## MEMORANDUM

TO: Council, SSC, and AP members

FROM: Jim H. Branson CAV

**Executive Director** 

DATE: May 21, 1981

SUBJECT: Salmon test fishery and commercial fishery update.

ACTION REQUIRED

No action required. Information only.

#### BACKGROUND

During the April 15 - May 15 closure of all Southeast Alaskan waters to commercial salmon fishing, ADF&G conducted a test fishery to tag chinooks and recover coded wire tags (CWT's). The results were much better than expected, and 764 kings and 1 coho were tagged with external Petersen disk tags. About 50% of the chinooks were mature fish. Also, 9 CWT's were recovered, none of which were Taku River fish. The catch per unit of effort (CPUE) in the Juneau area sport fishery is much higher than average this year, indicating that the closure successfully moved fish inside and tags have begun to show up in the commercial and sport fisheries already. A report on the study will be available from ADF&G in the near future.

The commercial fishery in Alaskan waters opened May 15. Early reports indicated fishing was slow.

#### MEMORANDUM

TO: Council, SSC, and AP members

FROM: Jim H. Branson

Executive Director

DATE: May 21, 1981

SUBJECT: Salmon Limited Entry Request

## ACTION REQUIRED

Discussion of FCZ limited entry and further direction for Council staff.

#### BACKGROUND

At the March meeting the Council requested information about how many trollers would qualify under various eligibility requirements. We contacted CFEC for data on landings during the base period and have put together a series of criteria the Council could consider along with the estimated number of eligible fishermen. The Council specifically requested the number of fishermen making at least two landings in at least two of the base years, 1975-77. Due to the cost of generating these data we opted to estimate the numbers by a different method using the average pounds per landing for hand and power trollers. The differences between these numbers and those requested by the Council are minimal and should satisfy the present need.

#### Setting the initial number of permits.

Graphs have been prepared showing the catch distribution among the hand and power troll fleets in the 1975-1977 base period (Fig. 1-3). Less than 500 pounds was recorded for the majority of the hand troll permits which showed outer coastal landings. The average hand troll landing was about 98 pounds. The vertical lines indicate the percent of the fleet which would be eliminated from the FCZ if the poundage requirement was set at that level. In the power troll fleet, 50% of the permits showed landings of 4,000 pounds or more in 1975, and this rose to nearly 7,000 pounds in 1977. These figures do not indicate the additional trollers who did not fish during the base period.

The Council has three major alternatives for determining initial eligibility for FCZ permits. First, the two fleets can be considered together and a minimum requirement set for the entire fleet based on landings. Second, the two fleets can be combined and eligibility could be based on poundages. Third, hand trollers and power trollers could be treated separately and a proportional poundage requirement used.

Most hand troll landings reflect one day's fishing and about 98 pounds of salmon. Most power troll landings reflect more than one day's fishing and 575 pounds of salmon. Combining the two fleets and setting a common minimum poundage requirement would not necessarily discriminate between full-time, professional hand trollers and power trollers, but would impact the hand troll fleet more than the power troll fleet. Therefore, an alternative would be to use a 6:1 poundage ratio between power and hand trollers if poundages were to be used as criteria.

# A. Combine hand and power trollers; use landings as criteria.

# 1. One landing.

All current trollers who made at least one FCZ/outer coastal landing in two of the three base years (computed by CFEC).

 $\frac{\text{hand troll}}{156} \qquad \qquad \frac{\text{power troll}}{351}$ 

# 2. Two landings.

All current trollers who made two or more FCZ/outer coastal landings in two of the three base years (CFEC data for hand trollers landing 100+ lbs; estimated for power trollers landing 500+ lbs).

hand troll power troll 300 (approx)

3. Three landings.

three

All current trollers who made two or more FCZ/outer coastal landings in two of the three base years (CFEC data for hand trollers landing 200+ lbs; estimated for power trollers landing 1,000+ lbs).

hand troll power troll 290 (approx)

## B. Combine hand and power trollers; use poundages as criteria.

All current trollers landing at least 100 pounds from FCZ/outer coastal areas in two of the three base years (CFEC data for hand trollers).

hand troll power troll 350 (approx)

# C. Consider hand and power trollers separately; use proportional poundage requirement.

The average power troll landing is approximately six times as large as the average hand troll landing. If the two fleets are considered separately, a poundage requirement should be proportional to each. The numbers would be similar to those in example 2 of A above, i.e., 108 hand trollers and 300 power trollers. The actual number of power trollers would have to be computed by CFEC.

