers have the technical or legal knowledge to intervene in a case, but even assuming this expertise, still fewer consumers possess the personal financial resources necessary, since our statute imposes the potential liability of proportionate hearing costs.

The Commission recognizes and supports the positive contributions to the regulatory process which can be made by an organized, funded consumer advocacy group and will respond accordingly to legislative inquiries. A responsible consumer advocacy group would be a welcome complement to the work being done by the Commission's dedicated, competent Staff.

The Role of the APUC Staff

Attached you will find a memorandum from the Staff of the Commission as a result of a series of meetings held by the section chiefs to discusss their communication and involvement with consumers as an integral part of their responsibilities in the regulatory process.

Additional Items of Interest

You will be pleased to learn that the Commission has been successful in recruiting a power engineer to fill its current vacancy. Mr. Rudolph Bertschi, formerly with the Office of the Illinois Consumer Counsel, will join the Commission Staff on April 1, 1982.

The Commission plans to include the CAC representatives on its mailing list of Public Notices of Tariff Filings and its Weekly List of Orders Issued. Because the CAC's will be operating without any funding, the normal Commission fees associated with the distribution of this information will be waived.

Again, our thanks for your time and interest in providing meaningful communication with the Commission.

Sincerely,

Carolyn S. Guess
Chairman

Marvin R. Weatherly
Commissioner

Susan M. Knowles
Commissioner

Stuart C. Hall
Commissioner

Diana E. Snowden
Commissioner

STAFF POLICY ON ASSISTANCE TO CONSUMERS

It is the policy of the Staff that this agency is to be open and responsive to interests of consumers. The agency will answer questions or complaints of consumers as personnel are available and will receive information from consumers concerning utility practices, service, and tariff filings.

The Staff represents the broad public interest. This means that in its recommendations to the Commission, the Staff takes into consideration the interests of all classes of customers. This interest includes the long term viability of the utility to assure that customers continue to be served at reasonable rates. Staff will take into consideration suggestions from any interested person in pursuing its investigations. Its final recommendation will reflect a balanced point of view.

The Consumer Protection Section of the Commission is primarily responsible for resolving consumer complaints about utility services, answering consumer questions about Commission procedure, dockets, or tariff advice filings, soliciting and examining consumer comments in conjunction with any formal proceeding, and reviewing tariff filings for matters of consumer concern. Where appropriate, consumer questions or comments will be fielded to the staff member assigned to a particular matter. Generally, these Staff responses will be relayed to the consumer through the Consumer Protection Section. Arrangements will be made for any Staff's direct involvement in an information response when prudent handling of the matter so requires and within the time limitations imposed by that Staff member's primary responsibilities.

The Tariff Section of the Commission is primarily responsible for soliciting consumer comments concerning tariff advice filings, and for answering consumer questions about tariff matters. Consumer comments concerning tariff advice filings will be examined by the Staff individuals responsible for preparing the Staff recommendation to the Commission.

The Finance Section will assist consumers in finding information contained in utility annual reports to the Commission.

ON-GOING QUALITY OF SERVICE REVIEW

It is the policy of the Staff that this agency should monitor the quality of service provided by utilities on an on-going basis. Periodically, the Staff will seek consumer comments on the quality of service provided by their serving utilities. This may be accomplished by any method appropriate in the particular case, including publication of an advertisement, or other notice inviting comment; mailing out a bill insert, letter, or questionnaire; or conducting on-site visits and inspections. The Staff will monitor the performance of utility equipment by use of

appropriate test equipment. The Staff will advise any utilities whose service the Staff does not believe to be of adequate quality of specific problems. Where possible, Staff will assist utilities in taking action to improve service. Where Staff cannot resolve such problems informally, and the utility is not taking sufficient steps to remedy serious service problems, Staff will report its findings to the Commission, and if necessary, file a formal complaint against the utility.

CONSUMER INPUT ON RATE CASES

It is the policy of Staff that this agency should also seek consumer comments on quality of service during a rate case. This may be accomplished by publication of an advertisement or other notice inviting comment; mailing out a bill insert, letter, press release, or questionnaire; or conducting on-site visits and inspections. These comments should be sought prior to the Staff audit of the utility operations. The Executive Director, attorney, accountant and engineer (where applicable) assigned to the case, with input from the Consumer Protection Section, will decide whether quality of service should be at issue in the rate case.

Where appropriate, the Consumer Protection Section and/or attorney with assistance from other Staff members as needed will follow-up on comments received by conducting a public meeting on-site.

The results of the quality of service investigation, whatever it may be, will be reflected in the testimony of the engineer.

Also, the accountant will investigate and consider within the time frame of the audit any reasonable adjustment proposed by a consumer.

CONSUMER REQUESTS FOR INFORMATION

If a member of the public contacts the Staff to request information about a utility which is not available in the Commission's public records, that request may be granted or denied upon a consideration of the following:

a) Whether the Staff or the utility has an expectation that the requested information is not public under 3 AAC 48.050(a) or 3 AAC 48.040.

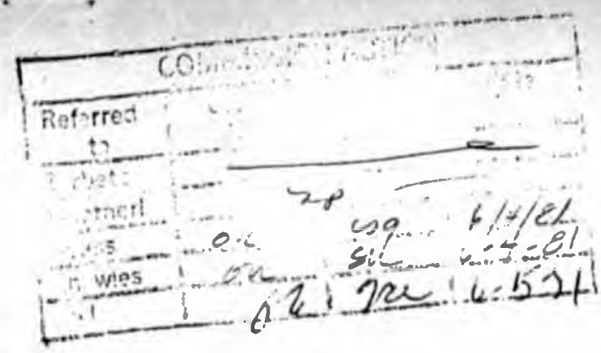
b) Whether the person requesting the information has the ability or resources to obtain it from another source such as the utility or an independent hired expert.

c) Whether obtaining the information requires unavailable Staff time.

d) Whether the information requested may have a significant effect on issues in a docket.

e) Whether a requested investigation is predicated on information from a reliable source.

f) Whether the requested information should be released only on order of the Commission.



STAFF ACTION

ACTION	INITIALS	DATE
Drafted by		6/3
Typed by		
Cycled		
Approved	947	

June 2, 1981

Mr. L.J. Schultz, General Manager
Chugach Electric Association, Inc.
P.O. Box 3518
Anchorage, AK 99501

Dear Mr. Schultz:

Re Cost Differential

According to Rule 8.12.d.(2) of Chugach Electric Association, Inc.'s (CEA), filed and currently effective tariff the utility is required to develop annually the construction cost differential between underground and overhead facilities on a per-lineal foot basis to be used during the construction season commencing on March 1, of each year. This differential together with supporting data is to be submitted to the Commission not less than sixty days prior to the March 1, effective date.

A review of the Commission's files indicates that we have not as yet received the required filing for the current construction season, nor have we received the required information for the years 1979 and 1980.

Therefore, please submit the filing required by CEA's Tariff Rule 8.12.d.(2) for the years 1979, 1980 and 1981 by no later than 4:00 p.m., June 17, 1981.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh

Executive Director

STAFF ACTION

ACTION	INITIALS	DATE
Drafted by		
Typed by		
Checked	DB mp 7-1	
Issued	[illegible] 7/1	

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA18-8, by CHUGACH ELECTRIC ASSOCIATION, INC., to Revise Schedule No. 59, Underground Line Extension Differential	)	U-78-48
	)	ORDER NO. 2

ORDER CLOSING DOCKET

On April 6, 1978, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), filed a tariff revision, designated at TA18-8, to modify its underground line extension differential rate. CEA proposed to reduce the rate from $7.00 per linear foot of primary facility to $5.00 per linear foot of primary facility. CEA contended that the filing was being made and the differential cost determined pursuant to rule 8.12d. (2) of its currently effective tariff.

On April 25, 1978, the Commission's Staff (Staff) presented its initial recommendation to the Commission regarding the disposition of the tariff filing. Staff recommended that the filing should become effective at the end of the 45-day statutory notice period on ~~5/22/78~~ May 22, 1978. The basis of that recommendation was that the cost information submitted with the filing justified the differential and the filing was a reduction in rate for underground extensions. The Commission did not concur with Staff's reccommendation.

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STAFF ACTION

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1	LMC	
	MCP	8/

OK MCP 8/11/81
OC LCG 8-11-81
OU SJC 8-11-81
MP

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	U-81- 1- ORDER NO. 1
In the Matter of the Consideration and Determination of Implementation of the Ratemaking Standards and Lifeline Rates in the Public Utility Regulatory Policies Act of 1978 for CHUGACH ELECTRIC ASSOCIATION, INC.	U-80-92 ORDER NO. 2
In the Matter of the Investigation of CHUGACH ELECTRIC ASSOCIATION, INC.'s Wholesale Power Billing Practices	U-81-20 ORDER NO. 2
In the Matter of the Investigation into the Management Practices and Procedures of CHUGACH ELECTRIC ASSOCIATION, INC.	U-81-53 ORDER NO. 1

ORDER SUSPENDING OPERATION OF TARIFF REVISION, GRANTING INTERIM RATE INCREASE, AND REQUIRING MANAGEMENT AUDIT OF UTILITY

On June 26, 1981, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), filed a tariff revision, designated as TA22-8, requesting an interim and permanent rate increase of 25.6 percent to retail electric rates exclusive of security and street lights. In addition, CEA proposed the elimination of rate differentials between urban and suburban classes by raising urban rates to the suburban level and then applying a percentage increase to rates of both classes. This resulted in a higher percentage increase in the bills of urban customers than in the bills of suburban customers.

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Mr. L. J. Schultz
General Manager
Chugach Electric Association
P. O. Box 3518
Anchorage, Alaska 99501

Dear Mr. Schultz:

The Commission is seriously concerned about the lack of information available to the public regarding the widespread and prolonged service outage experienced by Chugach Electric Association, Inc. (CEA), on Sunday, August 9, 1961. The Commission also lacks adequate information to ~~explain~~ understand the circumstances which resulted in the duration of the power outage.

In the past, the Commission has raised such questions with CEA on an informal basis. It is now appropriate to require a formal reply. Specifically, the Commission desires a written response to the following questions: (under AS42.05.291(a))

1) What is CEA's procedure for notifying the public via the media of an outage and the expected time for restoration of service?

2) Does CEA intend to install a "hotline" to resolve the problem of an overloaded telephone system which occurs during an outage?

3) What events led to the prolonged power outage on August 9, 1981, and what actions have been taken or will be taken to ensure that a repeat situation will not occur?

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STAFF ACTION		
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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan B. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 2
In the Matter of the Investigation of CHUGACH ELECTRIC ASSOCIATION, INC.'s Wholesale Power Billing Practices	)	U-81-20
	)	ORDER No. 3

ORDER GRANTING PARTIAL RECONSIDERATION; ALLOWING INTERVENTION; AND ESTABLISHING DATES FOR PUBLIC HEARING AND SUBMISSION OF PRE-FILED TESTIMONY

On June 26, 1981, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), filed a tariff revision, designated as TA22-8, requesting an interim and permanent rate increase of 25.6 percent to retail electric rates exclusive of security and street lights. In addition, CEA proposed the elimination of rate differentials between urban and suburban classes by raising urban rates to the suburban level and then applying a percentage increase to rates of both classes. This resulted in a higher percentage increase in the bills of urban customers than in the bills of suburban customers.

On August 10, 1981, the Commission issued Order No. 1 in Docket U-81-52 and Order No. 2 in Docket U-81-20 suspending TA22-8 for an initial six-month period ending February 10, 1982. The suspension period would allow the Commission Staff (Staff) time to thoroughly investigate the reasonableness and propriety of CEA's proposed tariff revision. The Commission also granted the utility a 16.91 percent

ALASKA PUBLIC UTILITIES COMMISSION
1100 Mackay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

STAFF ACTION

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan B. Knowles
Stuart C. Hall

In the Matter of the Investigation of CHUGACH ELECTRIC ASSOCIATION, INC.'s Wholesale Power Billing Practices	)	U-81-20
	)	ORDER NO. 3
In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 2

ORDER GRANTING PARTIAL RECONSIDERATION; DENYING INTERVENTION WITHOUT PREJUDICE; AND ESTABLISHING DATES FOR PUBLIC HEARING AND SUBMISSION OF PRE-FILED TESTIMONY

On June 26, 1981, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), filed a tariff revision, designated as TA22-8, requesting an interim and permanent rate increase of 25.6 percent to retail electric rates exclusive of security and street lights. In addition, CEA proposed the elimination of rate differentials between urban and suburban classes by raising urban rates to the suburban level and then applying a percentage increase to rates of both classes. This resulted in a higher percentage increase in the bills of urban customers than in the bills of suburban customers.

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COMMISSION ACTION			
Referred to	OK or NO	Initials	Date
Corbetz			
Weatherly	OK	MRW	9-25-81
Guess	OK	CSG	9-25-81
Knowles	OK	SMK	9-25-81
Hall	OK	SCH	9-25-81

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA228, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 3

ORDER GRANTING PETITION TO INTERVENE

On September 14, 1981, the Commission issued Order No. 2 in Docket U-81-52 which, among other things, denied without prejudice the Petition to Intervene by the ~~ANCHORAGE CONSUMER ADVISORY COMMITTEE~~ filed by the ALASKA CONSUMER ADVOCACY PROGRAM (ACAP) on September 3, 1981.

On September 16, 1981, ACAP submitted a Revised Petition to Intervene by the Anchorage Consumer Advisory Committee for consideration by the Commission. A ~~STAFF~~ (Staff) response to Second Petition for Intervention was filed on September 22, 1981, ~~opposing~~ which opposes ACAP's status as an intervenor.

The Commission has examined ACAP's Petition against the standards for for intervention set out in 3 AAC 48.110, particularly subsections (b) and (c) of that section, as well as its policy concerning intervention set out in U-77-16(2), pages 3-4, and has considered the counter-arguments presented by Staff in its response. Based on this analysis, the Commission concludes that the facts and reasons set out in ACAP's Petition for Intervention sufficiently meet the

COMMISSION ACTION			
Referred to	K or NO	Initials	Date
Engelken	OK	DES	9-29-81
Weatherly	OK	MRW	9/29/81
Guess	OK	CSG	9/30/81
Knowles	OK	SK	9/29/81
Hall			

STAFF ACTION		
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Drafted by		
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Checked by		
Approved by		

FINAL, CHECKED BY & OK TO RELEASE

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Investigation of CHUGACH ELECTRIC ASSOCIATION, INC.'s Wholesale Power Billing Practices	)	U-81-20
	)	ORDER NO. 4
In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 4

ORDER AMENDING SCHEDULES FOR SUBMISSION OF PRE-FILED TESTIMONY AND PUBLIC HEARINGS

On September 14, 1981, the Commission issued Order Nos. 3 and 2 in Dockets U-81-20 and U-81-52, respectively, which, among other things, established the dates for public hearing and submission of pre-filed testimony. CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), was required to file its list of witnesses and written prepared testimony by [redacted] September 30, 1981, and Commission Staff (Staff) was directed to file its witness list and pre-filed testimony by [redacted] October 7, 1981. While Order Nos. 3 and 2 denied intervention to the ALASKA CONSUMER ADVOCACY PROGRAM (ACAP) on behalf of Anchorage Consumer Advisory Committee, ACAP was placed on notice that if it was granted intervenor status in a subsequent order, its witness list and pre-filed testimony would be due October 14, 1981. The public hearing on the revenue requirement portion of CEA's proposed tariff revision was scheduled for October 21, 1981, at 9:00 a.m., in the Commission's offices in Anchorage, Alaska.

Based upon a revised petition to intervene filed [redacted] on September 16, 1981, the Commission in Order No. 3 in

COMMISSION ACTION			
Referred to	OK or NO	Initials	Date
Guess	✓	CSG	10-16-81
Weatherly	OK	MRW	10-16-81
Knowles	OK	SMK	10-16-81
Hall	OK	SCH	10-16-81
Snowden	—	DEP	

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

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In the Matter of the Filing of a Tariff Revision, Designated as TA14-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for a Permanent General Rate Increase	)	U-77-68
	)	ORDER NO. 8

ORDER ALLOCATING COSTS
AND CLOSING DOCKET

On October 13, 1980, the Commission issued Order No. 7 in this proceeding which, among other things, approved TA14-8 and TA14-8(1) filed by CHUGACH ELECTRIC ASSOCIATION, INC. (CEA); required CEA to file revised tariff sheets reflecting the approved rate design and rates; gave notice to CEA that in future cost-of-service studies and rate designs the deficiencies identified therein in its methodology and supporting documentation are to be rectified; and provided that outstanding cost-of-service and rate-design issues in this proceeding would be considered within the context of the Commission's consideration of the applicability of the ratemaking standards in the Public Utility Regulatory Policies Act of 1978 (PURPA) to CEA.

On November 14, 1980, CEA filed revised tariff sheets in compliance with the Commission's order. Subsequently, on December 12, 1980, in an administrative meeting, the Commission approved and made effective CEA's revised tariff sheets reflecting the rate design and rates approved in Order No. 7 thus concluding consideration of the outstanding substantive issues in this proceeding.

COMMISSION ACTION			
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Guess	OK	[illegible]	10/26/81
Weatherly	OK	[illegible]	10/26/81
Knowles	—	[illegible]	[illegible]
Hall	[illegible]	[illegible]	[illegible]
Snowden	—	[illegible]	[illegible]

STAFF ACTION		
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Checked by		
Approved by		

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Investigation of CHUGACH ELECTRIC ASSOCIATION, INC.'s Wholesale Power Billing Practices

U-81-20

ORDER NO. 5

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase

U-81-52

ORDER NO. 5

ORDER GRANTING PETITIONS FOR INTERVENTION, Delaying Hearing AND DENYING ADDITIONAL INTERIM RATE INCREASE WITHOUT

Orders No. 4, Issued September 29, 1981, granted an extension of time to CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), in which to designate witnesses from the Rural Electrification Administration (REA) and National Rural Utilities Cooperative Finance Corporation (CFC) and submit their written prepared testimony. The witness list and pre-filed testimony for representatives from agencies were required to be filed by 4:00 p.m., October 14, 1981. In order to allow the Commission Staff (Staff) adequate time in which to address the issues raised in the testimony filed by REA and CFC witnesses, Orders No. 4 extended Staff's filing requirement deadline to October 23, 1981, and rescheduled the public hearing from October 21 to October 27, 1981.

Orders No. 4 also clarified the Commission's intent to hold separate public hearings in these proceedings. A public hearing was scheduled for November 9, 1981 to examine and address CEA's wholesale power billing practices and procedures. Staff was required to address the wholesale power billing practices issue in

DRAFT 3 Sept Items

CC - I deletion

STAFF ACTION

Action		Date
Engineering	[redacted]	12/21
Typing	DKD	12/03
Checked by	DB	12/28
Approved by	MGP	12/63

OK MRW 12/29/81
OK SW 12-29-81
TP
OK DAS 12-30-81

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THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

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In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase

U-81-52

ORDER NO. 7

ORDER AFFIRMING PREVIOUS ORDERS AND DENYING RELEASE OF STAFF WORK PAPERS

On November 6, 1981, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA) filed a Request For Clarification Of Order And Release Of Staff Work-Papers. Specifically, CEA requested a clarification of the following paragraph four 4 on page 4, U-81-52(2):

> The Commission has reviewed the utility's petition and Staff's response thereto and is prepared to grant partial reconsideration of Order No. 1. Specifically, the Commission concurs with CEA that the actual, rather than an imputed, TIER requirement should be considered for interim rate-making purposes in the instant case. At the same time, the Commission agrees with Staff that it would be unreasonable to impose full responsibility for all TIER in excess of 1.0 on the retail customers. Accordingly, the Commission will allow the utility an across-the-board interim, refundable increase on all tariffed rates sufficient to yield a TIER of 1.34 on the retail revenue requirement only, i.e. not on the total company revenue requirement. In the absence of a cost of service study, it is difficult for the Commission or its Staff to compute the interim rate increase percentage which results from this decision without making certain arbitrary assumptions. Therefore, if the utility wishes to further increase its interim rates as allowed by this Order before the permanent revenue requirement determination, it will be necessary for CEA to perform the numerical

COMMISSION ACTION			
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[illegible]	ok	Su	2-3-82
[illegible]	ok	dks	2-3-82

STAFF ACTION		
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Drafted by	SMK	
Typed by	DKO	2/3
Checked by	RDM	2/3
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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 8

ORDER GRANTING PETITION TO ENLARGE TIME AND ESTABLISHING SCHEDULES FOR SUBMISSION OF PREFILED TESTIMONY AND FOR PUBLIC HEARING

On October 22, 1981, CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), filed a Petition for an Order Continuing Hearing and Scheduling Supplemental Filing in this proceeding. By Bench Order issued October 23, 1981, the Commission scheduled a hearing for October 26, 1981, to allow the utility, the Commission Staff (Staff), and the ALASKA CONSUMER ADVOCACY PROGRAM (ACAP) to present oral argument on CEA's petition. At the conclusion of the hearing the Commission issued a Bench Order granting CEA's request for a continuance subject to the following three conditions:

> (1) By February 15, 1982, CEA is required to submit a new revenue requirement filing, subject to the requirements of 3 AAC 48.275, with an updated 1981 test year with appropriate adjustments to revenues, expenses and rate base.
>
> (2) CEA is required to pursue the issue of TIER for generation and transmission as mandated in Order No. 2, to continue to request an [sic] REA policy

COMMISSION ACTION			
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Guess	OK/ SK	for CG	2-5-82
Weatherly			
Knowles	OK	SK	2-5-82
Hall			
Snowden	OK	DES	2/5/82

STAFF ACTION		
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Drafted by	SMK	2/5
Typed by	DKD	2/5
Checked by		
Approved by		

FINAL CHECKED BY DH & ST
OK TO RELEASE

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)))))	U-81-52 Order No. 9

ORDER STAYING ORDER NO. 8 PENDING INTERVENOR RESPONSE AND SCHEDULING SHOW CAUSE HEARING

On February 3, 1982, the Commission issued Order No. 8 in this proceeding which, among other things, granted the request of CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), for an extension of time in which to file its revenue requirement study from February 15, 1982, to March 10,1982.

On February 4, 1982, intervenor ALASKA CONSUMER ADVOCACY PROGRAM (ACAP) filed a Petition for Reconsideration of Order No. 8. ACAP stated that CEA failed to comply with 3 AAC 48.090(h) which requires that filings in a proceeding be served on all parties of record, and, therefore, the utility's Petition to Enlarge Time in Which to File Application for Rate Relief was void. According to ACAP, the following actions were necessitated by this deficiency:

> ——The Commission must order Chugach to serve their motion on us and then the Commission must give us the requesite number of days to respond to the motion.

COMMISSION ACTION			
Prepared by	OK or NO	Initials	Date
	OK	CG	2/11/82
		TD	
		SK	2/11/82 by K.S
		TD	
	OK	WRS	2/11/82

STAFF ACTION		
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Drafted by	DKO	
Typed by	Ron	2/11
Approved by		
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" "		

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA22-8, by CHUGACH ELECTRIC ASSOCIATION, INC., for an Interim and Permanent Rate Increase	)	U-81-52
	)	ORDER NO. 10

ORDER AFFIRMING ORDER NO. 8 AND SUPPLEMENTING SCHEDULE FOR SUBMISSION OF PRE-FILED TESTIMONY

On February 3, 1982, the Commission issued Order No. 8 in this proceeding granting the request of CHUGACH ELECTRIC ASSOCIATION, INC. (CEA), for an extension of time in which to file its revenue requirement study from February 15, 1982, to March 10, 1982. Order No. 8 also established deadlines for submission of pre-filed testimony by CEA and the Commission Staff (Staff) on March 10 and April 23, 1982, respectively, and scheduled a public hearing on the proposed rate increase to convene on May 5, 1982.

On February 4, 1982, intervenor ALASKA CONSUMER ADVOCACY PROGRAM (ACAP), filed a Petition for Reconsideration requesting cancellation of Order No. 8 pending ACAP receipt of and response to the utility's Petition to Enlarge Time in Which to File Application for Rate Relief. The Commission subsequently issued Order No. 9, dated February 5, 1982, staying the operation of Order

JAY S. HAMMOND, Governor

ALASKA PUBLIC UTILITIES COMMISSION
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

1100 MacKay Building
338 Denali Street
Anchorage, Alaska 99501

Phone (907) 276-6222

February 11, 1982

COMMISSION ACTION			
Referred to	OK or	Initials	Date
C	OK	cg	2/11/82
	JK	Mike	2/11/82
	OK	SHL	2-11-82
Snowden			

Chugach Electric Association
Tom Kolasinski, Acting Manager
P.O. Box 3518
Anchorage, Alaska 99501

Dear Mr. Kolasinski:

The Commission has been advised that the salary information required on page 104 of Chugach Electric Association's (CEA) 1990 Annual Report to the Commission has not been provided. In addition, the Commission has been informally advised by its Staff that CEA does not wish to file this information because it believes this action could violate the right to privacy of some of its employees.

CEA is hereby placed on notice that it shall file the required salary information by Friday, February 19, 1982 at 4:00 p.m. If the utility wishes to request that this information be treated as proprietary the following procedure which supplements the Commission's present statute and regulations governing public disclosure of information AS 42.05.671 and 3 AAC 48.040 should be followed:

PROCEDURE FOR THE TREATMENT OF MATERIAL OF INFORMATION FOR WHICH PROPRIETARY OR PRIVILEGED STATUS IS REQUESTED

A. Written Petition for Proprietary or Privileged Status.

1. If no written request has been made to designate material or information as proprietary or otherwise privileged, all material and information that is filed with, served upon, or otherwise made available to the Commission shall be available for examination by the public. Any person wishing to protect material or information filed with, served upon or otherwise made available to the Commission shall file with the Commission a formal written petition identifying the material or information sought to be protected and setting forth the facts, reasons, or other grounds upon which the Commission should classify that material or information as proprietary or otherwise privileged.

SHELH

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by		
Typed by		
Checked		
Approved		

Referred	OK or C		
	OK MPW 4/3/81		
	OK	Su	4-3-81

April 2, 1981

In reply refer to: Tariffs
TA132-120

A.C. Pistorius, General Manager
Anchorage Telephone Utility
600 East 38th Avenue
Anchorage, Alaska 99503

Dear Mr. Pistorius:

Enclosed is a validated copy of the tariff sheet filed on February 6, 1981, by Anchorage Telephone Utility. This filing, designated as TA132-120, has an effective date of March 27, 1981.

In consideration of the manner in which the amount of the credit for returning telephone sets was derived, the Commission directs ATU to monitor the appropriateness of the $5.00 credit amount and be prepared, at the time of a general rate examination, to provide the Commission with evidence as to why the credit should be continued or, as appropriate, modified.

BY DIRECTION OF THE COMMISSION.

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

JBF/ga
Enclosure

April 2, 1981

In reply refer to: Tariffs
TA132-120

A.C. Pistorius, General Manager
Anchorage Telephone Utility
600 East 38th Avenue
Anchorage, Alaska 99503

Dear Mr. Pistorius:

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BY DIRECTION OF THE COMMISSION.

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

JBF/ga
Enclosure

Referred to	OK or		
Verification	OK MRW 5/26/81		
News	OK	SLL	5-26-81

OK SLA 5-26-81
(must EAS study should be by Aug 1st deadline)

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by		
Typed by		
Checked by	MRW	5/26/81
Approved by	[illegible]	5/26/81
" "		
" "		

May 26, 1981

In reply refer to: Tariffs
TA138-120
U-80-42
U-81-19

45 days end 5/26/81.

A.C. Pistorius, General Manager
Anchorage Telephone Utility
600 East 38th Avenue
Anchorage, Alaska 99503

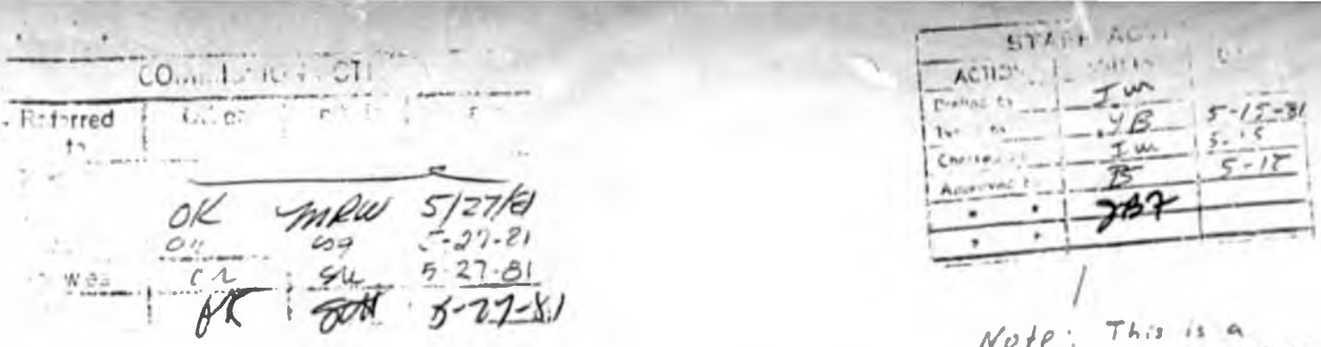
Dear Mr. Pistorius:

The Commission has approved the proposal of Anchorage Telephone Utility (ATU) to cancel its adopted tariff of the Greater Anchorage Borough Telecommunications Company, Inc. (GAB-TEL), and to apply its present Anchorage area tariff to the areas served under the GAB-TEL tariff. This filing has an effective date of May 26, 1981.

should be read

As a part of its consideration of this filing, the Commission observed that the feasibility study on the provision of extended area service (EAS) to the former GAB-TEL area still has not been filed with the Commission. This report was originally anticipated in July, 1980. The Commission understands that ATU is presently analyzing traffic data and expects to complete the study shortly. Therefore, the Commission directs that the EAS feasibility study be filed with the Commission no later than August 1, 1981.

A list of the validated tariff sheets being returned at this time is attached. As the Staff has discussed with ATU, the following procedural matters are still required to complete the application of the Anchorage area tariff to the GAB-TEL area.



Note: This is a second routing of this draft - 1st draft has apparently been lost.

May 15, 1981

Ted Burns, Esq.
Municipal Attorney
Municipality of Anchorage
632 West 6th Avenue
Anchorage, Alaska 99501

Dear Mr. Burns:

Re: Certification of Garbage and Refuse Public Utilities

The enactment of Ch. 136, SLA 1980 (FCCS SB 577) repealed the language of AS 42.05.221(f) and portions of AS 42.05.711(b) which exempted garbage and refuse collection and disposal public utilities operating within municipal boundaries (as they existed on January 1, 1973) from having to obtain a certificate of public convenience and necessity for the service area within these boundaries.

The repeal of this language means that all municipal garbage and refuse utilities must possess a certificate of public convenience and necessity for the area ~~it serves~~ served. AS 42.05.221(a), 42.05.701(2)(F), (5)(A). This is required even though, as a municipal utility, under the remaining language in 42.05.711(b) or under the new 42.05.711(j) (annual gross revenues of $200,000 or less) they may not be subject to economic regulation by the Commission.

Alternatively the requirement makes clear a municipality may not be exempted from all or any portion of these statutes if on a reasonable analysis of the costs public interest [illegible] AS 42.05.711(j).

STAFF		
ACTION		
Draft	JMW	6/19/81
Typed	SKM	6/19/81
Corrected	JMW	6/19/81
Word Proc.	TA13	6/19/81

45 days end 7/24; utility must have advance approval to bill 7/1/81

June 19, 1981

In reply refer to: Tariffs
TA34-121

Thomas R. Stahr, General Manager
Municipal Light & Power ~~Department~~
~~Municipality of Anchorage d/b/a/~~
1200 East First Avenue
Anchorage, Alaska 99501

Dear Mr. Stahr:

Enclosed are validated copies of tariff sheets filed on June 10, 1981, by Municipal Light and Power (ML&P). This filing, designated as TA34-121, has an effective date of June 1, 1981.

Although the Commission has approved this filing, it is concerned about the continuing lack of generation by the waste heat unit. ML&P is directed to include in its next gas cost rate adjustment filing an explanation of the lack of reported steam generation and ML&P's plans for use of the waste heat unit.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

STAFF ACTION		
AC	INITIALS	DATE
Drafted by	JMW	6/18/81
Typed by	SKM	6/19/81
Checked by	JMW	6/19/81
Approved by	JBF	6/19/81

45 days end 7/2/81

June 19, 1981

In reply refer to: Tariffs
TA146-120

A. C. Pistorius, General Manager
600 East 38th Avenue
Anchorage, Alaska 99503

Dear Mr. Pistorius:

Enclosed is a validated copy of the tariff sheet filed on May 18, 1981, by Anchorage Telephone Utility (ATU). This filing, designated as TA146-120, has an effective date of July 2, 1981.

In its study of this filing, the Commission reviewed a number of previous filings affecting the Secretarial Answering Service Schedule and noted that the large TASCOM answering system, which was the subject of TA 98-120, TA111-120, and TA115-120, is not presently tariffed. The Commission urges ATU to review its offerings in the Secretarial Answering Service Schedule to assure that all offerings are properly tariffed.

BY DIRECTION OF THE COMMISSION

Very truly yours,

ALASKA PUBLIC UTILITIES COMMISSION

John B. Farleigh
Executive Director

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of Tariff Revisions, Designated as TA135-120 and TA136-120, by ANCHORAGE TELEPHONE UTILITY for Rates for Straight Line Feature Telephones

U-81-29

ORDER NO. 1

ORDER SUSPENDING TARIFF REVISION AND GRANTING INTERIM RATES

On March 25, 1981, ANCHORAGE TELEPHONE UTILITY (ATU) filed two tariff revisions (TA135-120 and TA136-120) to add a nonrecurring charge of $17.55 and a monthly rate of $2.35 for straight line feature telephones (wall and desk models) to the rate schedules for three PBX systems: the Rolm CBX (Class H), Rolm SCBX (Class I), and SL-1 (Class J).

The filings were noticed to the public on April 2, 1981, with a closing date of May 4, 1981, for the submission of statements in support of, or in opposition to, the proposed tariff revisions. On May 4, 1981, the Commission received a protest of the filings from Comtec, Inc. (Comtec), a company engaged in selling, installing, and maintaining telephone equipment, including PBX equipment.

Comtec states that it appears that the straight line feature telephone is a standard push button telephone that can be used in any residential home or with several other PBX systems in ATU's tariff. Comtec's protest includes three specific charges,

STAFF ACTION		
ACTION	NOTES	DATE
Drafted by		
Typed by		
Checked by		
Approved by		

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA139-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Conditions and Rates for Coin Telephone Service	U-81-33 ORDER NO. 1

ORDER SUSPENDING OPERATION OF TARIFF REVISION, INSTITUTING INVESTIGATION, ESTABLISHING DATES FOR PUBLIC HEARING AND SUBMISSION OF PRE-FILED TESTIMONY

On April 17, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELPEHONE UTILITY (ATU) filed a tariff revision, designated as TA139-120, which proposed changes to the conditions and rates for coin telephone service. The utility proposed to

1) increase the per message rate charges for public and semi-public coin telephone service from $10¢ to $20¢ per call;

(2) increase the minimum monthly revenue required as a basis for continuing service at each location, ~~from two times the regular business line rate (local only) to three times the regular business line rate (local and toll);~~

(3) increase installation charges for semi-public telephone enclosure/supports;

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA23-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for Consolidation of Service Areas and Permanent Reduction of Rates	U-81-36 ORDER NO. 1
In the Matter of the Filing of a Tariff Revision, Designated as TA20-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for a Rate Increase, in the Anchorage, Eagle River, and Girdwood-Alyeska Sewer Service Areas.	U-80-4 ORDER NO. 10

ORDER SUSPENDING SERVICE AREA CONSOLIDATION

On May 1, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL SEWER UTILITY (ASU) filed a tariff revision, designated as TA23-126, requesting the immediate permanent reduction in rates for sewer service in the Eagle River Sewer Service Area (ERSSA) and the Girdwood-Alyeska Sewer Service Area (GASSA). ASU requested that customers in the ERSSA and GASSA be integrated into the appropriate rate schedule of the Anchorage Bowl Service Service Area (ABSSA); all that ERSSA and GASSA rate schedules except for those based on meter water consumption be deleted; that definitions and other tariff references for Service Area 40 (ABSSA) and Service Area 50 (ERSSA) be deleted; and that a definition be added for the Anchorage Sewer Service Area (ASSA) as "that area established by Anchorage, Alaska, Ordinance 81-23...."

COMMISSION ACTIO			
Referred to	OK or I.O	Initials	Date
Zerbetz			
Weatherl			
[illegible]	OK	[illegible]	[illegible]
[illegible] wies	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by	[illegible]	[illegible]
Typed by	[illegible]	[illegible]
Checked by	[illegible]	6-12
Approved by	[illegible]	6-17

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R Weatherly
Susan M. Knowles
Stuart C. Hall

FINAL ORDER TO PREPARE: TAM

In the Matter of the Application by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY to Amend its Certificate of Public Convenience and Necessity No. 122 To Extend Its Service Area South Along Lake Otis Parkway to O'Malley Road To Include Independence Park and Adjacent Lots

U-80-97

ORDER NO. 2

ORDER CLOSING DOCKET

Ordering paragraph No. 2 in Order No. 1 of this proceeding required the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY (AWU) to file, within 60 days, tariff sheets describing the amendments to its authorized service area granted by the Commission. On May 20, 1981, AWU complied with this requirement.

The Commission finds that all outstanding procedural and substantive matters have been disposed of in the above-captioned proceeding, and that there are no costs to be allocated to the utility. Accordingly, this Docket should be closed.

ORDER

THE COMMISSION FURTHER ORDERS, That, Docket U-80-97 is closed.

DATED AND EFFECTIVE at Anchorage, Alaska, this 28th day of May, 1981.

BY DIRECTION OF THE COMMISSION

(SEAL)

STAFF ACTION

ACTION	DATE	DATE
	MRW	6-20
	MRW	6-26
	MRW	6-30
	w/ corrections	

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners:

Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA110-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY for Rates and Conditions for Exchange System Used by Interexchange Services.

U-80-42

ORDER NO. 3

ORDER GRANTING TARIFF REVISION

On April 4, 1980, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed TA110-120 proposing rates and conditions for use of the utility's exchange system by interexchange services (ESIS).

The ESIS tariff offering provides unlimited local exchange service to users not located in the utility's service area. ESIS will apply to all services that have the capacity to utilize the local exchange system including, but not limited to, Foreign Exchange (FX), Common Control Switching Arrangements (CCSA), Off-Premise Extensions (OPX), Tie Lines (TL), and authorized MTS/WATS equivalent services provided by Other Common Carriers (OCC). ESIS will not apply to services, such as Message Telephone Service, that contribute, through the settlements process between the long lines carrier and the local exchange utility, to the financing of the cost of exchange facilities.

STAFF ACTION

ACTION	INIT.	DATE
Drafted by	MP	7-7-81
Typed	MP	7-7-81
Compared	MP	7-7-81
Approved	CSH	7-8-81
"	MRW	7/8/81
"		

OK MRW 7/7/81
OL SG 7/7/81 MP
JV EH 7/2/81

STATE OF ALASKA

THE ALASKA PUBLI UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA110-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY for Rates and Conditions for Exchange System Used by Interexchange Services

U-80-42

dcb

ERRATA NOTICE

ORDER NO. 3 dcb

ORDER GRANTING TARIFF REVISION
(Issued June 26, 1981)

Page 10, line 10-1/2: Delete "Agreement" and Insert "for Interstate Access".

Page 23, line 30: Add "CCSA $ 99".

Page 26, line 13: Add "Common Control Switching Arrangements $ 99".

DATED AND EFFECTIVE at Anchorage, Alaska this 8th day of July, 1981.

BY DIRECTION OF THE COMMISSION
(Commissioner Susan M. Knowles, not participating.)

(S E A L)

ALASKA PUBLIC UTILITIES COMMISSION
1100 MACKAY BUILDING
338 DENALI STREET
ANCHORAGE, ALASKA 99501
PHONE 276-6222

Referred to	Sig. or Init.	Initials	Date
Zerbetz			
Weatherly	OK	MRW	6/30/81
Guess	OK	CSG	6/30/81
Knowles	C		
Hall	OK	SCH	7/1/81

STAFF ACTION		
ACTION		DATE
Drafted by		
Typed		
Checked		
Approved	MRW	7-10

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners:

Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA26-121, by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for an Interim and Permanent Rate Increase

U-80-100

ORDER NO. 5

ORDER EXTENDING SUSPENSION PERIOD

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by	RS	7/20
Typed by	RS	7/20
Checked by		
Approved by		
" "		
" "		

CO
Reiche
OK MRW 7/20/81
Gu on Lkg 7/20/81
Knowle on Su 7:21:81
Hall mp

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Special Contract between the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT and the UNITED STATES OF AMERICA d/b/a FEDERAL AVIATION ADMINISTRATION	U-78-85 ORDER NO. 10

ORDER CLOSING DOCKET

The Commission finds that all outstanding procedural and substantive matters have been disposed of in the above-captioned proceeding and there are no allocable costs under AS 42.05.651 and 3 AAC 48.150(n)-(1). Accordingly, this Docket should be closed.

ORDER

THE COMMISSION FURTHER ORDERS, That, Docket U-78-85 is closed.

DATED AND EFFECTIVE at Anchorage Alaska, this ____ day of July, 1981.

BY DIRECTION OF THE COMMISSION

(S E A L)

WORK F
COMMISSION AC SH
Received
Hall

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by		
Typed by		
Checked by		
Approved by		
"	"	
"	"	

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA26-121, by the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT for an Interim and Permanent Rate Increase	)	U-80-100
	)	ORDER NO. 6

ORDER AFFIRMING BENCH ORDER GRANTING RATE INCREASE; ESTABLISHING REVENUE REQUIREMENT AND REQUIRING COST-OF-SERVICE STUDY

On October 24, 1980, the MUNICIPALITY OF ANCHORAGE d/b/a MUNICIPAL LIGHT & POWER DEPARTMENT (ML&P) filed a tariff revision, designated as TA26-121, requesting across-the-board interim and permanent rate increases of 23.31 percent ($3,887,225 in additional revenues). Further, the filing requested that the utility be allowed to:

1. use a 1.406 proforma Debt Service Coverage (DSC) ratio which is based on maximum future debt service coverage;

2. implement a $15 connection charge when permanent rate relief is granted. The connection charge reflects changes in the currently effective schedule of fees and charges and Tariff Rule 7.13. (ML&P Tariff Sheets 29, 42, 43 and 100); and

3. delete Rule 7.4 Primary Metering Discount. (ML&P Tariff Sheet No. 43).

COMMISSION ACTION			
Entered	Circ. or	Initials	Date
Beck	CK	cog	10/6/81
Hall	D-	[illegible]	10/6/81
Knowles	SK	SK	10-8-81
Hall	[illegible]	[illegible]	[illegible]
Snowden	[illegible]	[illegible]	10-8-81

STAFF ACTION		
Action	Initials	Date
Drafted by	(illegible)	9/5
Typed by	[illegible]	
Checked by	[illegible]	10/6
Approved by	[illegible]	
"	"	
"	"	

Center when using #4 paper

Please conform right margin better when putting in final. Center was standard order format

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA129-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Revise Line Extension and Unusual Construction Policies	)	U-81-19
	)	ORDER NO. 2

2 sp

ORDER EXTENDING SUSPENSION PERIOD

2 sp

Order No. 1 in this proceeding dated April 13, 1981, suspended the operation of a tariff revision designated as TA129-120, filed by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) for an initial six-month period not to extend beyond October 6, 1981, and instituted an investigation into the reasonableness and propriety of the revision.

On October 5, 1981, the Commission received a letter from ATU stating that "Pursuant to discussions between utility and Commission staff, (Staff) it is agreed to extend the time period for this particular filing by sixty (60) days."