# D. Non-transferable permits.

A non-transferable permit could be given to all fishermen who made landings in 1978, 1979 and 1980 but do not qualify for a transferable permit. We have data on power trollers for 1978-80 and hand trollers for 1978 and 1979. The data, which show one or more landings per permit, are summarized below.

Power troll - at least one landing in 1978, 1979 or 1980 (excluding 1975-77 fishermen)

421 permits fished 341 present permit holders

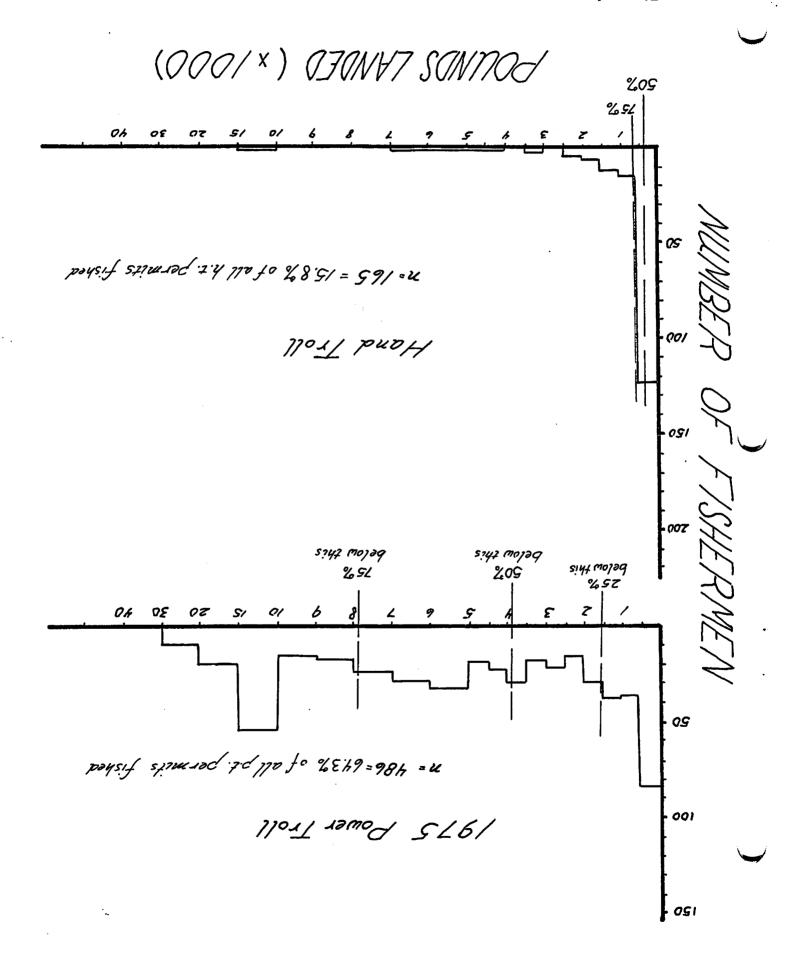
Hand troll - at least one landing in 1978 or 1979 (excluding 1975-77 fishermen)

1978 - outer coastal and FCZ = 523 FCZ only = 146

1979 - outer coastal and FCZ = 692 FCZ only = 93

1980 - In 1980 it was illegal for hand trollers to fish in the FCZ or outer districts with the exception of state area 113. A total of 3,149 hand troll landings were recorded from outer coastal and FCZ in 1980. The number of fishermen is not available at present.

These numbers could be higher or lower, depending on the criteria for transferable permits or whether more than one landing is required for non-transferable permits.