Because the Commission Since it appears that Staff and ATU are engaged in meaningful discussion which may lead to a satisfactory resolution of the issues in this proceeding, the Commission believes that the public interest would best be served by extending the suspension of TA129-120 for an additional sixty (60) days. 60

COMMISSION ACTION			
Referred to	OK or NO	Initials	Date
Guess	OK	CG	10-27-81
Weatherly	OK	MRW	10/27/81
Knowles	OK	SMK	10-27-81
Hall	OK	SH	10-27-81
Snowden	OK	DES	10-29-81

DITTO E

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by	Mat	
Typed by	Donna	
Checked by		
Approved by		
• •		
• •		

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

FINAL CHECKED BY ST & BH
OK TO RELEASE

In the Matter of the Filing of a Tariff Revision, designated as TA8-122, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY for a General Rate Increase	U-76-66 / ORDER NO. 9
In the Matter of the Filing of a Tariff Revision, Designated as TA22-122, by MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY for an Interim and Permanent Rate Increase	U-81-75 / ORDER NO. 1

ORDER SUSPENDING OPERATION OF TARIFF REVISION, GRANTING INTERIM RATE INCREASE, CLOSING DOCKET U-76-66 AND ALLOCATING COSTS.

On September 2, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE WATER UTILITY (AWU) filed a tariff revision, designated as TA22-122 requesting interim and permanent rate increases of 15 percent and 22.95 percent, respectively. The utility proposed that the rate increases be applied across-the-board to all recurring monthly charges for water sales. In addition, the rate increases would be applied to all non-recurring charges except deposits and initial fees for connection, permits and inspection. AWU has also requested that the private fire hydrant maintenance fee be deleted, its elimination having been overlooked in TA21-122.

The Commission Staff (Staff) has reviewed the filing and has determined that it meets the requirements of 3 AAC 48.270 and 3 AAC 48.275(a). AWU has requested a waiver of 3 AAC 48.275(a)(8) since information relating to income taxes is inapplicable to a municipally owned utility.

Routing to	Initials	Date
Cross		
[illegible]	OK MW	10/30/81
Knowles	OK SC	10-30-81
Hall 1	OK SC	11/3/81
Snowden	OK OKB	11-3-81

STAFF ACTION

ACTION	DATES	
Drafted by		
Typed by		
Checked by		
Approved by		

November 4
~~October 27~~, 1981

Mr. John W. Coyne
Assistant Municipal Attorney
Municipality of Anchorage
Pouch 6-650
Anchorage, Alaska 99502

FILED, CERTIFIED BY _____ & _____
ON THE DATE

Dear Mr. Coyne:

RE: The Application of the Municipality of Anchorage
For a Certificate of Public Convenience and
Necessity to Operate as a Public Utility
Furnishing Garbage, Refuse and Trash
Collection and Disposal Service

With recognition of the fact that Staff agreed that responses to questions 3, 4 and 10 could be omitted and the request for exemption by the Municipality of Anchorage, a review of the above referenced application discloses that the application is deficient or otherwise incomplete in the following respects:

(1) The $50.00 application fee required by AS 42.05.661 and noted in instructional footnote 2 of the application has not been paid.

(2) The service area description, Exhibit E, is not set forth in township, range and section designations as requested in instructional footnote 3 of the application.

(3) The proposed tariff included with the application is not set forth in the format approved by the Commission as required by 3 AAC 48.200 and 3 AAC 48.430 and as noted in instructional footnote 13 of the application.

In order that noticing of the application can be made and to avoid any further unnecessary delay in the processing of the application, you are requested to immediately remit the

ALASKA PUBLIC UTILITIES COMMISSION
1100 MacKay Building - 338 Denali Street
Anchorage, Alaska 99501
Phone 276-6222

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA139-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Conditions and Rates for Coin Telephone Service	)	U-81-33
	)	ORDER NO. 2

ORDER EXTENDING SUSPENSION PERIOD

Due to the workload and out-of-state commitments of the hearing panel in this proceeding, and the desire by the full Commission to address the social issues raised by the utility's request to increase the rates for public and semi-public telephone service from 10¢ to 20¢ per call, the Commission will extend the suspension period in this docket until March 1, 1982.

ORDER

THE COMMISSION ORDERS, That, the operation of the tariff revision designated as TA139-120, filed by the Municipality of Anchorage d/b/a Anchorage Telephone Utility, is

needs order, title check

URGENT - PRIORITY
MUST GO OUT DEC 1

COMMISSION ACTION			
Referred to	OK or NO	Initials	Date
Guess			
Weatherly	OK		12/1/81
Knowles			
Hall	OK	SDH	12/1/81
Snowden			

STAFF ACTION		
ACTION	INITIALS	
Drafted by	Hall	
Typed by	BLS	
Checked by		
Approved by		

** RED TAG ITEM

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA139-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Conditions and Rates for Coin Telephone Service	U-81-33 ORDER NO. 2

FINAL CHECKED BY ____ & ____
OK TO RELEASE ____

ORDER EXTENDING SUSPENSION PERIOD, REQUIRING ADDITIONAL INFORMATION, AUTHORIZING CUSTOMER SERVICE SURVEY

On August 11, 1981, the Commission convened in public hearing in its Anchorage office to take public testimony and consider the evidence concerning the tariff revision, designated as TA139-120, filed by MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) which proposed changes in the conditions and rates for coin telephone service. Among other matters, the

STAFF ACTION		
ACTION	INITS	DATE
Drafted by		
Typed by		
Checked by		6-15
Approved by		6/16
		6-16

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA20-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for a Permanent General Sewer Rate Increase in the Anchorage, Eagle River, and Girdwood-Alyeska Sewer Service Areas	)	U-80-4
In the Matter of the Filing of a Tariff Revision, Designated as TA23-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for Consolidation of Service Areas and Permanent Reduction of Rates	)	U-81-36

ERRATA NOTICE

ORDER NO. 10 and 1
~~ORDER NO. 1~~

ORDER SUSPENDING SERVICE AREA CONSOLIDATION AND APPROVING PERMANENT RATE REDUCTIONS
(Issued June 15, 1981)

Line 13, page 2: ~~Change "(opposed)" to "opposed".~~

Line 22, page3: Change "iself" to "itself".
Line 22 page4 Change "in" to "on".
Line 28, page 5: Change "tha" to "the".

DATED AND EFFECTIVE at Anchorage, Alaska, this 16th day of June, 1981.

BY DIRECTION OF THE COMMISSION

COMMISSION ACTION			
Referred to	OK or NO	Initials	Date
Guess	OK	CSG	1-21-82
Weatherly	OK	MRW/CJ	1-20-82
Knowles		w/o	
Hall	OK	SCH	1-28-82
Snowden	OK	DES	1-28-82

STAFF ACTION		
ACTION	INITIALS	DATE
Drafted by	Evans	1118
Typed by	BES	1119
Checked by	DED	1119
Approved by		1119
	SJH	

2d Draft

STIBH

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall
Diana E. Snowden

In the Matter of the Filing of a Tariff Revision, Designated as TA148-120, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY To Change the Rate Structure for the Provision of Basic Telephone Instruments	)	U-81-46
	)	ORDER NO. 2

On June 16, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE TELEPHONE UTILITY (ATU) filed a tariff revision, designated as TA148-120, requesting a change in rates and rate structure to separate billing charges between service access lines and telephone instruments. ATU stated that this was necessitated by recent Federal Communications Commission (FCC) actions.

ATU's present tariff provides for basic local business or residence service which includes the first or main telephone instrument at no additional charge. An additional charge is assessed for each extension connected to the basic local service. In TA148-120, ATU proposed to eliminate the extension charge, but proposed to charge the customer for each instrument (including the main instrument) provided by the utility. ATU asserted that elimination of extension service charges and implementation of

COMMISSION TARIFF ACTION MEETING

NC

Commissioners: Zerbetz
Weatherly
Guess
Knowles
Hall

AGENDA January 9, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
47-45	Nushagak Electric Cooperative, Inc.	2/9	Power Production Cost Assistance Staff recommendation: Approval	Approved Unanimously
6-210	Burton Carver & Co., Inc. (Homer)	1/27	Roll-off truck service Staff recommendation: Rejection	Suspended and grant interim w/Commrs. Guess & Knowles dissenting
7-215	Burton Carver & Co., Inc. (Hope)	1/27	Roll-off truck service Staff recommendation: Rejection	Suspended and grant interim w/Commrs. Guess & Knowles dissenting
			Staff recommendation:	
			Staff recommendation:	
44-3	General Telephone Company of Alaska	1/19	Unbundle mileage charge for station in off-premises extensions Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 271

AGENDA January 9, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
25-120	Anchorage Telephone Utility	1/9	Grandfather Key Systems 1 and 2 Staff recommendation: Approval	Approved Unanimously
41-25	Sitka Telephone Company	1/16	Rule Change re Wording on Billing Form Staff recommendation: Approval	Suspend unless waiver of 45 days received
42-25	Sitka Telephone Company	1/16	Billing Form Change Staff recommendation: Approval	Suspend unless waiver of 45 days received
84-19	Matanuska Telephone Association, Inc.	1/19	One Party Service in Eagle River Staff recommendation: Approval	Approved w/notice in next bill that this will take effect on the next bill
86-19	Matanuska Telephone Association, Inc.	2/5	Correction of Typographical Error Staff recommendation: Approval	Approved Unanimously
13-96	Bettles Light & Power	1/13	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 272

AGENDA January 9, 1961
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
10-230	Amfac Foods	1/16	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
32-63	Fort Yukon Utilities	1/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
63-16	Kodiak Electric Assoc., Inc.	1/20	Fuel Cost Rate Adjustment - Port Lions Staff recommendation: Approval	Approved Unanimously
64-16	Kodiak Electric Assoc., Inc.	1/20	Power Production Assistance - Port Lions Staff recommendation: Approval	Approved Unanimously
99-1	Alaska Electric Light & Power	1/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
11-24	Pelican Utility Company (Electric)	1/30	Fuel Cost Rate Adjustment Staff recommendation: Approval of a .42¢/KWH Surcharge	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 273

AGENDA January 9, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
153-2	Alaska Power & Telephone (Skagway)	1/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
154-2	Alaska Power & Telephone (Hydaburg)	1/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
155-2	Alaska Power & Telephon (Tok)	1/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
156-2	Alaska Power & Telephone (Craig)	1/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
41-88	Northern Power & Engineering	1/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
U-80-26	Yakutat Power, Inc.	--	Compliance with order Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 274

AGENDA January 9, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-80-44	Nushagak Electric Cooperative, Inc..	--	Compliance with order Staff recommendation: Approval	Approved Unanimously
U-80-75	Interior Telephone Company, Inc.	--	Compliance with order Staff recommendation: Approval	Hold for revision
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	
		--	Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

NO. 275

AGENDA January 23, 1981
(DATE)

Commrs. Zerbetz
Weatherly
Guess
Hall

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
TA 18-22	Naknek Electric Association, Inc.	2/19	Power Production Assistance Staff recommendation: Approval	Approved Unanimously
U-80-84	College Utilities Corporation(Sewer)	1/26	Emergency Interim Rate Increase Staff recommendation: Suspension	Approved Unanimously
U-80-85	College Utilities Corporation(Water)	1/26	Emergency Interim Rate Increase Staff recommendation: Approval	Approved Unanimously
42	McGahan Utilities, Inc.	1/26	Permanent Rate Increase Staff recommendation: Approval	Approved Unanimously
85-19	Matanuska Telephone Association, Inc.	/26	Custom Calling Service in Wasilla Staff recommendation: Approval with 3/1/82 Expiration date	Approved Unanimously
87-19	Matanuska Telephone Association, Inc.	2/5	Correction of error Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 276

AGENDA January 23, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
125-120 Sup. 1	Anchorage Telephone Utility	1/9	Grandfather Key Systems 1 and 2 Staff recommendation: Approval	Approved Unanimously
45-3 46-3	General Telephone Company of Alaska	1/29 2/9	MITEL SX-100 and SX-200 Rates Paging and Intercommunicating Equipment and Emergency Reporting Service Rates Staff recommendation: Approval	Approved Unanimously
40-43	Bethel Utilities Corporation	1/31	Deliquent Account Charge of 5 percent Staff recommendation: Approval	Approved Permanently Unanimously
-1	Alaska Electric Light and Power.	2/2	Pole Contact Agreement Staff recommendation: Approval	HOLD
156-15	Juneau & Douglas Telephone Company	2/2	Handling Charge for Deliquent Accounts Staff recommendation: Approval	Approved w/stipulation Unanimously
11-230	Amfac Foods, Inc.	2/23	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 277

AGENDA January 23, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
17-22	Naknek Electric Association, Inc.	2/19	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
6-92	Tanana Power Company	3/2	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
29-121	Anchorage Municipal Light and Power	3/2	Gas Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
4-14	Haines Light and Power	2/19	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
8-160	Cordova Electric Cooperative, Inc.	2/12	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
U-80-100	Anchorage Municipal Light and Power	--	Compliance with order Staff recommendation: Approval.	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 278

AGENDA January 23, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-80-6	Matanuska Electric Association, Inc.	--	Compliance with Order Staff recommendation: Approval	Approved Unanimously
U-80-43	Homer Electric Association, Inc.	--	Compliance with Order #3 Staff recommendation: Approval	HOLD
U-80-43	Homer Electric Association, Inc.	--	Compliance with Order #4 Staff recommendation: Approval	HOLD
U-80-89	McGrath Light & Power Company	--	Compliance with Order Staff recommendation: Approval	Approved Unanimously
U-80-4	Anchorage Sewer Utility	--	Compliance with Order Staff recommendation:	Approved Unanimously
		--	Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

NO. 279

AGENDA February 11, 1981
(DATE)

Commissioners:
Guess
Weatherly
Zerbetz
Hall

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
NONE	CITY OF NOME	N/A	Power Production Assistance Staff recommendation: Approval of 3.1874¢/KWH PPA	Approved Unanimously
197-98	ALASCOM, INC.	2/23	Private Line Equipment for ATU Staff recommendation: Approval	Approved Unanimously
41-25 & 42-25	SITKA TELEPHONE CO.	Waived	Wording Change on Billing Form Staff recommendation: Conditional Approval of Waiver	Approved Unanimously
157-2	ALASKA POWER & TELEPHONE (SKAGWAY)	2/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
158-2	ALASKA POWER & TELEPHONE (TOK)	2/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
159-2	ALASKA POWER & TELEPHONE (CRAIG)	2/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously

Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 280

AGENDA February 11, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
101-1	ALASKA ELECTRIC LIGHT & POWER	2/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
33-63	FORT YUKON UTILITIES	3/5	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
14-96	Bettles Light & Power	3/9	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
3-227	ARCTIC UTLITIES, INC.	3/9	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
41-43	BETHEL UTILITIES CORP.	3/2	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
49-14	HAINES LIGHT & POWER CO., INC.	3/20	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval * Not Available Yet	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 281

AGENDA February 11, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
28-10	COPPER VALLEY ELECTRIC ASSOCIATION, INC.	3/5	Fuel Cost Rate Adjustment and Power Production Assistance (Glennallen & Valdez) Staff recommendation: Approval of requested surcharges and requested Glennallen PPA; Approval of 2.44¢/KWH PPA at Valdez	Approved Unanimously
48-45	NUSHAGAK ELECTRIC COOPERATIVE, INC.	3/21	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
49-45	NUSHAGAK ELECTRIC COOPERATIVE, INC.	3/21	Power Production Assistance Staff recommendation: Approval	Approved Unanimously
65-16	KODIAK ELECTRIC ASSOC., INC.	3/12	Fuel Cost Rate Adjustment - Kodiak Staff recommendation: Approval	Approved Unanimously
66-16	KODIAK ELECTRIC ASSOC., INC.	3/12	Power Production Assistance - Kodiak Staff recommendation: Approval	Approved Unanimously
U-80-48	PATRICIA S.SCHROYER d/b/a LAZY ACRES SUBDIVISION	--	Compliance w/Order Staff recommendation: Approval	Approved Unanimously

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 282

Commissioners: Gordon J. Zerbetz, Chairman
Carolyn S. Guess
Stuart C. Hall

AGENDA March 2, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
9-66	Radio Communications, Inc.	Waived	Special Contract w/Shell Oil Staff recommendation: Suspension	Approved for 30 days Unanimously
22-32	Homer Electric Association, Inc.	3/13	Rules & Regulations Staff recommendation: Interim Approval	Held w/hearing scheduled for week of 3/16 Unanimously
126-120	Anchorage Telephone Utility	3/2	Program Amplifier Rates	Approved Unanimously
127-120		3/2	Bridge for Several Legs of Common Data Circuit rates	
128-120		3/2	Reconfiguration Charge for Class L PBX	
130-120		3/9	Private Line Terminal Equipment Rates	
131-120		3/9	Staff recommendation: Deletion or Limitation of PBX Systems Approval	
148-49	Glacier State Telephone Company	3/9	Digitone Receiver card Rate for SL-1 PABX and Touchcall rate for Kodiak CGB Staff recommendation: Suspension and Interim Approval	Suspended and Granted Interim Unanimously
30-121	Anchorage Municipal Light & Power	4/6	Gas cost rate adjustment Staff recommendation: Approval	Approved Unanimously
12-24	Pelican Utility Company	3/20	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously

Not Available Yet

COMMISSION TARIFF ACTION MEETING

No. 283

AGENDA March 2, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
103-1	Alaska Electric Light & Power	4/3	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
42-88	Northern Power & Engineering	3/30	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
42-43	Bethel Utilities Corp.	3/30	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
9-160	Cordova Electric Cooperative, Inc.	3/23	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
50-14	Haines Light & Power Co., Inc.	3/26	Fuel Cost rate adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
51-45	Nushagak Electric Cooperative, Inc.	4/6	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously

Not Available at ICC

COMMISSION TARIFF ACTION MEETING

NO. 285

AGENDA March 2, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-80-85	College Utilities Corp. (Water)	---	Compliance w/order Staff recommendation: Conditional Approval	Approved Unanimously
U-80-8	College Utilities Corp. (Water)	---	Compliance w/order Staff recommendation: Conditional Approval	Approved Unanimously
U-80-56	Juneau & Douglas Telephone Company	--	Compliance w/order Staff recommendation: Approval	Approved Unanimously
			Staff recommendation:	
			Staff recommendation:	
		--	Staff recommendation:	

* Not Available for

COMMISSION TARIFF ACTION MEETING

NO. 286

AGENDA March 13, 1981 (DATE)

Commissioners: Zerbetz
Weatherly
Guess

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
	Manley Utility Company and Takotna Village Association, Inc.	N/A	Power Production Assistance Staff recommendation: Notify MUC & TVA of audit requirement; Direct Staff to perform audits.	Approved Unanimously
7-92	Tanana Power Company	N/A	Rate Increase Staff recommendation: Approval of Staff Calculated Rate Increase	Approved Unanimously
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	

* Not Available Yet

COMMISSION TARIFF ACTION

NO. 286.1

AGENDA March 13, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
198-98	ALASCOM, INC.	3/16	Private Direct Toll Access Line Service for St. George and Akutan Staff recommendation: Suspension	Approved w/Commers. Guess Dissenting
102-1	ALASKA ELECTRIC LIGHT & POWER	3/19	Budget Payment Plan for All-Electric Residential and Commercial customers Staff recommendation: Approval	Approved Unanimously
149-49	GLACIER STATE TELEPHONE COMPANY	4/10	Revised Base Rate Area for Kodiak Coast Guard Base Staff recommendation: Approval	Approved Unanimously
160-2	ALASKA POWER & TELEPHONE (Craig)	3/26	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
162-2	ALASKA POWER & TELEPHONE (Skagway)	3/26	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
163-2	ALASKA POWER & TELEPHONE (Craig)	4/9	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously

Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 287

AGENDA March 13, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
12-230	AMFAC FOODS, INC.	4/3	Fuel cost rate adjustment Staff recommendation: Approval	Approved Unanimously
29-10	COPPER VALLEY ELECTRIC ASSOCIATION, INC.	4/6	Fuel cost rate adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
68-16	KODIAK ELECTRIC ASSOCIATION, INC. (Kodiak)	4/13	Power Production Assistance Update Staff recommendation: Approval	Approved Unanimously
69-16	KODIAK ELECTRIC ASSOCIATION, INC. (Kodiak)	4/13	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
U-81-3	BURTON CARVER & CO., INC.	--	Compliance with order Staff recommendation: Approval	Hold
U-81-4	BURTON CARVER & CO., INC.	--	Compliance with order Staff recommendation: Approval	Hold

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 288

AGENDA March 27, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
50-45	Nushagak Electric Cooperative, Inc.	4/9	Line Extension Policy Changes Staff recommendation: Suspension	Suspended Unanimously
129-120	Anchorage Telephone Utility	4/6	Line Extension Policy Changes Staff recommendation: Suspension	Suspended Unanimously
132-120	Anchorage Telephone Utility	Waive	Credit for Returning Instrument to Phone Store Staff recommendation: Approval	Approved Unanimously
133-120	Anchorage Telephone Utility	1/10	Special contracts with DECCO - Alaska for FAA Staff recommendation: Approval	Approved Unanimously
88-19	Matanuska Telephone Association, Inc.	Waive	Starset Headset Rate Staff recommendation: Approval	Approved Unanimously
89-19	Matanuska Telephone Association, Inc.	4/3	4800 Baud Modem Rate Staff recommendation: Approval of reduced rate	Approved Unanimously

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 289

AGENDA March 27, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
31-121	Anchorage Municipal Light & Power	4/27	Gas Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
161-2	Alaska Power & Telephone (Tok)	Waived	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
164-2	Alaska Power & Telephone (Tok)	4/9	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
166-2	Alaska Power & Telephone (Skagway)	4/23	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
34-63	Fort Yukon Utilities	4/6	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
33-53	Yakutat Power, Inc.	4/9	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 290

AGENDA March 27, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
13-12	Northway Power & Light	4/16	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
104-1	Alaska Electric Light & Power	4/27	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
30-10	Copper Valley Electric Association, Inc.	5/1	Fuel Cost Rate Adjustments and Power Production Assistance Updates Staff recommendation: Approval	Approved Unanimously
10-240	Tlingit-Haida Regional Electrical Authority	5/7	Fuel Cost Rate Adjustment and Power Production Assistance Update Staff recommendation: *	Approved Unanimously
53-45,	Nushagak Electric Cooperative, Inc.	5/4	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
54-45	Nushagak Electric Cooperative, Inc.	5/4	Power Production Assistance Update Staff recommendation: Approval	Approved Unanimously

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 291

AGENDA March 27, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
1D-160	Cordova Electric Cooperative, Inc.	4/27	Power Production Assistance Update Staff recommendation: Approval	Approved Unanimously
U-80-75	Interior Telephone Company	--	Compliance with order Staff recommendation: Approval	Approved Unanimously
U-81-3	Burton Carver & Co., Inc.	--	Compliance with order Staff recommendation: Approval	Approved Unanimously
U-81-4	Burton Carver & Co., Inc.	--	Compliance with order Staff recommendation: Approval	Approved Unanimously
			Staff recommendation:	
		--	Staff recommendation:	

Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 292

Commissioners: Guess
Weatherly
Knowles
Hall

AGENDA April 13, 1981 (DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
199-98	Alascom, Inc.	4/27	FAA Special Radio Control System Staff recommendation: Approval	APPROVAL UNANIMOUSLY
22-28	Central Alaska Utilities, Inc.	4/27	Offsite Assessments Staff recommendation: Interim Approval	INTERIM REFUNDABLE APPROVAL UNANIMOUSLY
23-97	College Utilities Corp. (Water)	4/13	Assessments Staff recommendation: Approval of Interim and Suspension of Permanent	INTERIM APPROVAL & PERMANENT SUSPENSION UNANIMOUSLY
24-37	College Utilities Corp. (Sewer)	4/13	Assessments Staff recommendation: Approval of Interim and Suspension of Permanent	INTERIM APPROVAL & PERMANENT SUSPENSION UNANIMOUSLY
22-126	Anchorage Sewer Utility	4/17	Contract w/Kulis Air National Guard Base Staff recommendation: Approval	APPROVAL UNANIMOUSLY
			Staff recommendation:	

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 293

AGENDA April 13, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
90-19	Matanuska Telephone Association, Inc.	4/24	Change of Palmer and Eagle River office addresses and addition of Wasilla office address Staff recommendation: Approval	APPROVAL UNANIMOUSLY
95-19	Matanuska Telephone Association, Inc.	5/11	Correction of metes and bounds of Talkeetna Exchange Staff recommendation: Approval	APPROVAL UNANIMOUSLY
137-120	Anchorage Telephone Utility	5/11	Relocation of rate to Private Line Section and deletion of rate Staff recommendation: Approval	APPROVAL UNANIMOUSLY
35-63	Fort Yukon Utilities	5/1	Fuel cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
105-1	Alaska Electric Light & Power	5/18	Fuel cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
43-43	Bethel Utilities Corp.	5/4	Fuel cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 294

AGENDA April 13, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
70-16	Kodiak Electric Association, Inc.	5/15	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
71-16	Kodiak Electric Association, Inc.	5/21	Power Protection Assistance Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-79-90	Radio Communications, Inc.	----	Compliance w/order Staff recommendation: Approval	APPROVAL UNANIMOUSLY
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 295

Commissioners: Guess
Weatherly
Knowles
Hall

AGENDA April 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
24-97	COLLEGE UTILITIES CORP.	5/25	Omnibus administrative, fixed charge and rate design changes.	REJECTED UNANIMOUSLY
25-37			Staff recommendation: rejection	
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	
67-16	KODIAK ELECTRIC ASSOC. INC	4/3*	Reconnection fee increase after infraction of payment requirements	APPROVAL UNANIMOUSLY
			Staff recommendation: Approval	
23-28	CENTRAL ALASKA UTILITIES, INC.	Waived	Contract w/Municipality of Anchorage	APPROVAL UNANIMOUSLY
			Staff recommendation: Approval	

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 296

AGENDA April 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
150-49	GLACIER STATE TELEPHONE CO.	4/27	Additional Equipment for the Kodiak Coast Guard Base PABX Staff recommendation: Approval	HOLD
43-25 44-25	SITKA TELEPHONE COMPANY	5/4	Billing Regulations change Billing Form change Staff recommendation: Approval	APPROVAL UNANIMOUSLY
91-19	MATANUSKA TELEPHONE ASSOC INC.	4/24	Textual changes to index and rate schedules Staff recommendation: Approval	APPROVAL UNANIMOUSLY
32-121	ANCHORAGE MUNICIPAL LIGHT & POWER	5/25	Gas Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
13-42	PELICAN UTILITY COMPANY	5/18	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
43-88	NORTHERN POWER & ENGINEERING	5/25	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 297

AGENDA April 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
167-2	ALASKA POWER & TELEPHONE (SKAGWAY)	5/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
168-2	ALASKA POWER & TELEPHONE (TOK)	5/28	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
169-2	ALASKA POWER & TELEPHONE (HYDABURG)	5/28	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
31-10	COPPER VALLEY ELECTRIC ASSOCIATION, INC.	5/25	Fuel Cost Rate Adjustment and Power Production Assistance (Glennallen) Staff recommendation: Approval	APPROVAL UNANIMOUSLY
20-100	CORDOVA ELECTRIC COOP, INC	5/28	Power Production Assistance Staff recommendation: Approval of PPA lower than requested	APPROVAL UNANIMOUSLY
U-81-18	TANANA POWER COMPANY	--	Compliance w/order Staff recommendation: Approval Not Available Yet	APPROVAL UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

NO. 298

AGENDA April 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-80-57	ANCHORAGE TELEPHONE UTIL.	--	Compliance w/order Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-80-85	COLLEGE UTILITIES CORP.	--	Compliance w/order 1 and 4 Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-80-[illegible]	COLLEGE UTILITIES CORP.	--	Compliance w/order 6 Staff recommendation: Conditional approval	HOLD UNTIL 4/27/81
U-80-84 U-80-58	COLLEGE UTILITIES CORP.	--	Compliance w/order 6 Staff recommendation: Cond.tional approval	HOLD UNTIL 4/27/81
			Staff recommendation:	
		--	Staff recommendation:	

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 299

AGENDA May 8, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
			Staff recommendation:	
			Staff recommendation:	
3-208	NUSHAGAK TELEPHONE COOPERATIVE, INC.	5/8	CUSTOM CALLING SERVICE Staff recommendation: APPROVAL	APPROVED W/QUALIFICATIONS UNANIMOUSLY
134-120	ANCHORAGE TELEPHONE UTILITY	5/11	CHANGE IN AVAILABLE OFFERINGS OF ANSWERING AND RECORDING DEVICES Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
135-120 136-120,	ANCHORAGE TELEPHONE UTILITY	5/11	STRAIGHT LINE FEATURE TELEPHONE INSTRUMENT FOR ROLM CBX AND SCBX AND SL-1 Staff recommendation: Suspension for further investigation; Approval of non-refundable interim rate	SUSPENDED AND INTERIM NONREFUNDABLE W/COMM. KNOWLES DISSENTING ON REFUND
150-15	JUNEAU & DOUGLAS TELEPHONE COMPANY	5/15	TOUCH CALLING SERVICE IN DOUGLAS EXCHANGE Staff recommendation: SUSPENSION AND INTERIM APPROVAL OF $1.00 RATE	PERMANENTLY APPROVED UNANIMOUSLY

* Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 300

AGENDA May 8, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
26-4	ALASKA GAS & SERVICE	6/15	DEPOSIT RULE CHANGE Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
36-63	FORT YUKON UTILITIES	6/1	FUEL COST RATE ADJUSTMENT Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
			Staff recommendation:	
72-16	KODIAK ELECTRIC ASSOCIATION, INC.	6/11	FUEL COST RATE ADJUSTMENT Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
73-16	KODIAK ELECTRIC ASSOCIATION, INC.	6/11	POWER PRODUCTION ASSISTANCE UPDATE Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
U-80-56	JUNEAU & DOUGLAS TELEPHONE COMPANY	--	COMPLIANCE W/ORDER Staff recommendation: REJECTION Not Available Yet	REJECTED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

NO. 301

AGENDA May 8, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-79-23	TLINGIT-HAIDA REGIONAL ELECTRIC AUTHORITY	--	COMPLIANCE W/ORDER Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
U-81-18	TANANA POWER COMPANY	--	COMPLIANCE W/ORDER Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
U-79-36	COPPER VALLEY TELEPHONE COOPERATIVE	--	COMPLIANCE W/ORDER Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
U-80-95	MATANUSKA TELEPHONE ASSOCIATION, INC.	--	COMPLIANCE W/ORDER Staff recommendation: APPROVAL	APPROVED UNANIMOUSLY
			Staff recommendation:	
		--	Staff recommendation:	

Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 302

Commissioners Present: Guess
Weatherly
Knowles
Hall

AGENDA May 22, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
TA22-18	MATANUSKA ELECTRIC ASSOCIATION, INC.	5/26	Interim & Permanent Rate Increases Staff recommendation: Suspension and Approval of 16.79% Interim	2 recommendations: Wipperman - approval Evans - approval plus suspension period could change for rate redesign phase of the case - unanimously
TA139-120	ANCHORAGE TELEPHONE UTILITY.	6/1	Public and Semi-Public Coin Telephone Service Staff recommendation: Suspension	Suspend Unanimously
TA15-165	INTERIOR TELEPHONE COMPANY	5/22	New Rate Development Factors Staff recommendation: Interim Approval	Suspend Interim approval; consolidated with perm. rate case. Unanimously
-72	MANLEY UTILITY COMPANY	--	Power Production Assistance Staff recommendation: * Approval of PPA different from that requested	CONCUR ~~Approval~~ Unanimously
TA92-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	6/1	Hearing and Speech Impaired Communications Equipment Staff recommendation: Approval in Part & Rejection in Part	Did not concur: Interim approval; investigate rule conditions Hall - concured with Staff.
TA93-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	6/8	Individual Tariff for Alaska Division of Emergency Services Staff recommendation: Approval	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 303

AGENDA May 22, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
TA94-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	6/11	Individual Tariff for University of Alaska, Department of Agriculture Staff recommendation: ~~Suspension~~ Approval	Approval Unanimously
TA138-120	ANCHORAGE TELEPHONE UTILITY	5/26	Consolidation of GAB Telecommunications Company and Anchorage Telephone Utility Tariffs Staff recommendation: Approval, with certain procedural exceptions	Approval with conditions; Knowles, Guess, Hall. Weatherly did not concur.
TA140-120	ANCHORAGE TELEPHONE UTILITY	6/4	Revised Rates for Key System 5, 2 new telsets, and Alternate Payment Plan for Key System 5 Staff recommendation: *	Approval Unanimously
TA44-88	NORTHERN POWER & ENGINEERING	5/28	Delinquent Account Charge Staff recommendation: Approval	Approval Unanimously
TA33-121	ANCHORAGE MUNICIPAL LIGHT & POWER	6/29	Gas Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
TA13-230	AMFAC FOODS, INC.	6/1	Fuel Cost Rate Adjustment Staff recommendation: Approval.	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 304

AGENDA May 22, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
TA14-230	AMFAC FOODS, INC.	6/1	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
TA14-42	NORTHWAY POWER & LIGHT	6/15	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
TA9-5	ANIAK LIGHT & POWER	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
\170-2	ALASKA POWER & TELEPHONE (Skagway)	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	Appro al Unanimously
TA171-2.	ALASKA POWER & TELEPHONE (Tok)	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
TA172-2	ALASKA POWER & TELEPHONE (Craig)	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 305

AGENDA May 22, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
TA11-240	TLINGIT-HAIDA REGIONAL ELETRIC AUTHORITY	7/2	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Hold - Pending Revenue Requirement Order Release
TA51-14	HAINES LIGHT & POWER	7/2	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approval Unanimously
TA32-10	COPPER VALLEY ELECTRIC ASSOCIATION, INC.	6/26	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approval Unanimously
-78-14	M & D ENTERPRISES	---	New Tariff in Compliance w/Order Staff recommendation: Approval with Staff Modifications	Approval Unanimously
U-79-98	YUKON TELEPHONE, INC.	---	Compli /Order Staff recommendation: Approval	Approval Unanimously
U-80-65	FAR NORTH SANITATION	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 306

AGENDA May 22, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-81-25	CENTRAL ALASKA UTILITIES, INC.	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-80-84	COLLEGE UTILITIES CORP. (Sewer)	--	Compliance w/Order Staff recommendation: Conditional Approval	Approval Unanimously
U-80-85	COLLEGE UTILITIES CORP. (Water)	--	Compliance w/Order Staff recommendation: Conditional Approval	Approval. Unanimously
-81-23	COLLEGE UTILITIES CORP. (Water)	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-81-24	COLLEGE UTILITIES CORP. (Sewer)	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
			Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

No. 307

Commissioners Present: Knowles
Hall
Guess - concurred with
Knowles & Hall
on June 9, 1981.

AGENDA June 8, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
	NAPAKIAK CORPORATION	--	Power Production Assistance Staff recommendation: Staff to Audit	APPROVAL UNANIMOUSLY
	TAKOTNA COMMUNITY ASSOCIATION UTILITIES	--	Power Production Assistance Staff recommendation: Approve PPA; complete filing deficiencies	APPROVAL UNANIMOUSLY
200-98	ALASCOM, INC.	7/10	Special Equipment Arrangement for Private Line Staff recommendation: *	WITHDRAWN
15-230	AMFAC FOODS, INC.	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
4-227	ARCTIC UTILITIES, INC	7/2	Fuel Cost Rate Adjustment Staff recommendation: Interim refundable approval	APPROVAL UNANIMOUSLY
			*Not Available Yet	

COMMISSION TARIFF ACTION MEETING

No. 308

AGENDA June 8, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
106-1	ALASKA ELECTRIC LIGHT & POWER CO.	6/29	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
36-53	YAKUTAT POWER CO., INC.	7/10	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
15-96	Bettles Light & POWER	7/10	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
74-16	KODIAK ELECTRIC ASSOC	7/16	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY
55-45	NUSHAGAK ELECTRIC COOP., INC.	7/16	Fuel Cost Rate Adjustment Staff recommendation: Approval	APPROVAL UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 309

AGENDA June 8, 1981
(Date)

TA No.	UTILIT. NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
75-16	KODIAK ELECTRIC ASSOCIATION, INC.	7/16	Power Production Assistance Staff recommendation: Approval	APPROVAL UNANIMOUSLY
56-45	NUSHAGAK ELECTRIC COOP., INC.	7/16	Power Production Assistance Staff recommendation: Approval	APPROVAL UNANIMOUSLY
30-160	CORDOVA ELECTRIC COOP., INC.	7/6	Power Production Assistance Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-80-97	ANCHORAGE WATER UTILITY	N/A	Compliance with Order Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-80-80	TLINGIT-HAIDA REGIONAL ELECTRIC AUTHORITY	N/A	Compliance with Order Staff recommendation: Approval	APPROVAL UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 310

AGENDA June 8, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-80-23	GLACIER STATE TELEPHONE COMPANY	N/A	Compliance with Order Staff recommendation:	APPROVAL UNANIMOUSLY
U-80-75	INTERIOR TELEPHONE CO.	N/A	Compliance with Order Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-75-68	ALASKA GAS & SERVICE CO.	N/A	Compliance with Order Staff recommendation: Approval	APPROVAL UNANIMOUSLY
U-80-43	HOMER ELECTRIC ASSOCIATION, INC.	N/A	Compliance with Order Staff recommendation: Approval	WITHDRAWN
			Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

No. 311

AGENDA June 10, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
23-126	ANCHORAGE SEWER UTILITY	6/15	Rate Consolidation Permanent Rate reductions across-the-board, denial of deletion of definitions & rate schedules, addition of definition, & order to show cause why AB55A rates Staff recommendation: should not be decreased.	APPROVED UNANIMOUSLY
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

No. 312

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-81-2	ALASCOM, INC.	--	Local Exchange Tariff for Saint Paul Staff recommendation: Approval	APPROVED UNANIMOUSLY W/Modifications
TA201-98 U-81-2	ALASCOM, INC.	7/23	Compliance w/Order No. 2, U-81-2 Staff recommendation: Approval	APPROVED UNANIMOUSLY
29-4	ALASKA GAS & SERVICE CO.	7/13	Purchased Gas Cost Adjustment Staff recommendation: Approval	APPROVED UNANIMOUSLY
-4 28-4	ALASKA GAS & SERVICE CO.	6/29	Increase in Residential Rates Amendment to contract w/Muni. of Anchorage Staff recommendation: Rejection	REJECTED UNANIMOUSLY
8-217	Anchorage Refuse, Inc.	7/2	Interim and Permanent Rate Increases Staff recommendation: *	HOLD until 6/30 or 7/1
			* Not Available Yet	

COMMISSION TARIFF ACTION MEETING

No. 313

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
96-19	MATANUSKA TELEPHONE ASSOC., INC.	6/26	Rate Development Factor Change Staff recommendation: Suspension and Interim Approval	SUSPENDED & INTERIM APPROVED UNANIMOUSLY
151-49	GLACIER STATE TELEPHONE COMPANY	7/6	Permanent Rate Increase Staff recommendation: Suspension	SUSPENDED UNANIMOUSLY
142-120	ANCHORAGE TELEPHONE UTILITY	6/25	Manual EIA Switch for Private Line Equipment Staff recommendation: Approval	APPROVED UNANIMOUSLY
143-120	ANCHORAGE TELEPHONE UTILITY	6/25	Toll Only Print Option for Key System 6 Staff recommendation: Approval	APPROVED UNANIMOUSLY
144-120	ANCHORAGE TELEPHONE UTILITY	6/25	Data Station Termination for Private Line Data Equipment Staff recommendation: Approval	APPROVED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 314

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
145-120	ANCHORAGE TELEPHONE UTILITY	7/2	Several Changes to the Special Telephone section Staff recommendation: Approval	APPROVED UNANIMOUSLY
146-120	ANCHORAGE TELEPHONE UTILITY	7/2	Deletions and changes to the Secretarial Answering Service section Staff recommendation: Approval	APPROVED UNANIMOUSLY
34-121	ANCHORAGE MUNICIPAL LIGHT & POWER	7/27	Gas Cost Rate Adjustment Staff recommendation: Approval	APPROVED UNANIMOUSLY
24	Pelican Utility Co.	7/10	Fuel Cost Rate Adjustment Staff recommendation: Approval of surcharge different from that proposed.	APPROVED UNANIMOUSLY
173-2	ALASKA POWER & TELEPHONE	7/27	Fuel Cost Rate Adjustment (Craig) Staff recommendation: Approval	APPROVED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 315

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
[illegible]-2	ALASKA POWER & TELEPHONE	7/27	Fuel Cost Rate Adjustment (Hydaburg) Staff recommendation: Approval	APPROVED UNANIMOUSLY
175-2	ALASKA POWER & TELEPHONE	7/27	Fuel Cost Rate Adjustment (Skagway) Staff recommendation: Approval	APPROVED UNANIMOUSLY
52-14	HAINES LIGHT & POWER	7/23	Fuel Cost Rate Adjustment & Power Production Assistance Staff recommendation: Approval	APPROVED UNANIMOUSLY
[illegible]10	COPPER VALLEY ELEC. ASSOCIATION, INC.	7/24	Fuel Cost Rate Adjustment & Power Production Assistance (Glennallen and Valdez) Staff recommendation: Approval	APPROVED UNANIMOUSLY
4D-160	CORDOVA ELECTRIC COOP., INC.	7/30	Power Production Assistance Staff recommendation: Approval	APPROVED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 316

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
			Staff recommendation:	
U-80-100	ANCHORAGE MUNICIPAL LIGHT & POWER	--	Compliance w/Bench Order Staff recommendation: Approval	APPROVED UNANIMOUSLY
U-80-56	JUNEAU & DOUGLAS TELEPHONE COMPANY	--	Compliance w/order Staff recommendation: Approval	APPROVED UNANIMOUSLY
0-89	MC GRATH LIGHT & POWER	--	Compliance w/order Staff recommendation: Approval	APPROVED UNANIMOUSLY
TA15-44	MC GRATH LIGHT & POWER	--	Power Production Assistance Compliance Staff recommendation: Approval	APPROVED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 317

AGENDA June 19, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
TA138-120	ANCHORAGE TELEPHONE JTILITY	--	Compliance w/By Direction Letter Staff recommendation: Approval	APPROVED UNANIMOUSLY
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

NO. 318

AGENDA July 10, 1981 (DATE)

Commrs: Guess
Knowles
Hall

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
			Staff recommendation:	
1	NAPAKIAK CORPORATION	--	Power Production Assistance Staff recommendation:	Not Available
15-42	NORTHWAY POWER & LIGHT, INC.	7/10	Rate Increase Staff recommendation: Grant Interim Less than requested and Suspend Permanent	Approval of Interim & Suspension of Permanent Unanimously
17-1	ALASKA ELECTRIC LIGHT & POWER	7/16	Rate Increase Staff recommendation: Grant Interim Less than Requested and Suspend Permanent	Approval of Interim & Suspension of Permanent Unanimously
10-5	ANIAK LIGHT & POWER	8/3	Service Area Correction Staff recommendation: Approval	Approval Unanimously
23-18	MATANUSKA ELECTRIC ASSOC., INC.	7/20	Change in Billing Policy Staff recommendation: Approval	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 319

AGENDA July 10, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
24-28	CENTRAL ALASKA UTIL., INC.	7/23	Finance Charge Increase Staff recommendation: Approval	Approval Unanimously
44-43	BETHEL UTILITIES CORP.	7/27	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
16-230	AMFAC FOODS, INC.	8/3	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
108-1	ALASKA ELECTRIC LIGHT & POWER	7/22	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
76-16	KODIAK ELECTRIC ASSOC., INC.	8/12	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approval Unanimously
77-16	KODIAK ELECTRIC ASSOC., INC.	8/12	Power Production Assistance Staff recommendation: Approval	Approval Unanimously

Not Available for

COMMISSION TARIFF ACTION MEETING

NO. 320

AGENDA July 10, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-81-32	MATANUSKA ELECTRIC ASSOCIATION, INC.	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-80-56	JUNEAU & DOUGLAS TELEPHONE COMPANY	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
158-15	JUNEAU & DOUGLAS TELEPHONE COMPANY.	--	Compliance w/Letter Order Staff recommendation: Approval	Approval Unanimously
240	TLINGIT-HAIDA REGIONAL ELECTRIC AUTHORITY	--	Addition of Power Production Assistance to Rate Schedule Staff recommendation: Approval	Approval Unanimously
U-80-80	TLINGIT-HAIDA REGIONAL ELECTRIC AUTHORITY	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-79-4	NORFOLK UTILITIES, INC.	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 321