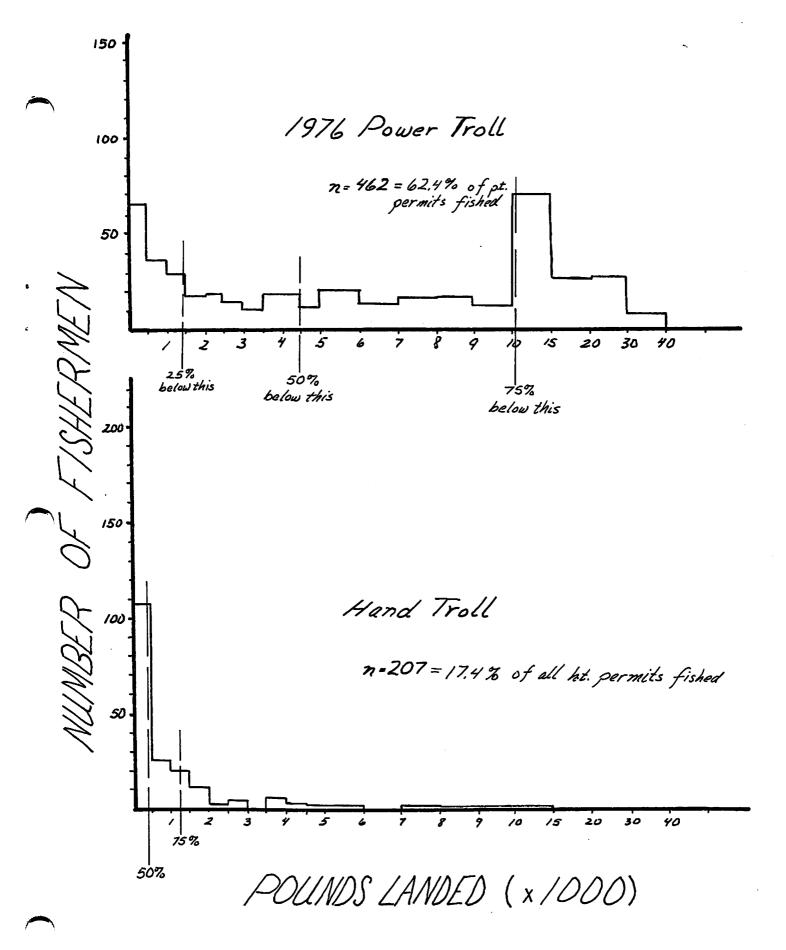


Figure 2.

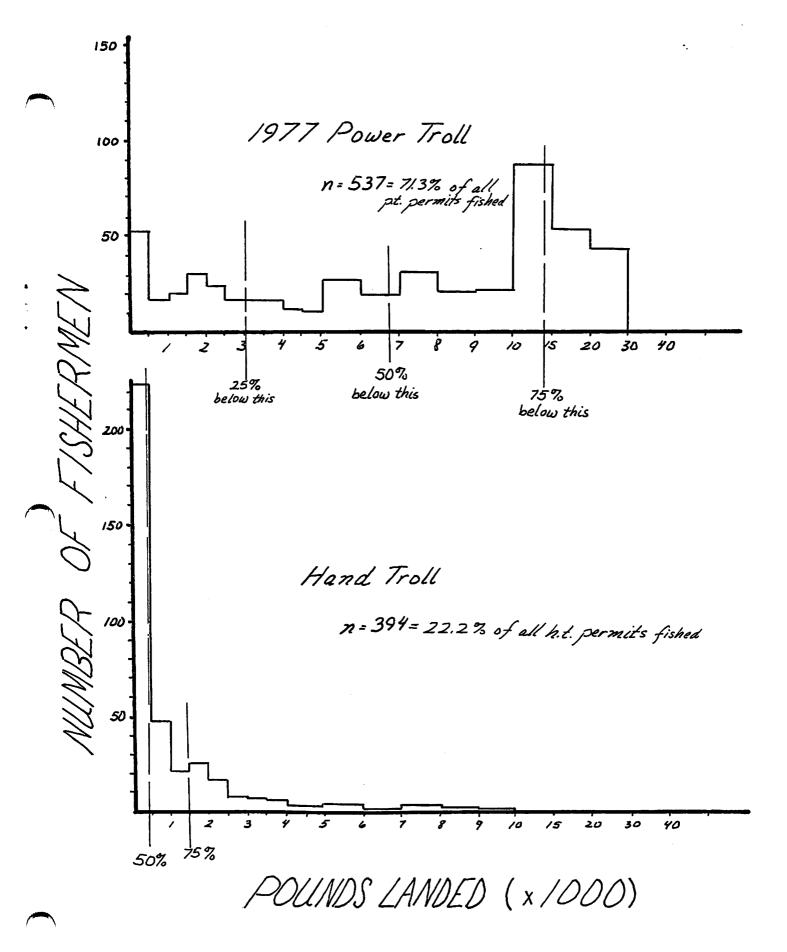


Figure 3.