AGENDA July 10, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
U-80-8	ANCHORAGE TELEPHONE UTILITY	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-80-84	COLLEGE UTILITIES CORP. (SEWER)	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
U-80-85	COLLEGE UTILITIES CORP. (WATER)	--	Compliance w/Order Staff recommendation: Approval	Approval Unanimously
			Staff recommendation:	
			Staff recommendation:	
			Staff recommendation:	

Not Available Yet

COMMISSION TARIFF ACTION MEETING No. 323

AGENDA July 24, 1981
(Date)

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
28-13	GOLDEN VALLEY ELECTRIC ASSOCIATION, INC.	8/13	Rate Increases Staff recommendation: Grant 13.49% Interim & Suspend Permanent	Deny Interim and Suspend Permanent Unanimously
	PELICAN UTILITY CO. (SAND POINT)	8/13	Rate Increases Staff recommendation: Grant 24.3% Interim & Suspend Permanent	Granted 24.3% Interim & Suspended Permanent w/Commission Knowles dissenting
13-44 U-80-89	MC GRATH LIGHT & POWER		Rate Increases Staff recommendation: Grant 84.68% Interim above permanent Rates and Suspend Permanent	Grant Interim & Suspend Permanent Unanimously
			Staff recommendation:	
			Staff recommendation:	

COMMISSION TARIFF ACTION MEETING

NO. 324

AGENDA July 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
98-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	8/10	Dishonored Check Charge and Delinquent Account Charge Increases Staff recommendation: *	Approved w/Weatherly & Knowles Partially Dissenting
23-8	CHUGACH ELECTRIC ASSOC., INC.	8/10	Underground Line Extension Differential Staff recommendation: Approval	Approved w/Conditions Unanimously
47-3	GENERAL TELEPHONE COMPANY OF ALASKA	8/5	Additions and Deletions of Terminal Equipment Staff recommendation: Approval	Approved Unanimously
159-15	JUNEAU & DOUGLAS TELEPHONE COMPANY	8/12	Deletions of Terminal Equipment Staff recommendation: Approval	Approved Unanimously
25-97	COLLEGE UTILITIES CORP. (WATER)	8/19	Administrative Cleanup Staff recommendation: Approval	Approved Unanimously
35-121	ANCHORAGE MUNICIPAL LIGHT & POWER	8/24	Gas Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

NO. 325

AGENDA July 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
8-92	TANANA POWER COMPANY	8/21	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
			Staff recommendation:	Approved Unanimously
176-2	ALASKA POWER & TELEPHONE (SKAGWAY)	8/26	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
177-2	ALASKA POWER & TELEPHONE (CRAIG)	8/31	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
178-2	ALASKA POWER & TELEPHONE (HYDABURG)	8/31	Fuel Cost Rate Adjustment Staff recommendation: Approval	Approved Unanimously
34-10	COPPER VALLEY ELECTRIC ASSOCIATION, INC. (GLENNALLEN)	8/21	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously

Not Available Yet

COMMISSION TARIFF ACTION MEETING

NO. 326

AGENDA July 24, 1981
(DATE)

TA NO.	UTILITY NAME	45 day	SUBJECT MATTER AND STAFF RECOMMENDATIONS	ACTION TAKEN
31-17	KOTZEBUE ELECTRIC ASSOCIATION, INC.	8/26	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
24-18	MATANUSKA ELECTRIC ASSOCIATION, INC. (UNALAKLEET)	9/1	Fuel Cost Rate Adjustment and Power Production Assistance Staff recommendation: Approval	Approved Unanimously
U-80-12	EAGLE RIVER HEIGHTS UTILITIES, INC.	-	Compliance w/Order Staff recommendation: Approval	Approved Unanimously
81-40	ANCHORAGE REFUSE, INC.	--	Compliance w/Order Staff recommendation: Approval	Approved Unanimously
U-80-42	ANCHORAGE TELEPHONE UTILITY	--	Compliance w/Order Staff recommendation: Approval	Approved Unanimously
U-80-23	GLACIER STATE TELEPHONE COMPANY	--	Compliance w/Order Staff recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

Commissioners: Gucse
Weatherly
Knowles
Hall

No. 327

AGENDA August 14, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
202-98	ALASCOM, INC.	8/14	Conditions for connection of telephone utility facilities to Alascom facilities Staff Recommendation: Approval	APPROVED UNANIMOUSLY
149-120	ANCHORAGE TELEPHONE UTILITY	8/20	New rate development factors Staff Recommendation: Approval as modified	APPROVED UNANIMOUSLY
151-120	ANCHORAGE TELEPHONE UTILITY	8/24	Multi-line terminal equipment offered on a temporary basis & customer terminal equipment upgrade without penalty Staff Recommendation: Approval	APPROVED UNANIMOUSLY WITH COMM. KNOWLES NOT PARTICIPATING
150-120	ANCHORAGE TELEPHONE UTILITY	8/14	Addition of concept of individual tariffs for special equipment; individual tariff rates for TASCOM telephone answering system Staff Recommendation:	APPROVED UNANIMOUSLY
203-98	ALASCOM, INC.	8/24	Communicatively handicapped equipment Staff Recommendation. Approval	HOLD
26-37	COLLEGE UTILITIES CORP. (Sewer)	8/19	Textual revisions Staff Recommendation: Approval	APPROVED UNANIMOUSLY

* Not available

COMMISSION TARIFF ACTION MEETING

No. 328

AGENDA August 14, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
30-17	KOTZEBUE ELECTRIC ASSOC., INC.	8/3	Request for tariff interpretation Staff Recommendation: See memo	HOLD
	PELICAN UTILITY CO.	9/2	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY
45-88	NORTHERN POWER & ENG.	9/8	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY
37-63	FORT YUKON UTILITIES	9/8	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY
57-45	NUSHAGAK ELECTRIC COOP., INC.	9/10	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY
109-1	ALASKA ELECTRIC LIGHT & POWER COMPANY	8/24	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY

* Not available

COMMISSION TARIFF ACTION MEETING

No. 329

AGENDA August 14, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
78-16	KODIAK ELECTRIC ASSOC., INC.	9/16	Fuel cost rate adjustment Staff Recommendation: Approval	APPROVED UNANIMOUSLY
U-80-4 U-81-36	ANCHORAGE SEWER UTL.	8/28	Compliance w/Ordering Paragraphs 4 & 8 of Order No. 10 in U-80-4 and Order No. 1 in U-81-36 Staff Recommendation: Approval	APPROVED UNANIMOUSLY
U-80-4 U-81-36	ANCHORAGE SEWER UTL.	8/28	Compliance w/Ordering Paragraph 7 of Order No. 10 in U-80-4 and Order No. 1 in U-81-36 Staff Recommendation: Approval in part & Rejection in part	HOLD
U-81-44	ALASKA ELECTRIC LIGHT & POWER	9/8	Compliance w/ Order Staff Recommendation: Approval	APPROVED UNANIMOUSLY
U-81-4	BURTON CARVER & CO., INC.	9/17	Compliance w/Order Staff Recommendation: Approval	APPROVED UNANIMOUSLY
U-81-3	BURTON CARVER & CO., INC.	9/17	Compliance w/Order Staff Recommendation: Approval	APPROVED UNANIMOUSLY

COMMISSION TARIFF ACTION MEETING

No. 330

AGENDA August 14, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-80-39	Homer Electric Association, Inc.	9/17	Special Contract with Tesoro Staff Recommendation: Approval	APPROVED UNANIMOUSLY
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation: * Not available	

Commissioners Present:
Guess
Weatherly
Knowles
Hall

No. 331

COMMISSION TARIFF ACTION MEETING

AGENDA August 21, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-80-4 U-81-36	ANCHORAGE SEWER UTILITY	8/28	Compliance w/Ordering Paragraph 7 of Order No. 10 in Docket U-80-4 and Order No. 1 in Docket U-81-36 Staff Recommendation: Approval in Part & Rejection in Part	Concur
-03-81	ALASCOM, INC.	8/24	Communicatively Handicapped Equipment Staff Recommendation: Approval	Grant interim refundable approval; Suspend; require info re: rate development; open generic docket
30-17	KOTZEBUE ELECTRIC ASSOCIATION, INC.	8/3	Request for tariff interpretation Staff Recommendation: See memo	Concur with Staff; recommend clarifying language
	HOMER ELECTRIC ASSOCIATION, INC	N/A	Combined Billing Staff Recommendation: Reaffirm earlier decision to disallow	Concur with Staff
U-79-65	CENTRAL ALASKA UTILITIES	N/A	Southwood Park Subdivision Deviation from Tariff Staff Recommendation: Approval	Concur with Staff
			Staff Recommendation: Not available	

COMMISSION TARIFF ACTION MEI

Guess
Weatherly
Hall

No. 332

AGENDA August 28, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
204-98	ALASCOM, INC.	8/28	Private Direct Toll Access Line Service Staff Recommendation: Suspension	Approved w/stipulation deleting Togiak & Eagle Unanimously
U-81-51	MATANUSKA TELEPHONE ASSOC., INC.	N/A	Interim Approval of Connection, Move & Trip Charges Staff Recommendation: Interim Approval	HOLD
28-169	ALASKA VILLAGE ELECTRIC COOP., INC.	9/25	Service area amendment Staff Recommendation: Approval	Approved w/Commissioner Hall Dissenting
36-121	ANCHORAGE MUNICIPAL LIGHT & POWER	9/24	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
110-1	ALASKA ELECTRIC LIGHT & POWER	10/5	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
15-24	PELICAN UTILITY CO. (Pelican)	9/23	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
179-2	ALASKA POWER & TELEPHONE (Skagway)	9/24	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 333

AGENDA August 28, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
180-2	ALASKA POWER & TELEPHONE	9/24	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
37-53	YAKUTAT POWER, INC.	9/28	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
23-32	HOMER ELECTRIC ASSOC., INC.	10/6	Wholesale Power Cost Adjustment Staff Recommendation: *	Approved Unanimously
1D-22	NAKNEK ELECTRIC ASSOC., INC.	9/17	Power Production Assistance Staff Recommendation: Approval	Approved Unanimously
98-19	MATANUSKA TELEPHONE ASSOC., INC.	9/30	Compliance with By Direction Letter Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation: * Not available	

COMMISSION TARIFF ACTION MEETING

No. 334

AGENDA August 28, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
25-97	COLLEGE UTILITIES CORP. (Water)	9/30	Compliance w/By Direction Letter Staff Recommendation: Approval	Approved Unanimously
-80-43	HOMER ELECTRIC ASSOC.,INC.	7/5	Rules and Regulations Staff Recommendation: Will be available 8/27	Approved Unanimously
U-81-42	NORTHWAY POWER & LIGHT	10/2	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-80-24	TELEPHONE UTILITIES OF ALASKA, INC. (Fort Wainwright)	9/16	Adoption Notice Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

COMMISSION TARIFF ACTION MEETING

Commissioners: Guess
Weatherl
Knowles
Hall

No. 335

AGENDA September 11, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
4-251	TELEPHONE UTILITIES OF ALASKA, INC.	9/16	Custom Calling Rates Staff Recommendation: Approval	Concurred with Staff
161-15	JUNEAU & DOUGLAS TELEPHONE COMPANY	9/14	Unbundled Tariff Staff Recommendation: Suspension	Concurred with Staff
160-15	JUNEAU & DOUGLAS TELEPHONE COMPANY	9/14	Touch Calling in the Sterling Exchange Staff Recommendation: Approval	Concurred with Staff
205-98	ALASCOM, INC.	9/16	Electronic Blackboard Rates Staff Recommendation: Suspension with Interim Approval	Concurred with Staff
19-230	PELICAN UTILITY CO. - Sand Point	10/2	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Concurred with Staff
111-1	ALASKA ELECTRIC LIGHT & POWER	10/19	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Concurred with Staff

* Not available

COMMISSION TARIFF ACTION MEETING

No. 336

AGENDA September 11, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
150-120	ANCHORAGE TELEPHONE UTILITY	8/14	Compliance w/Letter Order Staff Recommendation: Approval	Concurred with Staff
U-80-89	MC GRATH LIGHT & POWER COMPANY	10/5	Compliance w/Order Staff Recommendation: Approval	Concurred with Staff
1	NAPAKIAK CORPORATION	---	Request for Reconsideration of Power Production Assistance Staff Recommendation:	Support Staff Deny Napakiak's request for reconsideration & will pursue discussion with the AG's office.
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

COMMISSION TARIFF ACTION MEETING

Commissioners: Guess
Weatherly
Knowles
Hall

No. 337

AGENDA September 25, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
152-49	GLACIER STATE TELEPHONE COMPANY	9/30	Unbundled Tariff Staff Recommendation: Suspension	Suspended Unanimously
1-218	EAGLE RIVER REFUSE, INC.	9/25	Interim & Permanent Rate Increases Staff Recommendation:	Interim Approved & Permanent Suspended Unanimously
153-49 162-15	GLACIER STATE TELEPHONE COMPANY JUNEAU & DOUGLAS TELEPHONE COMPANY	10/16	New Billing Form Staff Recommendation: Approval	Approved Unanimously
152-120	ANCHORAGE TELEPHONE UTILITY	10/5	Signaling Equipment Staff Recommendation: Approval	Approved Unanimously
153-120	ANCHORAGE TELEPHONE UTILITY	10/3	Cutoff/Transfer Key Staff Recommendation. Approval	Approved Unanimously
155-120	ANCHORAGE TELEPHONE UTILITY	10/9	Call Detail Recording Equipment Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

No. 338

AGENDA September 25, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
156-120	ANCHORAGE TELEPHONE UTILITY	10/9	Deletion of 1K Memory Card LA34 & Addition of 4K Memory Card LA34 Staff Recommendation: Approval	Approved Unanimously
7-121	ANCHORAGE MUNICIPAL LIGHT & POWER	10/26	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
182-2	ALASKA POWER & TELEPHONE (Hydaburg)	10/28	Fuel Cost Rate Adjustment Staff Recommendation: *	Approved Unanimously
183-2	ALASKA POWER & TELEPHONE (Skagway)	10/28	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
U-81-54	PELICAN UTILITY COMPANY	10/14	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
U-80-89	MCGRATH LIGHT & POWER	11/5	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 339

AGENDA September 25, 19 1

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-81-48	COLDEN VALLEY ELECTRIC ASSOCIATION, INC.	10/19	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
TA204-98	ALASCOM, INC.	10/30	Compliance w/Letter Order Staff Recommendation: Approval	Approved Unanimously
U-80-25	CENTRAL ALASKA UTILITIES, INC.	N/A	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

COMMISSION TARIFF ACTION

AGENDA October 9, 1981

Weatherly
Knowles
Hall
Snowden

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
38-53	YAKUTAT POWER, INC.	10/14	Interim and Permanent Rate Increases Staff Recommendation: Grant Interim & Suspend Permanent	Interim Granted & Permanent Suspended w/Comm. Hall dissenting re: rate of return
2-122	ANCHORAGE WATER UTILITY	10/16	Interim and Permanent Rate Increases Staff Recommendation: Grant Interim & Suspend Permanent	Interim Granted & Permanent Suspended Unanimously
24-126	ANCHORAGE SEWER UTILITY	11/2	Amendment to Sewer Service Agreement w/ State of Alaska, Department of Transportation and Public Facilities Staff Recommendation: Approval	Approved Unanimously
25-18	MATANUSKA ELECTRIC ASSOCIATION, INC. (Unalakleet)	11/11	Fuel Cost Rate Adjustment and Power Production Assistance Staff Recommendation: Approval	Approved Unanimously
32-17	KOTZEBUE ELECTRIC ASSOCIATION, INC.	11/11	Fuel Cost Rate Adjustment and Power Production Assistance Staff Recommendation: Approval of a Different Surcharge	Approved Unanimously
6D-160	CORDOVA ELECTRIC COOPERATIVE, INC.	11/11	Power Production Assistance Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 341

AGENDA October 9, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
2D-22	NAKNEK ELECTRIC ASSOCIATION, INC. (Naknek)	11/18	Power Production Assistance Staff Recommendation: Approval	Approved Unanimously
J-81-14	HOMER ELECTRIC ASSOCIATION, INC.	9/3	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

Commissioners: Guess
Weatherly
Knowles

COMMISSION TARIFF ACTION MEETING

No. 342

AGENDA October 23, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
28-169	ALASKA VILLAGE ELECTRIC COOPERATIVE, INC.	17/27	Power Cost Assistance Staff Recommendation: Approval of PCA lower than requested	Approved Unanimously
49-3	GENERAL TELEPHONE COMPANY OF ALASKA	11/13	Revised Rules Governing Establishment and Furnishing of Service Staff Recommendation: Approval in part/Suspension in part	Suspended Unanimously
53-14	HAINES LIGHT & POWER	10/23	Contract between HL&P and Small Power Producer Staff Recommendation:Approval	Approved Unanimously
			Staff Recommendation:	
99-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	11/5	Individual Tariff for Radio Communications, Inc. Staff Recommendation: Approval	HOLD
100-19	MATANUSKA TELEPHONE ASSOCIATION, INC.	11/30	New Billing Form Staff Recommendation: Approval	HOLD

COMMISSION TARIFF ACTION MEETING

NO. 345

AGENDA October 23, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
38-121	ANCHORAGE MUNICIPAL LIGHT & POWER	11/25	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
6-96	BETTLES LIGHT & POWER	11/20	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
112-1	ALASKA ELECTRIC LIGHT & POWER	11/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
184-2	ALASKA POWER & TELEPHONE (Skagway)	11/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimou .ly
27-169	ALASKA VILLAGE ELECTRIC COOPERATIVE, INC.	11/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
U-79-4	NORFOLK UTILITIES, INC.	10/23	Compliance w/order Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 344

AGENDA October 23, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-80-4 U-81-36	ANCHORAGE SEWER UTILITY	11/18	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-42	NORTHWAY POWER & LIGHT	11/27	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-15	GLACIER STATE TELEPHONE COMPANY	11/6	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-27	GLACIER STATE TELEPHONE COMPANY	11/6	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-73-[illegible]	MATANUSKA TELEPHONE ASSOCIATION, INC.	11/16	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-80-26	YAKUTAT POWER, INC.	11/30	Compliance w/order Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

Commissioners: Weatherly
Knowles
Hall
Snowden

No. 345

AGENDA November 13, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
14-240	Tlingit-Haida Regional Electric Cooperative, Inc.	12/8	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
48-3	General Telephone Company of Alaska	11/16	Non-Recurring Charge Increase Staff Recommendation: Approval of a lower increase than requested	Approved Unanimously
8-11	Copper Valley Telephone Cooperative, Inc.	11/13	Unbundled Tariff Staff Recommendation: Suspend	Suspended Unanimously
80-16	Kodiak Electric Association, Inc. (Port Lions)	11/13	Interim & Permanent Rate Increase Staff Recommendation: Suspend Permanent; Approve Across-the-Board Interim	Suspended Permanent and Granted Interim Unanimously
26-32	Homer Electric Association, Inc.	11/19	Special Contract with City of Seldovia Staff Recommendation: Approval	Approved Unanimously
100-19	Matanuska Telephone Association, Inc.	11/23	New Billing Form Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

No. 346

AGENDA November 13, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
185-2	Alaska Power & Telephone (Tok)	12/7	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
38-63	Fort Yukon Utilities	12/7	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
15-240	Tlingit-Haida Regional Electric Cooperative, Inc.	12/21	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
16-24	Pelican Utility Company (Pelican)	11/30	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
20-230	Pelican Utility Company (Sand Point)	11/30	Fuel Cost Rate Adjustment Staff Recommendation: Approve reduced surcharge; require refund.	Suspended Permanent and Approved Interim Unanimously
21-230	Pelican Utility Company(Sand Point)	12/3	Fuel Cost Rate Adjustment Staff Recommendation: Approve reduced surcharge; require refund	Suspended Permanent and Approved Interim Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 347

AGENDA November 13, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-81-12	Pelican Utility Company (Sand Point)	11/16	New Tariff Staff Recommendation: Incorporate New Tariff into U-81-12; Approve Adoption Notice	Approved Adoption Notice Unanimously
-81-54	Pelican Utility Company (Sand Point)	12/3	Compliance with Order Staff Recommendation: Approval	Approved Unanimously
U-80-100	Anchorage Municipal Light & Power	11/6	Compliance with Order Staff Recommendation: Approval	Approved Unanimously
53-14	Haines Light & Power	12/16	Compliance with Letter Order Staff Recommendation: Approval	Approved Unanimously
U-79-41	Matanuska Telephone Association, Inc.	10/5	Compliance With Order Staff Recommendation: Approval	HOLD
	Kodiak Sanitation, Inc.	12/3	Adoption Notice Staff Recommendation: Approval	Approved Unanimously

* Not Available

COMMISSION TARIFF ACTION MEETING

No. 348

AGENDA November 13, 1981

TA NO.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-81-75	Eagle River Refuse, Inc.	12/16	Compliance with Order Staff Recommendation: Approval	Approved Unanimously
-81-52	Chugach Electric Association, Inc.	12/21	Compliance with Order Staff Recommendation: Approval	Approved Unanimously
TA 28-169	Alaska Village Electric Cooperative, Inc.	12/23	Compliance with Letter Order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

Commissioners: Guess
Hall
Snowden

COMMISSION TARIFF ACTION MEETING

No. 349

AGENDA November 23, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
3-274	M & D ENTERPRISES	1/4	Power Cost Assistance (Inclusion of this item on the agenda is on a tentative basis) Staff Recommendation: *	NOT AVAILABLE
39-121	ANCHORAGE MUNICIPAL LIGHT & POWER	12/28	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
20-230 21-230	PELICAN UTILITY CO. (Sand Point)	11/30 12/3	Fuel Cost Rate Adjustments at Sand Point Staff Recommendation: Further reduce surcharges, grant interim approval to surcharges; direct refund	Staff recommendations Approved Unanimously
23-230	PELICAN UTILITY CO. (Sand Point)	12/28	Fuel Cost Rate Adjustment at Sand Point Staff Recommendation: Reduce Surcharge; grant interim approval to reduce surcharge; direct refund.	Staff recommendations Approved Unanimously
			Staff Recommendation:	
113-1	ALASKA ELECTRIC LIGHT & POWER	12/23	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 350

AGENDA November 23, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
187-2	ALASKA POWER & TELEPHONE (Tok)	12/28	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
188-2	ALASKA POWER & TELEPHONE (Skagway)	12/28	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
2-274	M & D ENTERPRISES	12/28	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
30-22	NAKNEK ELECTRIC ASSOC., INC.	12/30	Power Production Assistance Staff Recommendation: Approval	Approved Unanimously
U-78-10	ARCTIC SLOPE TELE-PHONE ASSOC. COOP.	10/9	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
U-81-57	UNITED UTILITIES, INC.	12.28	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

Weatherly
Knowles

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
			Staff Recommendation:	
		1/13	Staff Recommendation:	
33-17	KOTZEBUE ELECTRIC ASSOC., INC.	1/13	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
18-96	BETTLES LIGHT & POWER	12/21	Power Cost Assistance Staff Recommendation: Correction of Previously approved PCA	Correction Approved Unanimously
58-45	NUSHAGAK ELECTRIC COOP., INC.	1/15	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
45-43	BETHEL UTILITIES CORP., INC.	1/18	Power Cost Assistance Staff Recommendation: Approval as Adjusted	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 352

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
2	TAKOTNA VILLAGE COMMUNITY ASSOC.	12/31	Power Cost Assistance Staff Recommendation: Rejection	HELD
	CITY OF RUBY	1/4	Power Cost Assistance Staff Recommendation: Approval as adjusted on interim basis, Subject to audit	Approved Amount Unanimously
54-14	HAINES LIGHT & POWER	1/8	Power Cost Assistance Staff Recommendation: Approval as adjusted	Approved Unanimously
2	NAPAKIAK CORPORATION	1/10	Power Cost Assistance Staff Recommendation: Approval as adjusted on interim basis, Subject to audit.	Approved Amount Unanimously
7D-160	CORDOVA ELECTRIC COOP., INC.	1/10	Power Cost Assistance Staff Recommendation: Approval on an interim basis, Subject to audit.	Approved Amount Unanimously
35-10	COPPER VALLEY ELECTRIC ASSOC.INC	1/13	Power Cost Assistance Staff Recommendation: Approval as adjusted	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 353

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
17-44	MCGRATH LIGHT & POWER	1/13	Power Cost Assistance Staff Recommendation: Approval as adjusted on an interim basis, Subject to Commission asseptance of the stipulation.	HELD
-D-72	MANLEY UTILITY CO.	1/15	Power Cost Assistance Staff Recommendation: Approval as adjusted on an interim basis, Subject to audit.	Approved Amount Unanimously
1D	HUGHES POWER & ELECTRIC	1/18	Power Cost Assistance Staff Recommendation: Rejection	Letter explaining requirements approved unanimously
3D-150	NOME JOINT UTILITIES SYSTEM	1/13	Power Cost Assistance Staff Recommendation: Approval as adjusted	Approved Amount Unanimously
26-18	MATANUSKA ELECTRIC ASSOC., INC. (Unalakleet)	1/14	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
81-16	KODIAK ELECTRIC ASSOC., INC. (Kodiak	1/15	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

No. 354

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
82-16	KODIAK ELECTRIC ASSOC., INC. (Port Lions)	1/15	Power Cost Assistance Staff Recommendation: Approval as adjusted on an interim basis, Subject to audit.	Approved Unanimously
			Staff Recommendation:	
1-278	ALASCOM, INC. (St.Paul)	1/27	Rule for taxes imposed on utility for direct charge to subscribers Staff Recommendation: Approval	Approved Unanimously
163-15	JUNEAU & DOUGLAS TELEPHONE COMPANY	12/18	Rates for the SL-1 for the State of Alaska Staff Recommendation: Interim approval and suspension	Interim Approval and Suspension Unanimously
157-120	ANCHORAGE TELEPHONE UTILITY	12/21	Rates for Infotron Statistical Multiplex Equipment Staff Recommendation: Approval	Approved Unanimously
165-2	ALASKA POWER & TELEPHONE	1/4	Delinquent Account Carrying Charge Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 355

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
13-31	NATIONAL UTILITIES, INC.	1/4	Delinquent Account Carrying Charge Staff Recommendation: Approval	Approved Unanimously
121	ANCHORAGE MUNICIPAL LIGHT & POWER	1/25	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
16-44	MCGRATH LIGHT & POWER	12/21	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
11-5	ANIAK LIGHT & POWER	1/4	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
19-96	NETTLES LIGHT & POWER	1/20	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

No. 356

AGENDA December 18, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
17-24	PELICAN UTILITY CO. (Pelican)	1/20	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
-10	COPPER VALLEY ELECTRIC ASSOC., INC. (Valdez)	1/21	Fuel Cost Rate Adjustment & Power Production Assistance Staff Recommendation: Approval	Approved Unanimously
46-43	BETHEL UTILITIES CORP., INC.	1/25	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
U-80-79	ILIAMNA-NEWHALEN ELECTRIC COOP.,INC.		New Tariff Staff Recommendation: Approval	HELD
U-79-41	MATANUSKA TELEPHONE ASSOC., INC.	10/4	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-79-79	BETHEL UTILITIES CORP., INC.	12/30	Compliance w/order Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 357

AGENDA December 13, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
U-81-78	ANCHORAGE WATER UTILITY	1/8	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
TA99-19	MATANUSKA TELEPHONE ASSOC., INC.	1/17	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
TA24-126	ANCHORAGE SEWER UTILITY	1/10	Compliance w/order Staff Recommendation: Approval	HELD
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

COMMISSION TARIFF ACTION MEETING

Commissioners: Guess
Weatherly
Knowles
Snowden

No. 358

AGENDA December 24, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
206-98	ALASCOM, INC.	12/24	New Rate Development Factors Staff Recommendation: Suspension	HELD
	NAPASKIAK		Power Cost Assistance Staff Recommendation: Approval on an interim basis pending audit	Approved on an Interim Basis Unanimously
2	TAKOTNA VILLAGE COMMUNITY ASSOC.	12/31	Power Cost Assistance Staff Recommendation: Approval on an interim basis pending audit	Approved on an Interim Basis Unanimously
4D-22	NAKNEK ELECTRIC ASSOCIATION, INC.	1/10	Power Cost Assistance Staff Recommendation: Approval as adjusted on an interim basis, pending audit	Approved on an Interim Basis Unanimously
39-63	FORT YUKON UTILITIES	1/11	Interim and Permanent Rate Increase Staff Recommendation: Grant Interim & Suspend Permanent	Approved Interim & Suspended Permanent Unanimously
40-63	FORT YUKON UTILITIES	1/13	Power Cost Assistance Staff Recommendation: Approval as adjusted on interim basis, pending audit	Approved on an Interim Basis Unanimously

* Not available

Commissioners: Guess
Weatherly
Knowles
Snowden

COMMISSION TARIFF ACTION MEETING

No. 359

AGENDA December 24, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MA. AND STAFF RECOMMENDATION	ACTION TAKEN
30-4	ALASKA GAS & SERVICE	12/28	Interim Rate Increase Staff Recommendation: Grant Interim	Approved Interim w/Comm.Weatherly Dissenting
U-80-75	INTERIOR TELEPHONE COMPANY	1/27	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-32	MATANUSKA ELECTRIC ASSOCIATION, INC	1/25	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-87	KODIAK ELECTRIC ASSOCIATION, INC.	1/27	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	

Commissioners: Guess
Weatherly
Knowles
Hall
Snowden

COMMISSION TARIFF ACTION MEETING

No. 360

AGENDA January 8, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
39-53	YAKUTAT POWER, INC.	2/3	Power Cost Assistance Staff Recommendation: Approval of a Reduced PCA	Approved Unanimously
241	VALLEY WATER COMPANY	1/20	Interim and Permanent Rate Increase Staff Recommendation: Grant Interim & Suspend Permanent	Approved Interim and Suspended Permanent Unanimously
27-18	MATANUSKA ELECTRIC ASSOCIATION, INC.	2/1	Wholesale Power Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
24-230	PELICAN UTILITY COMPANY(Sand Point)	waived	Fuel Cost Rate Adjustment Staff Recommendation: Approval on an Interim Basis	Approved Unanimously
25-230	PELICAN UTILITY COMPANY(Sand Point)	2/3	Fuel Cost Rate Adjustment Staff Recommendation: Approval on an Interim Basis	Approved Unanimously
109-2	ALASKA POWER & TELEPHONE (Skagway)	1/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 361

AGENDA January 8, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
190-2	ALASKA POWER & TELEPHONE (Tok)	1/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
191-2	ALASKA POWER & TELEPHONE (Craig)	1/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
192-2	ALASKA POWER & TELEPHONE (Hydaburg)	1/27	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
114-1	ALASKA ELECTRIC LIGHT & POWER	2/3	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
5-227	ARCTIC UTILITIES, INC.	2/1	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
U-80-24	TELEPHONE UTILITIES OF ALASKA, INC. (Ft. Wainwright)	1/29	Compliance w/order Staff Recommendation: Approval	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

No. 362

AGENDA January 8, 1981

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
24-126	ANCHORAGE SEWER UTILITY	1/10	ASU letters (response to letter order) re military accounts Note: this item held over from 12/18/81 TA meeting Staff Recommendation: Clarifying letter order be issued	Approved Unanimously
4d-3	GENERAL TELEPHONE COMPANY OF ALASKA	1/25	Compliance w/letter order Staff Recommendation: Approval	Approved Unanimously
U-81-99	BETTLES LIGHT & POWER	2/3	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

Commiss

COMMISSION TARIFF ACTION MEETING

No. 363

AGENDA January 25, 1982

Snowden

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
10-92	Tanana Power Co.	2/19	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
1D-106	City of Unalaska	2/8	Power Cost Assistance Staff Recommendation: Approval of higher PCA than requested	Approved Unanimously
4D-22	Naknek Electric Association, Inc. (Naknek)	1/10	Power Cost Assistance Staff Recommendation: Correction of PCA amount	Correction Approved Unanimously
31-4	Alaska Gas and Service	2/16	Purchased Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
9-92	Tanana Power Company	1/29	Rules and Regulations Changes: Billing and Collection, Line Extensions, Service Connections. Staff Recommendation: Approval in part and interim approval in part	Suspended and Allowed to go into effect on an Interim Basis w/ Comm. Weatherly Dissenting
18-44	McGrath Light & Power	2/19	Billing Form Changes Staff Recommendation: Approval	HELD

COMMISSION TARIFF ACTION MEETING

AGENDA January 25, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
41-121	Anchorage Municipal Light & Power	2/25	Gas Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
115-1	Alaska Electric Light & Power	3/1	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
U-81-101	Alaska Gas & Service	2/29	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
U-81-81	Yakutat Power, Inc.	2/26	Compliance w/order Staff Recommendation: Approval	Approved Unanimously
45-43	Bethel Utilities Corporation, Inc.	2/22	Compliance w/letter order Staff Recommendation: Approval	Approved Unanimously
U-81-14	Homer Electric Association, Inc.	2/17	Compliance w/order Staff Recommendation: Approval	Approved Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 365

AGENDA January 25, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
54-14	Haines Light & Power	3/1	Compliance w/letter order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation	
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	
			Staff Recommendation:	

* Not available

Commissioners: Guess
Weatherly
Knowles
Hall
Snowden

COMMISSION TARIFF ACTION MEETING

No. 366

AGENDA February 11, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
46-88	NORTHERN POWER & ENGINEERING CORP.	3/1	Power Cost Assistance Staff Recommendation: Approval	Approved Unanimously
208-98	ALASCOM, INC.	3/22	Deletion of Eagle Village from list of locations where Private Direct Toll Access Line Service is provided Staff Recommendation: Approval	Approved Unanimously
24-6	CHUGACH ELECTRIC ASSOCIATION, INC.	2/16	Underground Line Extension Differential Staff Recommendation: Approval	Approved Unanimously
117-1	ALASKA ELECTRIC LIGHT & POWER CO.	3/15	Deletion of 3% Franchise Tax for customers in the City of Juneau Staff Recommendation: Approval	Approved Unanimously
116-1	ALASKA ELECTRIC LIGHT & POWER CO.	3/17	Fuel Cost Rate Adjustment Staff Recommendatio... Approval	Approved Unanimously
93-2	ALASKA POWER & TELEPHONE (Skagway)	3/4	Fuel Cost Rate Adjustment Staff Recommendation: Approval Not available	Approved Unanimously

COMMISSION TARIFF ACTION MEETING

AGENDA February 11, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
194-2	ALASKA POWER & TELEPHONE (Tok)	3/8	Fuel Cost Rate Adjustment Staff Recommendation: Approval	Approved Unanimously
18-24	PELICAN UTILITY CO. (Pelican)	3/19	Fuel Cost Rate Adjustment Staff Recommendation: Approval of a Reduced Surcharge: Refund on next properly calculated surcharge	Approved Unanimously
U-81-18	TANANA POWER CO.	2/19	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
U-82-3	FORT YUKON UTILITIES	2/26	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
U-81-89	PELICAN UTILITY CO. (Sand Point)	3/17	Compliance w/Order Staff Recommendation: Approval	Approved Unanimously
			Staff Recommendation:	

* Not available

COMMISSION TARIFF ACTION MEETING

Commissioners: Guess
Weatherly
Knowles
Hall
Snowden

No. 368

AGENDA February 26, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
27-230	Pelican Utility Company (Sand Point)	3/19	Power Cost Assistance Staff Recommendation: Approved of higher PCA than requested.	Approval Unanimously
154-49	Glacier State Telephone Company	3/3	Interim Rate Increase Staff Recommendation: Grant Interim	HELD
			Staff Recommendation:	
207-98	Alascom, Inc.	3/8	Transportable Earth Stations Staff Recommendation: Suspension if TA206-98 is suspended; otherwise, approval	Interim Approval & Suspension Unanimously
81-19	Matanuska Telephone Association, Inc.	Waived	Rates for Remote Display Unit for Golden Valley Electric Association, Inc., Healy Power Plant Mitel SX-20 Staff Recommendation: Approval	Approval Unanimously
42-121	Anchorage Municipal Light & Power	3/26	Gas Cost Rate Adjustment Staff Recommendation: Approval; open docket to investigate methodology	Approval and open Docket Unanimously

* Not available

COMMISSION TARIFF ACTION MEETING

No. 369

AGENDA February 26, 1982

TA No.	UTILITY NAME	45/day	SUBJECT MATTER AND STAFF RECOMMENDATION	ACTION TAKEN
47-43	Bethel Utilities Corporation, Inc.	3/24	Fuel Cost Rate Adjustment and Power Cost Assistance Adjustment Staff Recommendation: Approval	Approval Unanimously
40-53	Yakutat Power, Inc.	4/1	Fuel Cost Rate Adjustment and Power Cost Assistance Adjustment Staff Recommendation: Approval	Approval Unanimously
26-230	Pelican Utility Company (Sand Point)	3/8	Fuel Cost Rate Adjustment Staff Recommendation: Suspension & Interim Approval	Approval Unanimously
U-82-2	Valley Water Company	3/24	Compliance with Order Staff Recommendation: Approval	Approval Unanimously
U-81-54	Pelican Utility Company (Sand Point)	3/26	Compliance with Order Staff Recommendation: Approval	Approval Unanimously
U-81-29	Anchorage Telephone Utility	N/A	Supplemental Filing Staff Recommendation: Approval	Approval Unanimously

* Not available

ALASKA PUBLIC UTILITIES COMMISSION and the Municipality of Anchorage, d/b/a Municipal Light and Power Department, Appellants,

v.

CHUGACH ELECTRIC ASSOCIATION, INC., Appellee.

CHUGACH ELECTRIC ASSOCIATION, INC., Cross-Appellant,

v.

ALASKA PUBLIC UTILITIES COMMISSION and the Municipality of Anchorage, d/b/a Municipal Light and Power Department, Cross-Appellees.

Nos. 2969, 2993.

Supreme Court of Alaska

May 26, 1978.

Electric utility corporation appealed from order of the Public Service Commission which assigned fixed service areas to corporation and to city light and power department within area served by both. The Superior Court, Third Judicial District, Eben H. Lewis, J., held that there was insufficient evidence to support conclusions in Commission's order and remanded matter to Commission for reconsideration, and city light and power department appealed and utility corporation cross-appealed. The Supreme Court, Burke, J., held that (1) in light of statute providing that all certificates of convenience and necessity issued before July 1, 1970 would be subject to modification, general saving statute did not preserve any right which electric utility corporation might have had, prior to order of Commission, to continue providing electric service, and failure of Commission to find existence of such right did not deny utility corporation due process, (2) portion of order establishing fixed service areas for utility corporation and city light and power department within area served by both had a reasonable basis, and (3) portion of order providing for retirement and transfer of facilities from utility corporation to city light and power department in those areas where the two utilities were operating duplicate and parallel facilities lacked a reasonable basis and would be remanded to Commission for further evidence.

Remanded.

1. Statutes ⇐277

General saving statute will save rights and remedies except where subsequent repealing act indicates that it was not intention of legislature that particular remedies and rights in question should be saved. AS 01.10.100.

2. Constitutional Law ⇐296(1)
Electricity ⇐4

In light of statute providing that all certificates of convenience and necessity issued before July 1, 1970 would be subject to modification in areas of conflict with public utilities that had not previously been required to have a certificate, general saving statute did not preserve any right to continue providing service which electric utility corporation, which was operating in same area as city light and power department and which had been issued certificate of convenience and necessity to do so in 1963, may have had prior to Public Service Commission order assigning fixed service areas to corporation and to city department; thus, corporation was not denied due process by failure of Commission to find existence of such right. AS 01.10.100, 42.05.221, AS 42.05.191, 42.05.194, 42.05.196, Laws 1963, c. 95.

3. Administrative Law and Procedure ⇐790

In cases where decision involves administrative expertise as to either complex subject matter or fundamental policy formulations, deference should be given to administrative determination if it has reasonable basis in law and fact, such deference is given because agency is in better position to make such a determination than court because of agency's specialized knowledge in a field. AS 44.62.570.

4. Electricity ⇨4

On appeal from order of Public Service Commission assigning fixed areas to electric utility corporation and to city light and power department within area served by both pursuant to statutes empowering Commission to take appropriate action to eliminate competition and duplication of facilities in areas where two or more public utilities are competing to furnish identical services, appropriate standard of review, in light of complex financial and engineering determinations involved and considerable expertise required, was reasonable basis test. AS 42.05.221(d), 44.62.570.

5. Electricity ⇨4

Since Supreme Court, on appeal from order of Public Service Commission assigning fixed service areas to electric utility corporation and to city light and power department within area served by both, was to review case independently of determination made by superior court, which had acted as intermediate court of appeal, Supreme Court would not need to decide whether lower court erroneously relied upon alleged misrepresentation of electric utility corporation regarding statement made by public service commissioner. AS 42.05.221(d), 44.62.570.

6. Electricity ⇨4

On appeal before Supreme Court from order of Public Service Commission assigning fixed areas to electric utility corporation and to city light and power department within area served by both, affidavit by president of engineering company, which had been submitted by electric utility corporation to Commission as part of its petition for reconsideration, and properly before Supreme Court, was evidence that part of corporation's argument that Commission order did not have reasonable basis. AS 42.05.221(d).

7. Electricity ⇨4

Portion of order of Public Service Commission assigning fixed service areas for electric utility corporation and city light and power department within area previously served by both, pursuant to statute empowering Commission to take appropriate action to eliminate competition and duplication of facilities in areas where two or more public utilities are competing to furnish identical services, allocated service areas in such a way as to resolve competing interests of corporation and light and power department and public they served, and had reasonable basis. AS 42.05.221(d).

8. Electricity ⇨4

Portion of order of Public Service Commission, entered pursuant to statute empowering Commission to take appropriate action to eliminate competition and duplication of facilities in areas where two or more public utilities are competing to furnish identical services, providing for retirement and transfer of facilities from electric utility corporation to city light and power department in those areas where those two utilities were operating duplicate and parallel facilities, lacked a reasonable basis and would require remand to Commission for further evidence regarding retirement and transfer of such facilities. AS 42.05.221(d).

Jeffrey B. Lowenfels, Asst. Atty. Gen., Anchorage, Avrum M. Gross, Atty. Gen., Juneau, for appellant and cross-appellee, Alaska Public Utilities Commission.

Peter C. Ginder, Asst. Municipal Atty., Karen D. Nagel, Associate Counsel, Richard W. Garnett, III, Municipal Atty., Anchorage, for appellant and cross-appellee, Municipality of Anchorage.

William [illegible] Morgan, Anchorage, for appellee and cross-appellant.

Before BOOCHEVER, Chief Justice, and CONNOR and BURKE, Justices.

OPINION

BURKE, Justice.

This appeal and cross-appeal require us to review a decision of the Alaska Public [illegible] Commission [illegible] to reform [illegible] of [illegible] and the division of [illegible] between the Municipal Light and Power Department

of the Municipality of Anchorage (hereinafter referred to as ML&P) and the Chugach Electric Association (hereinafter referred to as Chugach).

The present controversy began nearly seven years ago when ML&P filed an application before the Commission for a certificate of public convenience and necessity pursuant to AS 42.05.221.[1] ML&P requested authority to furnish electric service throughout a service area situated within and immediately adjacent to the then City of Anchorage. At the time of filing, ML&P was operating an extensive network of electric generation, transmission, and distribution facilities for which Commission certification was not required prior to January 1, 1971.

After reviewing ML&P's application, the Commission determined that identical services were being offered in many instances by Chugach, which was operating under a certificate of public convenience and necessity granted to it in 1963. AS 42.05.221(d)[2] provides that where the Commission determines that two or more public utilities are competing to furnish identical utility service and that this competition is not in the public interest, the Commission is to take appropriate action to eliminate the competition and any undesirable duplication of facilities. Pursuant to this section, the Commission issued Order No. 1 on March 11, 1971, seeking the advice and assistance of ML&P and Chugach in implementing a plan to eliminate such competition and duplication.