SSC Salmon Subgroup questions and requests regarding analyses and model used by Washington Department of Fisheries staff in March 12, 1981 report on 1981 management needs for upper Columbia River "bright" chinooks.

- The fishery model used in the analysis is a steady-state model in which certain characteristics are held constant. Are there input data and assumptions that artificially affect the estimated numbers of a stock taken in different fisheries if effort is changing? A more complete documentation of input numbers and pertinent assumptions is requested.
- 2. An effort shift to open time periods is assumed in response to season closures in the Alaska troll fishery (p. 3). What are the assumed harvest rates in the open time periods with and without this assumption?
- 3. Expand on the data and explain the basis for the monthly differences in transfer rates of fish saved in Alaska through remaining fisheries (p. 3).
- 4. The proposed 29% catch reduction in the Alaska troll fishery is apparently based on a zero hatchery surplus management concept. Is regulation of the wild stock catch the only reasonable alternative?
- 5. The between-dam "loss" of "brights" was atypically high in 1980. Use of 1980 loss figures in the 3 year mean greatly increases the estimated

USC calmon integrand quasisons and recouser congerting analyses and mosel oned toy very inactions of the configuration of the configuration of the conservation of the conservation of the conservation of the conservation. Here we calmed the conservations.

The example of the control of a control of a control of the contro

in affort sair on one, rage posions is an amed in consonse to season in all the seasons and all tasks of the contract of the epocal time periods with and with an all this assumptions.

no kapamentality viduales and not visit to be all the constant of the property of the constant of the property of the constant of the constant

ine proposed the esten reduction in Alasko that the propession of the estence is a specific terms of the estence of the estence is subject to the estence of the estence of

The heaveness was "ison" of "arighted" was anyphablis true in 1920. The off

average loss. (The three year 1978-80 average loss of 18,700 equals the second highest loss on record.) Other useful means could be:

76-80 12,700

64-79 9,800

64-80 11,000

If average losses of these magnitudes had been assumed in 1981, would there not have been enough fish projected for management and escapement? Since these unaccounted "losses" are of much greater magnitude than the escapement savings needed, need the focus be on reduction of Alaska troll catch?

- 6. A reduction of 93,000 chinook in the Alaska troll catch was requested to achieve a 5,900 fish savings of upper Columbia River "brights" in 1981.

  A better explanation of the expected distribution of the 93,000 fish is needed to assist in justifying the OY reduction.
- 7. What effect is expected from changes in coastwide fishery regulations Canada, Washington, Oregon?
- 8. Assumptions are made in Appendix I which give 7 times the weight to one coded wire tag group over the other two groups combined. How does this modify harvest rate calculations versus an assumption of no difference between tag groups? Please present size frequency data for the tagged groups and wild fish if available, as well as information on seaward migration timing of wild and hatchery fish.

41A/G

americage fors. The third pear 1978 400 tearing tops of 16.00 to the same second high this tops at record . Other necessity white bound be:

000, 51 08-60 4

It as read the been even the core magnification and need assessed in this could be and also and the core that are and the core and the core are as the core that are are at an are at the core are at a the core are at the following that the core are at the core as the core are at the core and the core are at the core are at the core are at the core and the core are at the core are at the core are at the core at the core are at the core at the core are at the core at the core are at the core at the core

reduction of V.,000 citizable in the straight caten we proved to account to active a 5,900 tish savings of appear delegates kinds we are of, etc. A bester appeared described to as are of, etc. (take a decree appeared to a car of, etc.) (take a decree at a sestimation of the legion of the described of the appeared as a sestimation of the legion of the light of the legion of the legion.

Assertations and made in Appendix I busics over 1 time, the weelst consideration that gette development who are new groups functions that gette cover who are not supposed to the constitution of the confidence o

- 9. A fuller explanation of paragraph 2, p. 12 is requested.
- 10. Expand Table 3 to include actual numbers of tagged and untagged fish in the samples by age.