In response to Order No. 1, ML&P and Chugach filed briefs outlining their respective views as to how the Commission should proceed. Both parties submitted proposed orders to establish a negotiating committee that would allow the utilities to reach agreement on a voluntary basis. On August 31, 1971, the Commission by Order No. 9 established the requested negotiating committee, composed of members from each of the utilities and one Commission staff member who was to serve as a coordinating chairman. The Commission also established interim service areas during this period.

After several months of negotiations the parties' efforts to reach agreement proved unsuccessful. The Commission then ordered each party to submit, among other things, proposed solutions to the service area dispute. Upon reviewing the proposed

1. AS 42.05.221 provides in relevant part:

Certificates required. (a) No public utility may operate and receive compensation for providing a commodity or service after January 1, 1971 without first having obtained from the commission under this chapter a certificate declaring that public convenience and necessity require or will require the service. Where a public utility provides more than one type of utility service, a separate certificate of convenience and necessity is required for each type. A certificate shall describe the nature and extent of the authority granted to it, including, as appropriate for the services involved, a description of the authorized area and scope of operations of the public utility.

(c) A certificate shall be issued to a public utility which was not required to have one before July 1, 1970 and which is required to have one after that date, if it appears to the commission that the utility was actually operating in good faith on that date. Such a certificate is subject to modification where there are areas of conflict with other public utilities or where there has been a substantial change in circumstances.

2. AS 42.05.221(d) states:

In an area where the commission determines that two or more public utilities are competing to furnish identical utility service and that this competition is not in the public interest, the commission shall take appropriate action to eliminate the competition and any undesirable duplication of facilities. This appropriate action may include, but is not limited to, ordering the competing utilities to enter into a contract which, among other things, would

(1) delineate the service area boundaries of each in those areas of competition;

(2) eliminate existing duplication and paralleling to the fullest reasonable extent;

(3) preclude future duplication and paralleling;

(4) provide for the exchange of customers and facilities for the purposes of providing better public service and of eliminating duplication and paralleling; and

(5) provide such other mutually equitable arrangements as would be in the public interest.

recommendations by each utility, the Commission concluded that neither plan provided an equitable solution to the problem.

On September 19, 1972, public hearings were commenced to afford both ML&P and Chugach the opportunity to augment their written filings and to cross-examine the other party on its proposal. Extensive testimony was taken, following which the parties submitted additional briefs. On September 27, 1973, the Commission issued Order No. 19 which, among other things, assigned firm, fixed service areas to each of the utilities. It is this Order, as amended by Order No. 20, which led to these appeals.

Pursuant to 3 AAC 48.090(e),[3] Chugach, on December 3, 197., petitioned the Commission for reconsideration of Order No. 19 and for the re-opening of the proceedings to receive additional evidence. No action was taken on the petition for 30 days and thus it was automatically denied under 3 AAC 48.090(e).

On February 1, 1974, Chugach gave notice of its appeal to the superior court from Order No. 19, as amended by Order No. 20. On April 30, 1976, oral argument was heard before the superior court. At the close of the proceedings the trial court held that there was insufficient evidence to support the Commission's conclusions in Order No. 19 and remanded the matter to the Commission for reconsideration. This appeal and cross-appeal followed. We will discuss the issues raised in Chugach's cross-appeal first.

CROSS-APPEAL

The service area granted to ML&P by the Commission in Order No. 19 included several areas which had been granted to Chugach in its 1963 certificate of public convenience and necessity. These areas were within the corporate limits of the former City of Anchorage where the two utilities were operating duplicate or parallel electrical facilities. In its cross-appeal, Chugach claims that its right to provide service within its certificated area is a vested property interest which was improperly taken without due process of law when the Commission granted to ML&P the right to offer service within portions of Chugach's certificated service area. In order to adequately set out Chugach's claim and resolve this question, it is first necessary for us to outline briefly the statutory history of pertinent portions of what is now entitled the Alaska Public Utility Commission Act (hereinafter referred to as the Act).

Utility regulation on a statewide basis in Alaska first became a reality upon passage, by the first state legislature, of Chapter 199, SLA 1959. This act established the Alaska Public Service Commission. However, its application to electric, telegraphic and telephonic utilities was held in abeyance pending submission of a report to the legislature by the newly formed Commission.

In 1963, AS 42.05 et seq. was amended in several respects by Chapter 95, SLA 1963. AS 42.05.193 required for the first time that certificates be obtained. That section stated:

Certificates of Convenience and Necessity. No public utility shall operate after January 1, 1964, without first having

[3] 3 AAC 48.090(e) provides:

> Within 15 days after an order of the commission is served, a party may file a petition for reconsideration of the order that is served setting forth specifically the grounds upon which the petitioner believes the order is unreasonable, erroneous, unlawful or otherwise defective. The petitioner may also submit a proposed order designed to cure the alleged defects of the commission's order. A petitioner making a petition for reconsideration shall have 10 days in which to respond. The commission's power to order reconsideration expires 20 days after the date that the order designated in the petition for reconsideration is served on the petitioner. If the commission takes no action on a petition for reconsideration within the time allowed for ordering reconsideration, the petition is automatically denied. The commission may order reconsideration of all or part of the record in a proceeding and any additional evidence and argument it may permit either in writing or orally. The mere filing of a petition for reconsideration does not excuse the petitioning party from compliance with a decision or order of the commission.

obtained from the commission under the provisions of this chapter a certificate declaring that public convenience and necessity require or will require the operation and delineating the area where service is to be provided.

AS 42.05.194, however, granted "grandfather rights" to those utilities then operating:

Certificates Granted to Existing Utilities. A Certificate shall be granted if it appears to the commission that the public utility was actually operating in good faith on October 15, 1962, within the confines of the requested area, or that the public utility was installing the facilities necessary to furnish service under a franchise as of that date.

It was under this section of the 1963 Act that Chugach obtained its certificate.

In requiring public utilities to obtain certificates in order to operate, the legislature also added the following provision, AS 42.05.196, upon which Chugach places great reliance:

Power of Commission to Grant Certificate. The commission shall have the power after hearing, upon reasonable notice to interested parties, to grant a certificate to provide service in an area already served by a certificate holder only when the existing public utility or utilities serving the area are not providing and will not provide service to the satisfaction of the commission. In all other cases, the commission with or without hearing may issue a certificate as requested or for good cause shown deny the same in whole or part.

In addition, AS 42.05.640(2) was amended to exclude municipally-owned utilities from regulation under the Act. It was this provision which allowed ML&P to furnish electrical services without a certificate of public convenience and necessity at that time.

The statutes regulating public utilities were again amended in 1970, pursuant to Ch. 113, SLA 1970. Several extensive changes are relevant to this appeal. The definition of "public utility" or "utility" was amended to include municipally-owned utilities. AS 42.05.701(2). As a result of this, municipally-owned utilities, including ML&P, were required to obtain certificates of convenience and necessity in order to operate. In addition, AS 42.05.194, AS 42.05.195 and AS 42.05.196, quoted above, were repealed.

In place of those repealed sections, AS 42.05.221 was enacted.[4] This statute requires public utilities to obtain certificates of convenience and necessity as a condition of operation. Subsection (c) gave "grandfather rights" to existing utilities newly subject to regulation. Subsection (b), which is significant in the instant case, provides:

All certificates of convenience and necessity issued to a public utility before July 1, 1970 remain in effect but they are subject to modification where there are areas of conflict with public utilities that have not previously been required to have a certificate or where there is a substantial change in circumstances.

This subsection was supplemented by AS 42.05.271, which provides for the modification, suspension or revocation of certificates for several listed reasons, including the requirements of public convenience and necessity.[5]

Within the context of this statutory history, Chugach's claim on cross-appeal can now be more fully understood. At the time Chugach was certificated, AS 42.05.196, quoted above, provided that a competing utility could be certificated in the same area as a certificate holder only if the certificate holder did not and would not furnish service in that area to the satisfaction

4. *See* notes 1 and 2 *supra* for relevant parts.

5. AS 42.05.271 states in pertinent part:
Modification, suspension or revocation of certificates. Upon complaint or upon its own motion the commission, after notice and opportunity for hearing and for good cause shown, may amend, modify, suspend, or revoke a certificate, in whole or in part. Good cause for amendment, modification, suspension or revocation of a certificate includes
(1) the requirements of public convenience and necessity.

of the Commission. Chugach contends that its right to provide electrical service within its certificated area became a vested right at the time of its certification, subject to divestment only if its service in that area was unsatisfactory to the Commission under AS 42.05.196. Because this right vested prior to the repeal of AS 42.05.196 in 1970, Chugach argues it is still entitled to the application of that section of the statute under Alaska's general saving statute, AS 01.10.100.[6] Thus, Chugach maintains, the Commission denied Chugach its right to due process with regard to its vested property interest when it granted ML&P the right to serve portions of Chugach's certificated area without first finding that Chugach had not and would not perform satisfactorily in that area.

In order to sustain Chugach's claim, we must first find that Chugach's 1963 certificate gave it a vested right to provide service in its certificated area barring a finding by the Commission that its services were unsatisfactory. Then we must find that this right was preserved under the Alaska saving statute despite the repeal of those sections in the former Act upon which this right depends. We conclude that the saving statute does not preserve any accrued right which Chugach may have had and thus it is unnecessary for us to determine whether in fact Chugach did have such a right.

AS 01.10.100(a) provides in relevant part:

> The repeal or amendment of any law does not release or extinguish any right accruing or accrued under such law, unless the repealing or amending act so provides expressly. The law shall be treated as remaining in force for the purpose of sustaining any proper action or prosecution for the enforcement of the right . . .

We note that the term "right" has been construed to mean a vested right and that vested property rights are protected from state action under the Fourteenth Amendment of the United States Constitution and Art. I, section 7, of the Alaska Constitution. *Bidwell v. Scheele*, 355 P.2d 584, 586 (Alaska 1960).

[1, 2] The law regarding general saving statutes was succinctly stated by the court in *Territory of Alaska v. American Can Company*, 137 F.Supp. 181, 16 Alaska 71, 76 (1956),[7] as follows:

> It is a fundamental rule of statutory construction that a general saving clause or statute preserves rights and liabilities which have accrued under the act repealed and that they operate to make applicable in designated situations the law as it existed before the repeal, *unless such application is negatived by the express terms or clear implication of a particular repealing act*, or where not otherwise provided by the repealing act. (emphasis in original).

The saving statute in effect at that time was somewhat different from the present one but the court's statement accurately reflects the general rule. As stated in Sutherland, *Statutory Construction* (4th ed. C.D. Sands 1973), a general saving statute will save rights and remedies "except where a subsequent repealing act indicates that it was not the legislative intention that particular rights and remedies should be saved." *Id.* at § 47.35. *See Summit Beach, Inc. v. Glander*, 153 Ohio St. 147, 91 N.E.2d 10, 11–12 (1950). *State v. Chicago Great Western Ry. Co.*, 222 Minn. 504, 25 N.W.2d 294, 297–98 (1946).

Section 5 of Ch. 113, SLA 1970, specifically repealed AS 42.05.193, AS 42.05.194 and AS 42.05.196, the sections on which Chugach's claimed property right depends. In

6. AS 01.10.100 provides in relevant part:

> Effect of repeals or amendments. (a) The repeal or amendment of any law does not release or extinguish any penalty, forfeiture, or liability incurred or right accruing or accrued under such law, unless the repealing or amending act so provides expressly. The law shall be treated as remaining in force for the purpose of sustaining any proper action or prosecution for the enforcement of the right, penalty, forfeiture, or liability . . .

7. *Aff'd* 246 F.2d 493, 17 Alaska 240 (9th Cir. 1957), *rev'd on other grounds*, 355 U.S. 224, 78 S.Ct. 274, 2 L.Ed.2d 242 (1958).

their place the legislature enacted AS 42.05.221.[8] Subsection (b), which was noted above, states as follows:

> All certificates of convenience and necessity issued to a public utility before July 1, 1970 remain in effect *but they are subject to modification where there are areas of conflict with public utilities that have not previously been required to have a certificate* or where there is a substantial change in circumstances. (emphasis added).

It is clear that the emphasized portion of this subsection specifically addresses itself to a situation such as the present one, *i. e.*, where a previously certificated utility (Chugach) is providing service in an area where a utility which has not previously been required to be certificated (ML&P) is also furnishing electric service. The legislature has decreed that the certificate of the previously certificated utility may be modified where such a conflict exists. By this statement the legislature clearly has extinguished whatever right Chugach may have had to continue providing service unless it was doing so unsatisfactorily and in its place the legislature has determined that the existence of a conflict with a municipally-owned utility in itself provides a sufficient ground for modification of a previously granted certificate. Assuming, *arguendo*, that Chugach did have the vested property right it has claimed, the legislature's mandate in the very situation presented here is clear. In enacting AS 42.05.221(b) the legislature indicated its intention that any right afforded certificated utilities under the old AS 42.05.196 was not saved. We hold, therefore, that the saving statute, AS 01.10.100, does not preserve any right Chugach may have had to continue providing electrical service unless it was not providing or would not provide service to the satisfaction of the Commission. Chugach, therefore, has not been denied due process by the Commission's failure to make such a finding.[9]

APPEAL

Appellants ML&P and the Commission's first argument on appeal is that the superior court used an incorrect standard of review in reaching its decision to remand the case to the Commission. The Commission argues that the lower court improperly substituted its judgment for that of the Commission while ML&P contends that the lower court improperly applied the substantial evidence test. Both parties maintain that the proper standard of review is the reasonable basis test.

At the outset we note that it is unclear from a reading of the superior court's oral decision which standard of review it applied. This lack of clarity is not significant, however, for we approach the issues here independently of the superior court which was acting as an intermediate court of appeal. *Jager v. State*, 537 P.2d 1100, 1106 (Alaska 1975); *State v. Marathon Oil Company*, 526 P.2d 293, 295 (Alaska 1974).

[3, 4] This court has enunciated several standards of review of agency action under AS 44.62.570,[10] the section of the Alaska

8. *See* notes 1 and 2 for relevant parts.

9. In its statement of issues presented for review and in its conclusion, Chugach suggests that its certificate of public convenience and necessity is a franchise or contract which is entitled to constitutional protection against impairment. However, because Chugach does not argue this issue beyond a passing reference to it in the argument portion of its brief, we do not consider the issue on review. *See Krisich v. State*, 550 P.2d 796, 804 (Alaska 1976); *Lewis v. State*, 469 P.2d 682, 691-92 n. 2 (Alaska 1970).

10. AS 44.62.570 provides in part:

> *Scope of review.* (a) An appeal shall be heard by the superior court sitting without a jury.
>
> (b) Inquiry in an appeal extends to the following questions: (1) whether the agency has proceeded without, or in excess of jurisdiction; (2) whether there was a fair hearing; and (3) whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the agency has not proceeded in the manner required by law, the order or decision is not supported by the findings or the findings are not supported by the evidence.
>
> (c) The court may exercise its independent judgment on the evidence. If it is claimed that the findings are not supported by the

Administrative Procedure Act governing scope of review. We do not find it necessary to discuss each of the various standards at this time, however, for it is clear that the appropriate standard of review in the instant case is the reasonable basis test.[11] In *Kelly v. Zamarello*, 486 P.2d 906, 916–17 (Alaska 1971), we set forth this test as follows: In cases where a decision involves administrative expertise as to either complex subject matter or fundamental policy formulations, deference should be given to an administrative determination if it has a reasonable basis in law and fact.[12] Such deference is given because the agency is in a better position to make such a determination than a court because of the agency's specialized knowledge in a field. In the instant case, it is readily apparent that the delineation of electrical service areas involves complex financial and engineering determinations and requires considerable expertise in these areas. In addition, fundamental policy formulations are involved in the Commission's task of eliminating undesirable competition and duplication of facilities under AS 42.05.221(d). It is difficult, in fact, to conceive of a situation where the reasonable basis test is more appropriate. Therefore, we limit our review in this case to deciding whether the Commission's action in Order No. 19, as amended, has a reasonable basis in law and fact.

[5] Before we can make this determination, however, it is necessary for us to deal with several other issues raised by appellants. Both ML&P and the Commission argue on appeal that the trial court erred in relying on Chugach's alleged misrepresentation regarding a "Statement of Position" by Mr. Hendershot, one of the commissioners involved in Order No. 19. This statement explained why no action was taken on Chugach's petition for reconsideration and set forth certain problems Mr. Hendershot saw in Order No. 19. Since, as noted above, we review this case independently of the superior court, we need not decide whether the lower court erroneously relied on the alleged misrepresentation.

[6] Appellants also argue that the superior court erred in considering an affidavit by T. Foley Treadway, president of the Georgia-based Southern Engineering Company, which Chugach had submitted to the Commission as part of its petition for reconsideration. Again, we need not decide whether the lower court erred in this regard; however, it is necessary for us to determine if and to what extent this court may consider the affidavit.

ML&P and the Commission argue this point somewhat differently, but the gist of their arguments[13] is that it is improper for

evidence, abuse of discretion is established if the court determines that the findings are not supported by (1) the weight of the evidence, or (2) substantial evidence in the light of the whole record.

(d) The court may augment the agency record in whole or in part, or hold a hearing de novo. If the court finds that there is relevant evidence which, in the exercise of reasonable diligence, could not have been produced or which was improperly excluded at the hearing, the court may (1) enter judgment as provided in (c) of this section and remand the case to be reconsidered in the light of that evidence, or (2) admit the evidence at the appellate hearing without remanding the case.

(e) The court shall enter judgment setting aside, modifying, remanding, or affirming the order or decision, without limiting or controlling in any way the discretion legally vested in the agency.

11. For a summary of the different standards of review, see *Jager v. State*, 537 P.2d 1100, 1107 (Alaska 1975).

12. See generally *Jager v. State*, supra; *Mobil Oil Corp. v. Local Boundary Commission*, 518 P.2d 92, 99 (Alaska 1974); *Swindel v. Kelly*, 499 P.2d 291 (Alaska 1972); *Pan American Petroleum Corp. v. Shell Oil Co.*, 455 P.2d 12 (Alaska 1969).

13. ML&P also argues that since the Commission failed to give the relief sought in Chugach's petition for reconsideration, the record closed and review is limited to examination of the testimony and exhibits presented at the hearings on Order No. 19. This contention is without merit. AS 44.62.[illegible] which determines the contents of the record on judicial review of [illegible] does not [illegible] also.

The [illegible] record includes (1) the pleadings, (2) all motions and rulings thereon, (3) the

the reviewing court to consider the Treadway affidavit because the affidavit presents evidence which could have been presented to the Commission before it entered Order No. 19 but which was not presented at that time. Appellants contend that Chugach should not be allowed to introduce new, previously available evidence under this circumstance by simply attaching such evidence to its administrative petition for reconsideration.

In refuting this argument by appellants, Chugach maintains that it did not and does not intend to introduce the Treadway affidavit as evidence, but rather as argument going to prove the unreasonableness as a matter of law of the Commission's Order No. 19. Chugach points out in its brief that had the shortcomings of the order been noted in its memorandum in support of its petition for reconsideration rather than in an affidavit, the appellants would have found no reason to move for its elimination from the record. Submitting the argument in the form that it did, Chugach contends, merely made it more penetrating and convincing. We find Chugach's contention persuasive and therefore hold that the Treadway affidavit is properly before this court on review not as evidence, but as part of Chugach's argument that Order No. 19, as amended, did not have a reasonable basis.

[7] We now turn to the question of whether the Commission's order has a reasonable basis. Order No. 19, as amended, makes two determinations relevant to this appeal. First, it delineates fixed service areas for each utility; second, it provides for the retirement and transfer of facilities from Chugach to ML&P in areas where the two utilities have duplicate or parallel facilities. We will address these components of the order separately, although we realize that the two facets of the order in fact may be related.

Initially, we find it helpful to set out that aspect of the service area delineation which is the major source of contention in this case. Stated briefly, the dispute centers on the Commission's grant to ML&P of virtually all areas within the limits of the former City of Anchorage in which the two utilities were providing duplicate and parallel service. It is not the fact that fixed service areas were established by the order that is in question; rather, it is the Commission's decision regarding the service areas actually assigned which must be reviewed for reasonableness.

After a lengthy recitation of the events leading up to the issuance of its order, including a summary of the proposals submitted by ML&P and Chugach and the testimony presented at the September 1972 hearings, the Commission in Order No. 19 assigned fixed service areas to each of the utilities. Essentially, the Commission awarded ML&P two non-contiguous sub-areas. In one of the sub-areas, ML&P was already the sole supplier of electrical services except for infrequent minor border area penetrations by Chugach. In the other, there was either no present supplier, ML&P was the sole supplier, or Chugach and ML&P were operating duplicate or parallel facilities. Chugach was awarded most of the remaining portions of its certificated service area.

Following its assignment of service areas the Commission provided the following basis for its decision:

> In establishing the above service area boundaries between CEA and ML&P, extensive consideration was given to the requirements that ML&P be afforded the necessary opportunity for horizontal growth and that the existing revenue base of CEA be preserved.
>
> . . . . . .

agency, (3) the proposed decision by a hearing officer, (4) the final decision, (5) a transcript of the testimony and proceedings, (6) the exhibits admitted or rejected, (7) the written evidence, and (8) all other documents in the case.

Classification 8, "all other documents in the case," clearly acts to make Chugach's petition, with its attached affidavits, part of the record on review.

> The Commission recognized in assigning ML&P almost all areas within the city in which duplication exists, that without compensating factors the gradual phase out of facilities and customers by CEA would progressively reduce the utility's revenues. Such effect, however, should be offset adequately by CEA's exclusive authorization to serve the rapidly expanding business and residential communities immediately outside ML&P's service boundaries.

In our view, that portion of the Commission's order establishing service areas for Chugach and ML&P had a reasonable basis. Acting pursuant to the mandate of AS 42.05.221(d), the Commission allocated service areas in such a way as to resolve the competing interests of both Chugach and ML&P and the public they serve. Therefore, we affirm that portion of Order No. 19.

[8] As noted above, Order No. 19 also provided for the retirement and transfer of facilities from Chugach to ML&P in those areas where the two utilities were operating duplicate and parallel facilities. The Commission did not order the immediate transfer of Chugach's facilities because it felt that to do so could result in increased rates and would jeopardize Chugach's financial integrity. Instead, the Commission provided that Chugach would be allowed to retain and operate its existing facilities within ML&P's newly-awarded service areas for the "normal life" of those facilities. As these facilities were "retired", ML&P would then be permitted to construct and operate the replacement facilities. In addition, it was provided that Chugach should perform routine and emergency maintenance on its old facilities so long as the maintenance did not constitute an attempt to extend the life of the facility beyond its normal life. Finally, the Commission established procedures whereby either utility, when circumstances so dictated, could construct or install additional facilities within the authorized service area of the other utility.

Our examination of the record in this case, particularly of the Treadway affidavit submitted by Chugach in support of its petition for reconsideration, persuades us that these portions of Order No. 19 lack a reasonable basis and that a remand to the Commission is required for further evidence regarding the retirement and transfer of Chugach's facilities to ML&P.[14] In his affidavit, Treadway discusses at great length the inadequacy of the transfer of facilities scheme set out in Order No. 19. At the outset, for example, he points out that it is unclear from the order exactly what the Commission means by retirement of facilities. Theoretically, retirement could occur when the facilities are fully depreciated on Chugach's books or when they physically have no remaining useful life. Furthermore, the term "facilities" could mean either an entire distribution line, circuit or section of a system, or it could mean simply units or components of a system.

More significantly, Treadway asserts that in reality, electrical service facilities are never retired, either actually or on the books. This is because it is necessary to maintain these facilities in good working condition so that they may continue to provide adequate service. Separate components of a distribution system may be retired at a given point due to damage or wear, but they must be replaced for the system to continue in operation. Thus, Treadway points out, not only is an electrical facility never fully retired, but, despite the Commission's order that no replacement or maintenance of a facility be done with

14. ML&P contends that Chugach may not challenge the retirement and transfer provisions of Order No. 19 because the Commission specifically limited the scope of the hearings to determination of service areas, postponing facility transfers to a later time. It is contended that Chugach consented to such a postponement and that therefore Chugach is estopped from now requesting that the proceeding be reopened for further evidence on this issue. We find it unnecessary whether or not the retirement and transfer issues were in fact postponed until a later time, as the Commission chose to deal with the problem in Order No. 19.

the intent to extend its useful life, such replacement or maintenance must necessarily extend the life of the property.

The Treadway affidavit contains many other criticisms of the retirement and transfer provisions of Order No. 19 which we do not feel are necessary to recite here since we are persuaded that it is necessary for the Commission to reconsider these provisions of Order No. 19. Therefore we remand this case to the superior court with directions that the case be remanded to the Commission so that it may take further evidence and such other action as it deems necessary regarding the retirement and transfer of Chugach's facilities to ML&P.

REMANDED.

RABINOWITZ and MATTHEWS, JJ., not participating.

AMOCO PRODUCTION COMPANY, Petitioner,

v.

W. C. CHURCH WELDING & CONTRACTING, INC., Respondent.

No. 3[illegible]7.

Supreme Court of Alaska.

June 23, 1978

Indemnitee moved for summary judgment that it was entitled to indemnification from indemnitor for injuries to indemnitor's employee. The Superior Court, Third Judicial District, Anchorage, Peter J. Kalamarides, J., denied summary judgment, and indemnitee petitioned for review. The Supreme Court granted review and held that: (1) enforceability of agreement for indemnification for injuries to indemnitor's employees was not dependent on whether indemnitor or indemnitee had been in control of work which caused employee's injury, and (2) where indemnification agreement was thus enforceable and there was no factual issue as to whether injury to indemnitor's employee came within terms of agreement, indemnitee was entitled to indemnity.

Reversed.

1. Indemnity ⇐8(1)

Enforceability of agreement for indemnity for injuries to indemnitor's employees was not dependent on whether indemnitor or indemnitee had been in control of work which caused employee's injury.

2. Indemnity ⇐3

Where indemnitee could have secured liability insurance protecting against claim by indemnitor's employees, there was no reason, in absence of some showing of unscrupulousness or unequal bargaining power, why indemnitee could not secure same protection from indemnitor by means of indemnification agreement.

3. Appeal and Error ⇐80(6)

Where issue involved was one of a controlling question of law on which there was substantial ground for difference of opinion and where an immediate and present review of the order might materially advance the ultimate termination of litigation, Supreme Court granted petition for review of trial court's denial of motion by indemnitee for summary judgment against indemnitor based on indemnification agreement.

4. Indemnity ⇐8(1)

Where indemnification agreement was enforceable even though indemnitee was in charge of indemnitor's employee and there was no factual issue involved as to whether injury to indemnitor's employee came under terms of agreement, indemnitee was entitled to indemnity for any claim for injury sustained by indemnitor's employee while he was working on indemnitee's offshore drilling rig.

Sanford M. Gibbs, Hagans, Smith, Brown, Erwin & Gibbs, Anchorage, for petitioner.

It is convenient in the course of our discussion of this case to review the reasons advanced by Mr. Madison and his associates for their conclusion, supplementing them, so far as may be, by additional considerations which lead this court to concur therein.

First. Mr. Madison insisted that article 2 by vesting the executive power in the President was intended to grant to him the power of appointment and removal of executive officers except as thereafter expressly provided in that article. He pointed out that one of the chief [116] purposes of the Convention was to separate the legislative from the executive functions. He said:

"If there is a principle in our Constitution, indeed in any free Constitution more sacred than another, it is that which separates the legislative, executive and judicial powers. If there is any point in which the separation of the legislative and executive powers ought to be maintained with great caution, it is that which relates to officers and offices." 1 Annals of Congress, 581.

Their union under the Confederation had not worked well, as the members of the convention knew. Montesquieu's view that the maintenance of independence as between the legislative, the executive and the judicial branches was a security for the people had their full approval. Madison in the Convention, 2 Farrand, Records of the Federal Convention, 56. Kendall v. United States, 12 Pet. 524, 610, 9 L. ed. 1181, 1215. Accordingly, the Constitution was so framed as to vest in the Congress all legislative powers therein granted, to vest in the President the executive power, and to vest in one Supreme Court and such inferior courts as Congress might establish, the judicial power. From this division on principle, the reasonable construction of the Constitution must be that the branches should be kept separate in all cases in which they were not expressly blended, and the Constitution should be expounded to blend them no more than it affirmatively requires. Madison, 1 Annals of Congress, 497. This rule of construction has been confirmed by this court in Meriwether v. Garrett, 102 U. S. 472, 515, 26 L. ed. 197, 205; Kilbourn v. Thompson, 103 U. S. 168, 190, 26 L. ed. 377, 386; Mugler v. Kansas, 123 U. S. 623, 662, 31 L. ed. 205, 210, 8 Sup. Ct. Rep. 273.

The debates in the Constitutional Convention indicated an intention to create a strong executive, and after a controversial discussion the executive power of the government was vested in one person and many of his important functions were specified so as to avoid the [117] humiliating weakness of the Congress during the Revolution and under the Articles of Confederation. 1 Farrand, 66-97.

Mr. Madison and his associates in the discussion in the House dwelt at length upon the necessity there was for construing article 2 to give the President the sole power of removal in his responsibility for the conduct of the executive branch, and enforced this by emphasizing his duty expressly declared in the third section of the Article to "take care that the laws be faithfully executed." Madison, 1 Annals of Congress, 496, 497.

The vesting of the executive power in the President was essentially a grant of the power to execute the laws. But the President alone and unaided could not execute the laws. He must execute them by the assistance of subordinates. This view has since been repeatedly affirmed by this court. Wilcox v. Jackson, 13 Pet. 498, 513, 10 L. ed. 264, 271; United States v. Eliason, 16 Pet. 291, 302, 10 L. ed. 968, 972; Williams v. United States, 1 How. 290, 297, 11 L. ed. 135, 138; Re Neagle, 135 U. S. 1, 63, 34 L. ed. 55, 71, 10 Sup. Ct. Rep. 658; Russell Motor Car Co. v. United States, 261 U. S. 514, 523, 67 L. ed. 778, 784, 43 Sup. Ct. Rep. 428. As he is charged specifically to take care that they be faithfully executed, the reasonable implication, even in the absence of express words, was that as part of his executive power he should select those who were to act for him under his direction in the execution of the laws. The further implication must be, in the absence of any express limitation respecting removals, that as his selection of administrative officers is essential to the execution of the laws by him, so must be his power of removing those for whom he can not continue to be responsible. Fisher Ames, 1 Annals of Congress, 474. It was urged that the natural meaning of the term "executive power" granted the President included the appointment and removal of executive subordinates. If such appointments and removals were not an exercise of the executive power, what were they? They certainly [118] were not the exercise of legislative or judicial power in government as usually understood.

It is quite true that in many colonial governments at the time of the Constitutional Convention, power to make appointments and removals had sometimes

been lodged in the legislatures or in the courts, but such a disposition of it was really vesting a part of the executive power in another branch of the government. In the British system, the Crown which was the executive, had the power of appointment and removal of executive officers, and it was natural, therefore, for those who framed our Constitution to regard the words "executive power" as including both. Ex parte Grossman, 267 U. S. 87, 110, 69 L. ed. 527, 531, 38 A.L.R. 131, 45 Sup. Ct. Rep. 332. Unlike the power of conquest of the British Crown, considered and rejected as a precedent for us in Fleming v. Page, 9 How. 603, 618, 13 L. ed. 276, 282, the association of removal with appointment of executive officers is not incompatible with our republican form of government.

The requirement of the second section of article 2 that the Senate should advise and consent to the Presidential appointments, was to be strictly construed. The words of § 2, following the general grant of executive power under § 1 were either an enumeration and emphasis of specific functions of the Executive, not all inclusive, or were limitations upon the general grant of the executive power, and as such, being limitations, should not be enlarged beyond the words used. Madison, 1 Annals, 462, 463, 464. The executive power was given in general terms, strengthened by specific terms where emphasis was regarded as appropriate, and was limited by direct expressions where limitation was needed, and the fact that no express limit was placed on the power of removal by the Executive was convincing indication that none was intended. This is the same construction of article 2 as that of Alexander Hamilton, quoted infra.

[110] Second. The view of Mr. Madison and his associates was that not only did the grant of executive power to the President in the first section of article 2 carry with it the power of removal, but the express recognition of the power of appointment in the second section enforced this view on the well approved principle of constitutional and statutory construction that the power of removal of executive officers was incident to the power of appointment. It was agreed by the opponents of the bill, with only one or two exceptions, that as a constitutional principle the power of appointment carried with it the power of removal. Roger Sherman, 1 Annals of Congress, 491. This principle as a rule of constitutional and statutory construction, then generally conceded, has been recognized ever since. Ex parte Hennen, 13 Pet. 230, 259, 10 L. ed. 138, 152; Reagan v. United States, 182 U. S. 419, 45 L. ed. 1162, 21 Sup. Ct. Rep. 842; Shurtleff v. United States, 189 U. S. 311, 315, 47 L. ed. 828, 831, 23 Sup. Ct. Rep. 535. The reason for the principle is that those in charge of and responsible for administering functions of government who select their executive subordinates need in meeting their responsibility to have the power to remove those whom they appoint.

Under § 2 of article 2, however, the power of appointment by the Executive is restricted in its exercise by the provision that the Senate, a part of the legislative branch of the government, may check the action of the Executive by rejecting the officers he selects. Does this make the Senate part of the removing power? And this, after the whole discussion in the House is read attentively, is the real point which was considered and decided in the negative by the vote already given.

The history of the clause by which the Senate was given a check upon the President's power of appointment makes it clear that it was not prompted by any desire to limit removals. As already pointed out, the important purpose of those who brought about the restriction was to lodge in the Senate, where the small states had equal [120] representation with the larger states, power to prevent the President from making too many appointments from the larger states. Roger Sherman and Oliver Ellsworth, delegates from Connecticut, reported to its governor: "The equal representation of the States in the Senate and the votes of that branch in the appointment to offices will secure the rights of the lesser as well as of the greater states." 3 Farrand, 99. The formidable opposition to the Senate's veto on the President's power of appointment indicated that in construing its effect, it should not be extended beyond its express application to the matter of appointments. This was made apparent by the remarks of Abraham Baldwin, of Georgia, in the debate in the First Congress. He had been a member of the Constitutional Convention. In opposing the construction which would extend the Senate's power to check appointments to removals from office, he said:

"I am well authorized to say that the mingling of the powers of the President and Senate was strongly opposed in the Convention which had the honor to sub-

mit to the consideration of the United States and the different states the present system for the government of the Union. Some gentlemen opposed it to the last, and finally it was the principal ground on which they refused to give it their signature and assent. One gentleman called it a monstrous and unnatural connexion and did not hesitate to affirm it would bring on convulsions in the government. This objection was not confined to the walls of the Convention; it has been subject of newspaper declamation and perhaps justly so. Ought we not, therefore, to be careful not to extend this unchaste connexion any further?" 1 Annals of Congress, 557.

Madison said:

"Perhaps there was no argument urged with more success or more plausibly grounded against the Constitution under which we are now deliberating than that founded [121] on the mingling of the executive and legislative branches of the government in one body. It has been objected that the Senate have too much of the executive power even, by having control over the President in the appointment to office. Now shall we extend this connexion between the legislative and executive departments which will strengthen the objection and diminish the responsibility we have in the head of the Executive? 1 Annals of Congress, 380.

It was pointed out in this great debate that the power of removal, though equally essential to the executive power is different in its nature from that of appointment. Madison, 1 Annals of Congress, 497 et seq.; Clymer, 1 Annals, 499; Sedgwick, 1 Annals, 522; Ames, 1 Annals, 541, 542; Hartley, 1 Annals, 481. A veto by the Senate—a part of the legislative branch of the government—upon removals is a much greater limitation upon the executive branch and a much more serious blending of the legislative with the executive than a rejection of a proposed appointment. It is not to be implied. The rejection of a nominee of the President for a particular office does not greatly embarrass him in the conscientious discharge of his high duties in the selection of those who are to aid him, because the President usually has an ample field from which to select for office, according to his preference, competent and capable men. The Senate has full power to reject newly proposed appointees whenever the President shall remove the incumbents. Such a check enables the Senate to prevent the filling of offices with bad or incompetent men or with those against whom there is tenable objection.

The power to prevent the removal of an officer who has served under the President is different from the authority to consent to or reject his appointment. When a nomination is made, it may be presumed that the Senate is, or may become, as well advised as to the fitness of the nominee [122] as the President, but in the nature of things the defects in ability or intelligence or loyalty in the administration of the laws of one who has served as an officer under the President, are facts as to which the President, or his trusted subordinates, must be better informed than the Senate, and the power to remove him may, therefore, be regarded as confined for very sound and practical reasons, to the governmental authority which has administrative control. The power of removal is incident to the power of appointment, not to the power of advising and consenting to appointment, and when the grant of the executive power is enforced by the express mandate to take care that the laws be faithfully executed, it emphasizes the necessity for including within the executive power as conferred the exclusive power of removal.

Oliver Ellsworth was a member of the Senate of the First Congress, and was active in securing the imposition of the Senate restriction upon appointments by the President. He was the author of the Judiciary Act in that Congress, and subsequently Chief Justice of the United States. His view as to the meaning of this article of the Constitution, upon the point as to whether the advice of the Senate was necessary to removal, like that of Madison, formed and expressed almost in the very atmosphere of the Convention, was entitled to great weight. What he said in the discussion in the Senate was reported by Senator William Patterson, 2 Bancroft, History of the Constitution of the United States, 192, as follows:

"The three distinct powers, legislative, judicial and executive should be placed in different hands. 'He shall take care that the laws be faithfully executed' are sweeping words. The officers should be attentive to the President to whom the Senate is not a council. To turn a man out of office is an exercise neither of legislative nor of judicial power; it is like a tree growing upon land that has been granted. The advice of the Senate does not make the appointment. The President appoints. There [123] are certain restrictions in certain cases, but the re-

striction is as to the appointment and not as to the removal."

In the discussion in the First Congress fear was expressed that such a constitutional rule of construction as was involved in the passage of the bill would expose the country to tyranny through the abuse of the exercise of the power of removal by the President. Underlying such fears was the fundamental misconception that the President's attitude in his exercise of power is one of opposition to the people, while the Congress is their only defender in the government, and such a misconception may be noted in the discussions had before this court. This view was properly contested by Mr. Madison in the discussion (1 Annals of Congress, 461), by Mr. Hartley (1 Annals, 481), by Mr. Lawrence (1 Annals, 485), and by Mr. Scott (1 Annals, 533). The President is a representative of the people just as the members of the Senate and of the House are, and it may be at some times on some subjects that the President elected by all the people is rather more representative of them all than are the members of either body of the legislature whose constituencies are local and not countrywide; and as the President is elected for four years, with the mandate of the people to exercise his executive power under the Constitution, there would seem to be no reason for construing that instrument in such a way as to limit and hamper that power beyond the limitations of it, expressed or fairly implied.

Another argument advanced in the First Congress against implying the power of removal in the President alone from its necessity in the proper administration of the executive power was that all embarrassment in this respect could be avoided by the President's power of suspension of officers, disloyal or incompetent, until the Senate could act. To this Mr. Benson said:

"Gentlemen ask, will not the power of suspending an officer be sufficient to prevent malconduct? Here is some [124] inconsistency in their arguments. They declare that Congress have no right to construe the Constitution in favor of the President, with respect to removal; yet they propose to give a construction in favor of the power of suspension being exercised by him. Surely gentlemen do not pretend that the President has the power of suspension granted expressly by the Constitution; if they do, they have been more successful in their researches into that instrument than I have been. If they are willing to allow a power of suspending, it must be because they construe some part of the Constitution in favor of such a grant. The construction in this case must be equally unwarrantable. But admitting it proper to grant this power, what then? When an officer is suspended, does the place become vacant? May the President proceed to fill it up? Or must the public business be likewise suspended? When we say an officer is suspended, it implies that the place is not vacant; but the parties may be heard, and, after the officer is freed from the objections that have been taken to his conduct, he may proceed to execute the duties attached to him. What would be the consequence of this? If the Senate, upon its meeting, were to acquit the officer, and replace him in his station, the President would then have a man forced on him whom he considered as unfaithful; and could not, consistent with his duty, and a proper regard to the general welfare, go so far as to entrust him with full communications relative to the business of his department. Without a confidence in the Executive Department, its operations would be subject to perpetual discord, and the administration of the government become impracticable." 1 Annals of Congress, 506.

Mr. Vining said:

"The Departments of Foreign Affairs and War are peculiarly within the powers of the President, and he must be responsible for them; but take away his controlling power, and upon what principle do you require his responsibility?

[125] "The gentlemen say the President may suspend. They were asked if the Constitution gave him this power any more than the other? Do they contend the one to be a more inherent power than the other? If they do not, why shall it be objected to us that we are making a legislative construction of the Constitution, when they are contending for the same thing?" 1 Annals of Congress, 512.

In the case before us, the same suggestion has been made for the same purpose, and we think it is well answered in the foregoing. The implication of removal by the President alone is no more a strained construction of the Constitution than that of suspension by him alone and the broader power is much more needed and more strongly to be implied.

Third. Another argument urged against the constitutional power of the President alone to remove executive officers appointed by him with the consent of the Senate is that in the absence of an express power of removal granted to the President, power to make provision for removal of

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STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Carolyn S. Guess, Chairman
Marvin R. Weatherly
Susan M. Knowles
Stuart C. Hall

In the Matter of the Filing of a Tariff Revision, Designated as TA20-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for a Permanent General Sewer Rate Increase in the Anchorage, Eagle River, and Girdwood-Alyeska Sewer Service Areas	U-80-4 ORDER NO. 10
In the Matter of the Filing of a Tariff Revision, Designated as TA23-126, by the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY for Consolidation of Service Areas and Permanent Reduction of Rates	U-81-36 ORDER NO. 1

ORDER SUSPENDING SERVICE AREA CONSOLIDATION AND APPROVING PERMANENT RATE REDUCTIONS

On May 1, 1981, the MUNICIPALITY OF ANCHORAGE d/b/a ANCHORAGE SEWER UTILITY (ASU) filed a tariff revision, designated of TA23-126, requesting the immediate permanent reduction of rates for sewer service in the Eagle River Sewer Service Area (ERSSA) and the Girdwood-Alyeska Sewer Service Area (GASSA). ASU requested that customers in the ERSSA and GASSA be integrated into the appropriate rate schedule of the Anchorage Bowl Service Service Area (ABSSA); that all ERSSA and GASSA rate schedules except for those based on metered water consumption be deleted; that definitions and other tariff references for Service Area 40 (ABSSA) and Service Area 50 (ERSSA) be deleted; and that a definition be

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added for the Anchorage Sewer Service Area (ASSA) as "that area established by Anchorage, Alaska, Ordinance 81-23...."

The Commission Staff (Staff) has reviewed the filing and has determined that it meets the requirements of 3 AAC 48.200 through 3 AAC 48.420.

The filing was noticed on May 7, 1981, with a closing date of June 8, 1981, for the submission of statements in support of, or in opposition to, the proposed tariff revision. As of June 8, 1981, five statements have been received by the Commission, four of which were also filed with ASU as required under 3 AAC 48.090(b)(2).

Of the four properly filed statements, two from ABSSA ratepayers (opposed) the tariff revision in its entirety; one from a GASSA ratepayer supported the tariff revision in its entirety; and one from an ABSSA ratepayer included a statement of non-objection to the decrease in ERSSA and GASSA rates, and a statement of vehement objection to the creation of a consolidated service area and dissolution of separate service areas.

On June 9, 1981, the Commission received a memorandum, a copy of which is attached hereto as Appendix A from the Staff setting forth a review and analysis of ASU's request.

Discussion

In support of its request for consolidation of sewer service areas, ASU cites the 1980 amendment (Sec. 5, Ch. 136, SLA 1980) to AS 42.05.391(a) which provides that:

> a municipally owned utility may offer uniform or identical rates for a public utility service to customers located in different areas within its certificated service area who receive the same class of service. Any uniform or identical

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